



Genius Guide

A comprehensive masterclass to
becoming an instant expert

Welcome to WORDPRESS

WordPress is one of the most advanced content management systems on the planet. Not only does it offer simple ways to maintain your website, but endless customisation options mean you can add plugins and widgets to fantastic pre-built themes. What's more, with WordPress you don't have to stick to what they give you, it's possible to build your very own theme framework – and this book will walk you through how. Inside you will find in-depth guides to essential settings, recommended themes and plugins, and loads of tutorials for personalising your blog or site. WordPress is a treasure trove of goodies and it's amazing what you can achieve with the assistance of CSS, HTML and Photoshop. This newly revised edition will help you build on your existing knowledge, so you can become a true WordPress genius.





Genius Guide
WordPress

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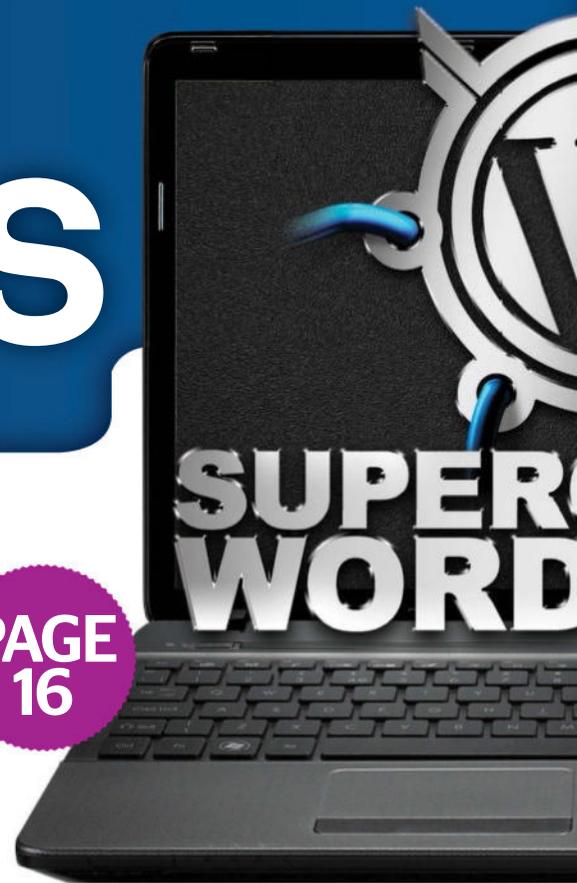
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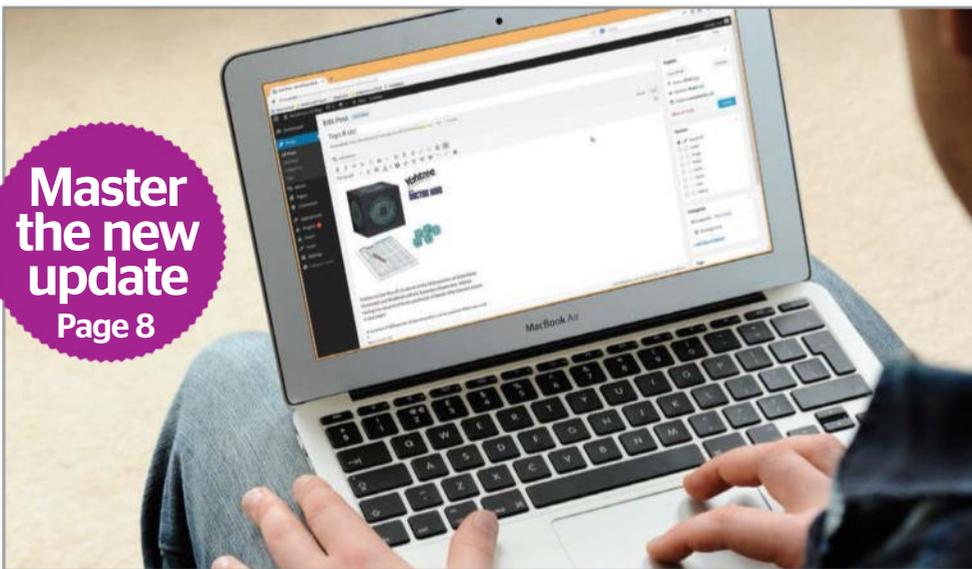
Contents

Everything you need to become a WordPress master and expand the functionality of your blog

PAGE 16



Master the new update
Page 8



PAGE 82

GETTING STARTED

- 24 The Settings
- 30 Use widgets in WordPress
- 31 Get to grips with plugins
- 32 Manage WordPress Comments
- 34 Posting WordPress content
- 36 Mastering the Media Library
- 38 Getting hosted with WP
- 42 Set up a host
- 44 Manage your different domains

- 46 Control user profiles
- 48 Back up your WP blog
- 50 Secure your WP site

THEMES

- 56 The 20 best WordPress themes
- 66 Create your own theme
- 74 Build a responsive WordPress theme
- 78 Customise a WP theme

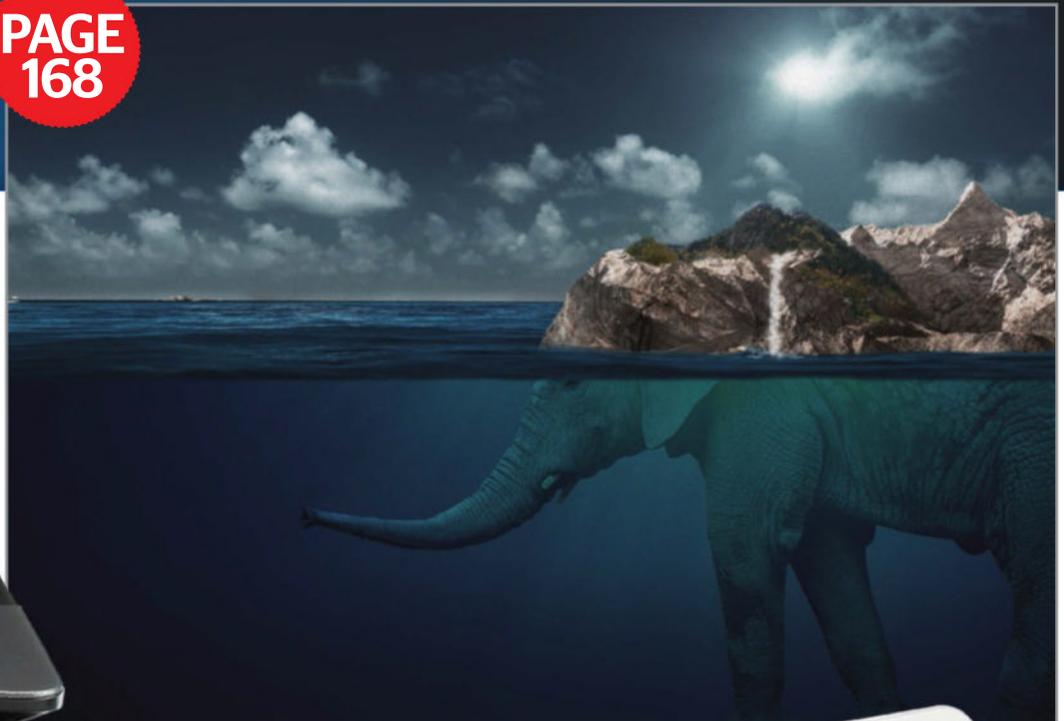
- 82 Convert a static site with a child theme
- 86 Create a mobile-friendly site
- 90 Transform HTML to WP

PLUGINS

- 100 Pro guide to plugins
- 106 Edit widgets and plugins
- 110 Protect your blog from spam
- 114 Increase site visits with SEO
- 118 Add a social author box



**PAGE
168**



**PAGE
110**

- 120** Build a WordPress slideshow
- 124** Schedule your blog posts

CUSTOMISATION

- 128** Add multiple moving backgrounds
- 130** Create an animated logo with CSS3
- 134** Blur and focus your text with Font Font
- 136** Build circular on-hover navigation
- 148** Create animated buttons with CSS3
- 142** Code a fixed image scroll-over effect

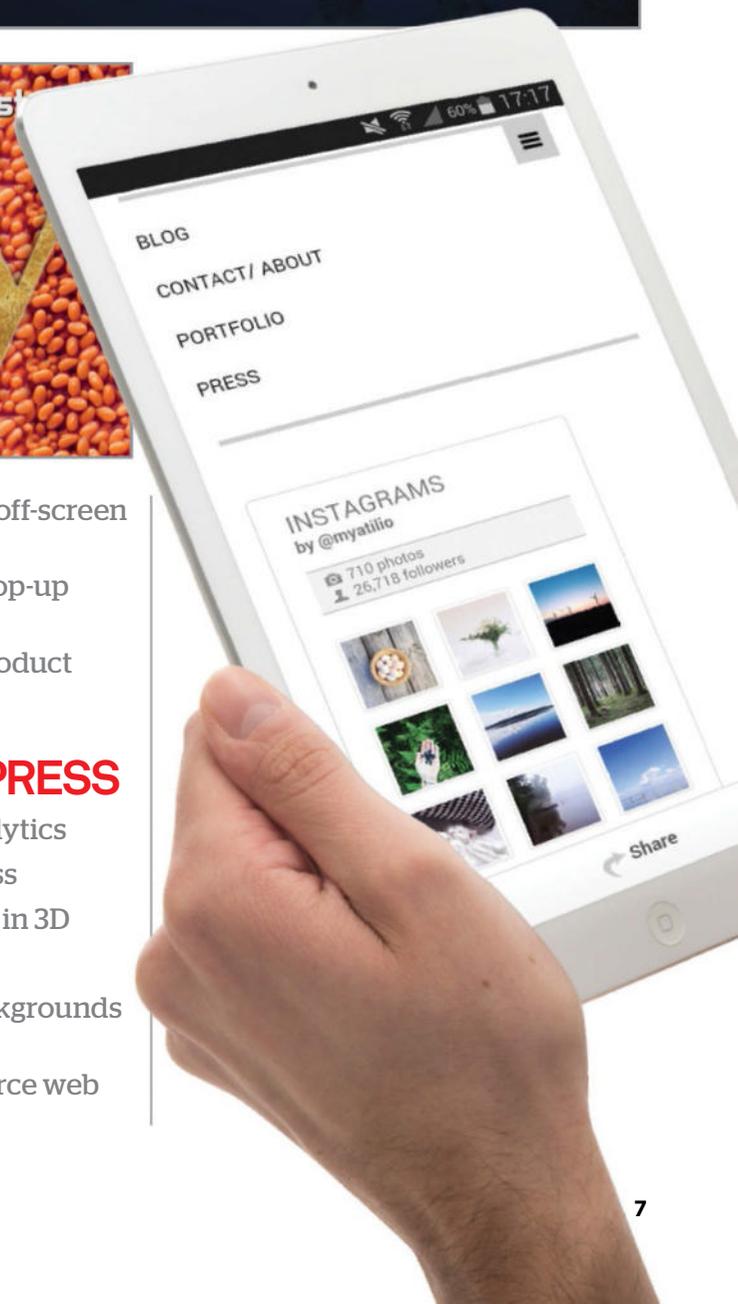


**PAGE
142**

- 144** Make an animated off-screen 3D menu
- 148** Master animated pop-up effects
- 150** Create a rotating product viewer

BEYOND WORDPRESS

- 154** Master Google Analytics
- 160** Speed up WordPress
- 164** Code an input form in 3D with CSS
- 168** Design layered backgrounds in Photoshop
- 172** Create an eCommerce web element with CSS3





Master the new update

WORDPRESS HAS UNDERGONE ONE OF ITS MOST SIGNIFICANT UPDATES, BUT IS IT REALLY ALL THAT DIFFERENT? WHAT'S REALLY NEW IN VERSION 4.3?



WORDPRESS 4.3 IS out now, and includes a selection of new features and security fixes to help bring your blog or website

right up to date.

A host of new features are available in WordPress 4.3, from improvements to the Theme Customizer view and Media Library interface to enhanced media handling in the Visual Posting view and a brand new interface for installing plugins. You'll also find some changes to the TinyMCE UI when creating a new post and it is now possible to select a language when you install WordPress for the first time.

These improvements all work together to deliver an updated, polished

WordPress experience. Enhancements to managing images and videos help us save time with previews, while browsing for new plugins has become a far better experience, allowing you to see small previews in advance.

In the background, various security fixes have been implemented, ensuring that your blog, your posts and any user data such as email addresses is protected against online intruders.

It is important to make sure your blog is up to date. This means reviewing plugins regularly as well as making a backup before you upgrade. If you've been holding off on recent updates, you shouldn't miss the most recent iteration of WordPress version 4.3.





Master the new update

Get to know the Dashboard

A NEW LOOK TELLS YOU EVERYTHING YOU NEED TO KNOW WHEN YOU LOGIN TO WORDPRESS

AT FIRST GLANCE, the Dashboard may not seem all that different in WordPress v.4, but on closer inspection you should spot the Welcome panel, where a collection of shortcuts can be found.

Ideal for newcomers to WordPress, the panel - which provides shortcuts for adding widgets, installing a new theme, writing a new post and adding an About page, as well as managing widgets and menus, turning comments on and off and more - can be dismissed if you're a more experienced user.

Elsewhere on the Dashboard, the 'At a Glance' panel, your blog's comments Activity, the Quick Draft box and the WordPress News (useful for spotting when new updates are imminent!) are also available, and are as customisable as they were before, you are able to drag and drop for your own liking. You can use the Screen

Options to determine which boxes appear and which remain hidden (see page 15).

Further items will be added to the Dashboard as you install plugins. Several prominent apps add important "at a glance"-style information to the Dashboard, such as Jetpack's visitor stats plugin.

Further items will be added to the Dashboard as you install plugins

The image shows a screenshot of the WordPress 4.0 Dashboard with several callout boxes pointing to specific features:

- Updates**: Update alerts will help you to keep your blog secure and protected against online threats as well improve functionality
- Customize Your Site**: Use the site customizer to get a preview of how your blog will look with a new background colour or with widgets added
- Welcome panel**: The Welcome panel introduces you to WordPress v.4. This is useful whether you're new to the software or an experienced user
- Quick Draft**: Employ the Quick Draft panel to add new blog posts in a stripped-down form, without any pressure to publish
- Screen options**: Use the screen options to tailor each screen in WordPress to your particular workflow requirements
- Plugins**: Adding new Plugins has been revised in WordPress v.4, with a brand new user interface that improves the experience
- At a Glance**: The At a Glance panel gives you all of the information you need about your blog
- Rearrange panels**: Dashboard panels can be rearranged as needed, allowing you to prioritise the information you need
- Welcome panel**: Once you're familiar with the Dashboard, maximise space by closing the Welcome to WordPress panel
- News panel**: The WordPress News panel keeps you up to date with new and upcoming versions of the blogging software

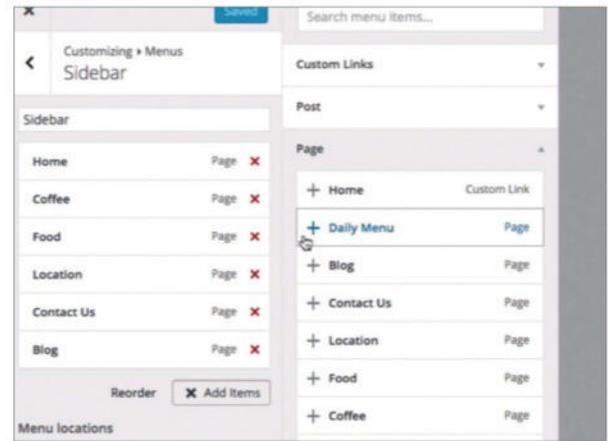
Get WordPress 4.3

UPGRADE TO WORDPRESS 4.3 FOR ALL THE LATEST FEATURES

ONE OF THE greatest aspects of WordPress is its much-admired easy installation, and the latest version is no different. If your blog is already running WordPress, ensure your database is backed up, then sign into the Dashboard, find the notification informing you that WordPress 4.3 is available and click the link to begin the upgrade process.

The latest incarnation of WordPress includes all the previous features in v.4, but before checking them out check your current plugins and themes. This is to ensure that they are compatible with the latest version of WordPress just installed. Modify, update and change accordingly.

So, what does the latest version have to offer? The big three are menus in Customizer, formatting shortcuts and site icons. Customizer allows users to quickly modify, update and live-preview menus, while the formatting options mean no need to head into the code or select text and choose an option, just add the right characters. Finally, add site icons to display in the Address Bar.



 After the update completes, you'll be presented with the new Dashboard page 

Blogging made easier

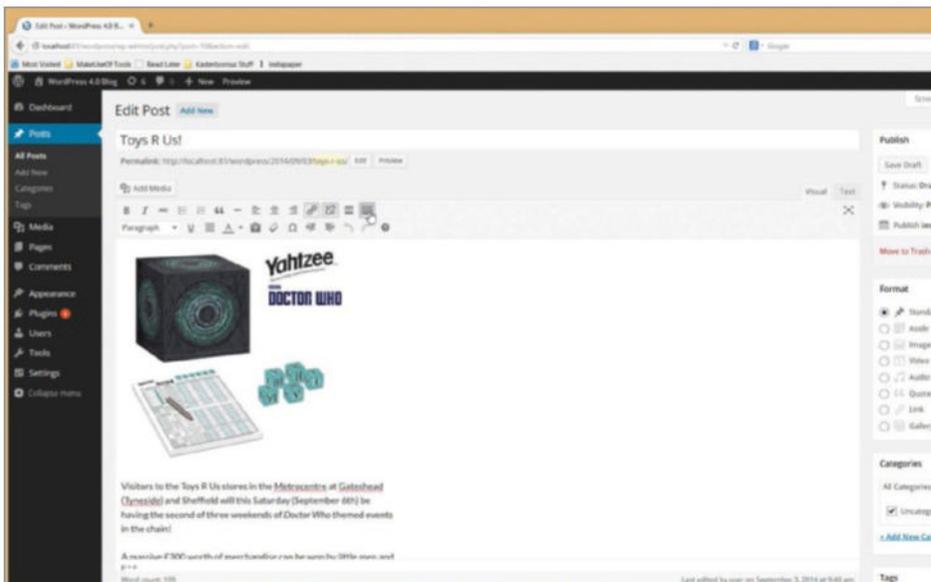
WORDPRESS V.4 HAS IMPROVED TOOLS FOR AUTHORIZING NEW ARTICLES

IMPROVEMENTS TO THE way in which you compose posts in WordPress v.4 can be a benefit to new bloggers and those using WordPress as the publishing system for their top-rated, busy website.

On the face of it, there are few differences with the previous version of WordPress, but these improvements have been gradual over the past couple of years, and as such are more secure and stable here.

In the Add New Post screen you'll still find the title box, the option to edit the Permalink (a vital tool in your SEO strategy) and to add images using the Add Media button. You may also prefer to view all of the available buttons in the TinyMCE text editor, possible using Toolbar Toggle.

A notable recent addition to WordPress is the Format toolbar, which can be used to create post types such as standard, images-focused, video posts, galleries and more. You'll find these work best when supported by your blog theme.



<above> Customising the look and feel of your blog posts has never been easier

Creating posts



01: Use full page editing

Use the Distraction Free Writing button to take the WordPress post editor box full-screen, and enjoy a completely new way of blogging.



02: Format your posts

Use post formats to style the published article appropriately - for instance, a video post might have the clip at the top of the page.



03: Visual Posting

The Visual Editor now gives you a better idea of how a blog post will appear when published, with accuracy determined by the active theme.

Master the new update

Revised media library

CHANGES TO THE WORDPRESS MEDIA LIBRARY MAKE CHOOSING IMAGES SIMPLER

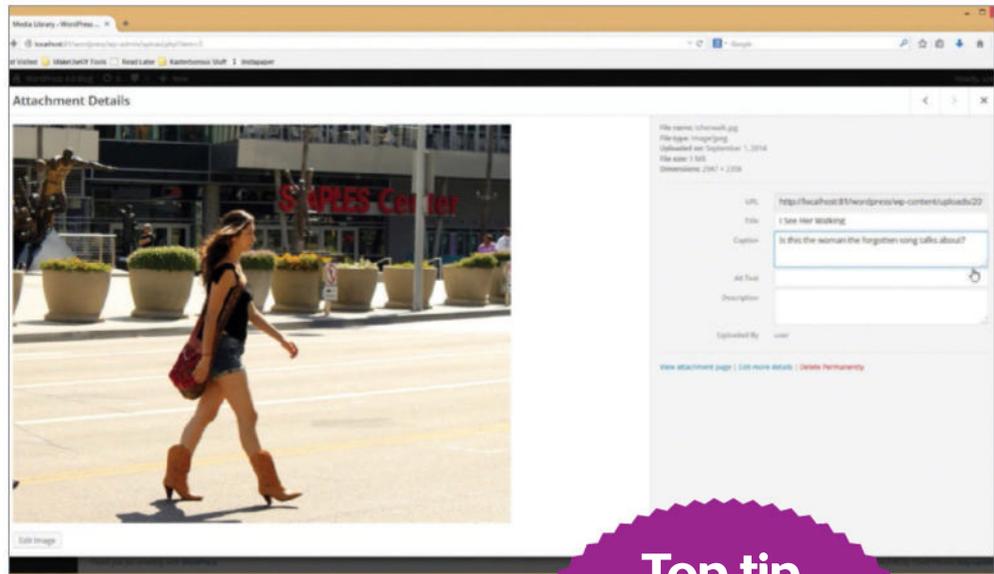
ONE KEY ADDITION to WordPress v.4 is an improvement to the Media Library. It is now possible to view a larger-resolution version of an uploaded image and make the necessary changes with ease.

Improvements in how your images are handled in the Edit screen (Media>Library>{Select your image}>Edit Image) meanwhile allow you to make and save edits without worrying whether or not the changes you make will be applied.

Although it isn't advisable to edit images on the server of a busy website, sometimes it just cannot be avoided (we would advise that image editing usually takes place on your computer or tablet).

You can also add a new title for the image, set a caption to be displayed when it is embedded in a post as well as display alt text when the image doesn't load. A description is also useful!

Whether you're editing images or words you can cycle between attachments uploaded by using the arrows in the top-right corner of the Attachment Details view.



Top tip
Intelligent resizing rearranges the left and right menus to fit above and below the editing box, enabling you to edit your blog on smaller devices.

🔗 The software will display the video preview, as it would on the sites it originates 🌐

Easily embed videos

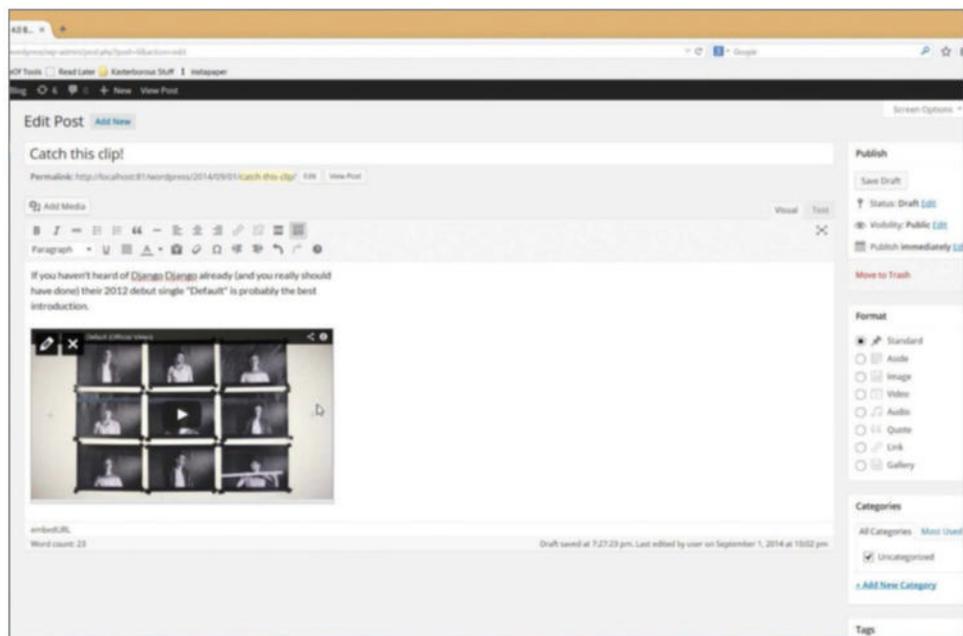
NOW THERE IS NO NEED TO PREVIEW EMBEDDED VIDEOS

ONE GREAT WAY to attract readers - and ensure they hang around - is to embed clips from video sharing services in your posts, and a new feature in WordPress v.4 is a refined method of viewing these video clips.

In the past, the video was represented by a big grey block, which provided a useful guide to the size of the embedded clip. After updating to WordPress v.4, the software will display the video preview, much as you would see it on the sites it originates (such as YouTube or WordPress.tv).

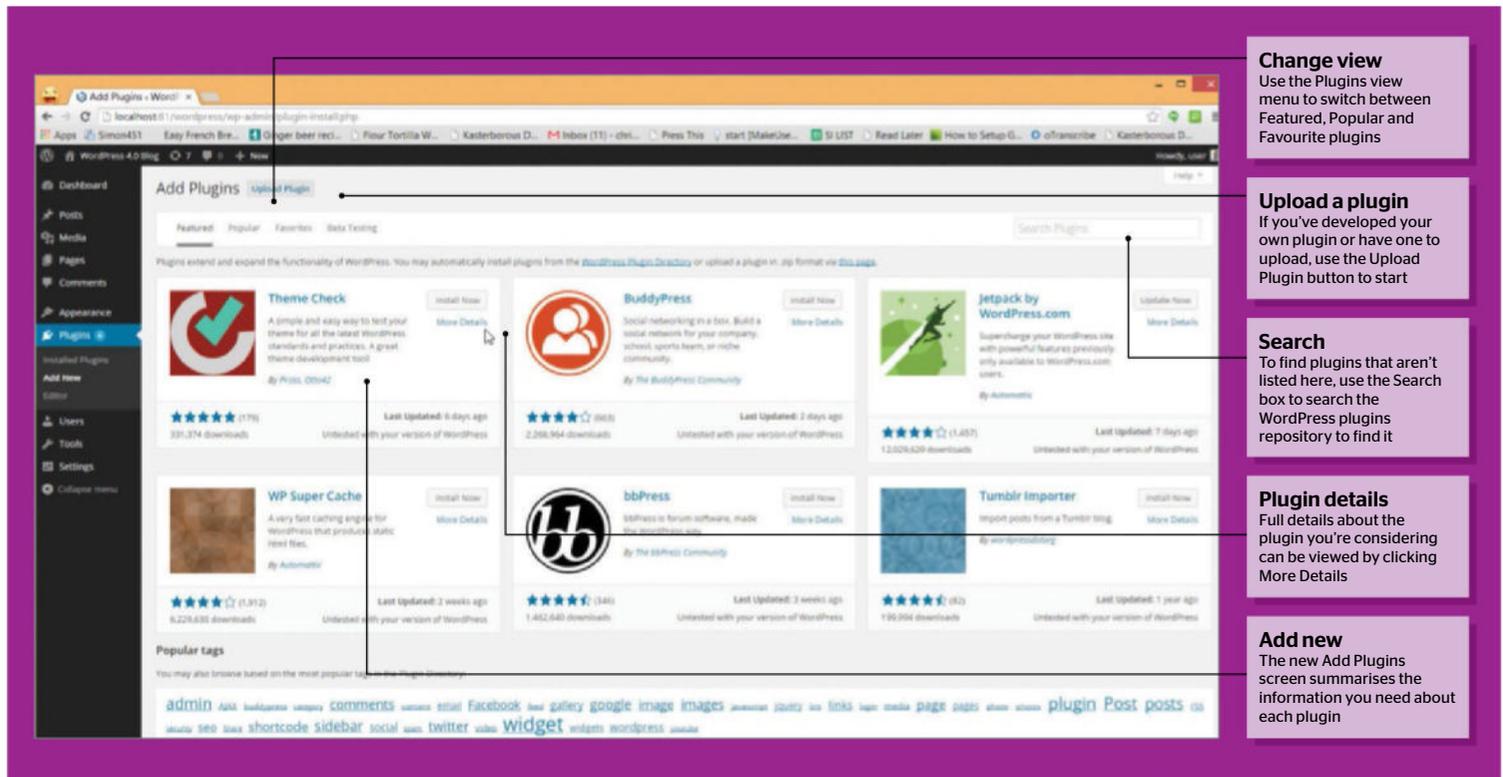
Better still, if you need to preview the video clip in the editor, you can, which will save time waiting for post previews to load.

Although editing options are limited, there are some choices available. If the video you embedded is the wrong one, you can click the pencil icon in the top left of the video preview to open the edit screen and input a different YouTube URL (WordPress requires only the URL rather than the embed code). Should you want to remove the video, all you need to do is click the X button to discard it.



Installing plugins in WordPress

USE THE NEW INSTALLER TOOL TO PREVIEW PLUGINS AND SAVE TIME



Change view
Use the Plugins view menu to switch between Featured, Popular and Favourite plugins

Upload a plugin
If you've developed your own plugin or have one to upload, use the Upload Plugin button to start

Search
To find plugins that aren't listed here, use the Search box to search the WordPress plugins repository to find it

Plugin details
Full details about the plugin you're considering can be viewed by clicking More Details

Add new
The new Add Plugins screen summarises the information you need about each plugin

Plugins made easy

NEW USER INTERFACE TAKES THE PAIN OUT OF PLUGIN INSTALLATION

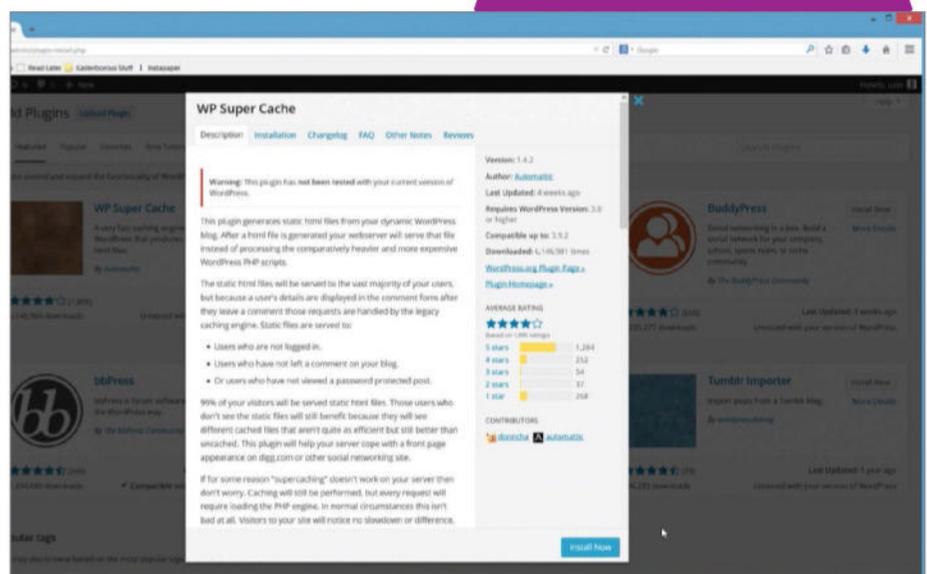
Top tip
When checking new plugins, always view the screenshots. If the developer believes in the plugin, they will take time to upload screenshots.

INSTALLING PLUGINS CAN be a stressful experience. After backing-up your database and files, you then need to ensure the plugin you're about to install (if you even find the one you're looking for) is the best option for your blog. You may run it on a test blog first to make sure that there are no inadvertent side-effects.

With WordPress v.4, the developers Automattic have introduced a new user interface that will alleviate some of the stress by presenting available plugins with a use preview that gives more information than was previously available.

Now when you open the Plugins>Add New screen, you're presented with a selection of Featured plugins, while a second tab displays Popular plugins. Descriptions, ratings and update information is provided, along with compatibility details. To find out more, click More Details, and when you're happy you can click Install Now to add the plugin to your blog.

A useful new feature for anyone running multiple blogs is Favourites, which means if you sign in through your blog, you can view any plugins that you marked as a favourite, making it easy to find in future.



WP Super Cache
Warning: This plugin has not been tested with your current version of WordPress.
This plugin generates static html files from your dynamic WordPress blog. After a html file is generated your webserver will serve that file instead of processing the comparatively heavier and more expensive WordPress PHP scripts.
The static html files will be served to the vast majority of your users, but because a user's details are displayed in the comment form after they leave a comment those requests are handled by the legacy caching engine. Static files are served to:
• Users who are not logged in.
• Users who have not left a comment on your blog.
• Or users who have not viewed a password protected post.
99% of your visitors will be served static html files. Those users who don't see the static files will still benefit because they will see different cached files that aren't quite as efficient but still better than uncached. This plugin will help your server cope with a front page appearance on digg.com or other social networking site.
If for some reason "super-caching" doesn't work on your server then don't worry. Caching will still be performed, but every request will require loading the PHP engine. In normal circumstances this isn't bad as all visitors to your site will notice no slowdown or difference.

AVERAGE RATING
★★★★☆
Based on 128 ratings
5 stars 1,204
4 stars 282
3 stars 54
2 stars 37
1 star 264

Master the new update

Get the language right

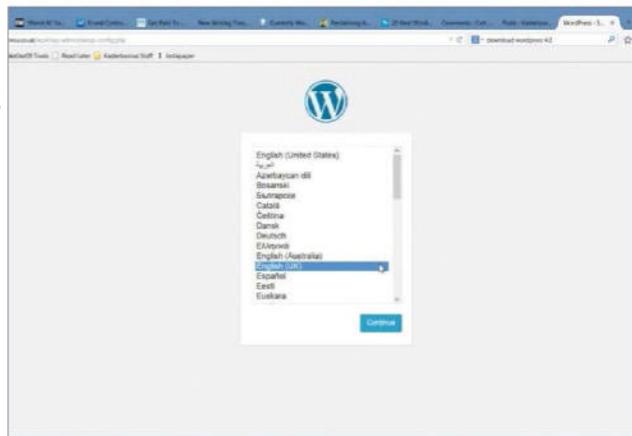
ADJUST YOUR LANGUAGE SETTINGS FOR YOUR CONTRIBUTORS

IF YOU RUN a blog that is targeted at a foreign country, and have a team of bloggers who speak the language of that region, then it might be a wise strategy to ensure that they can use WordPress effectively.

The best way to do this is to setup the blog software using their preferred language, which is now an option when you install WordPress v.4 onto a new server.

You're probably familiar with the WordPress installation screen, seen as you open your domain name in your browser after uploading the latest unzipped version of the blog software. Setting your preferred language is the first option here. If you're used to using automated installers in cPanel or similar server admin tools, the language option will also be found here.

Once the language is set, it cannot be changed without reinstalling, so ensure you have selected the right option.



You can now get a full preview in the Theme Customizer as you make changes

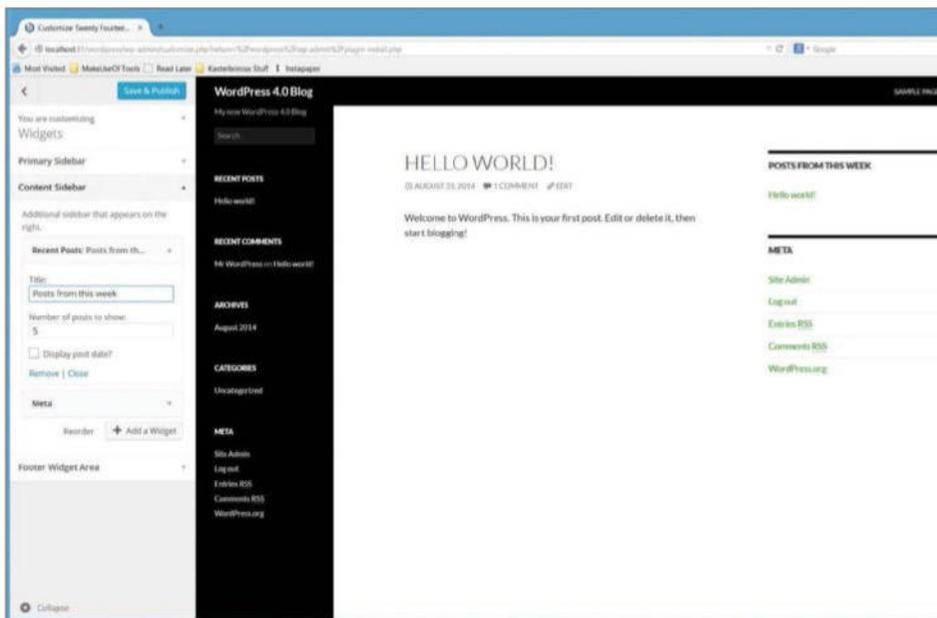
Previewing widgets

GET THE BEST PREVIEW OF YOUR THEME YET - WITH WIDGETS!

WORDPRESS V.4 FEATURES a few improvements to the Theme Customizer, which can be accessed in Appearance>Customize. Where once this was limited to changing colours and site title, it is now a far more powerful tool that can demonstrate the impact of any installed widgets on your chosen blog theme (as long as it is compatible with live widget previews) before you have installed it.

The advantage of this is clear. Whereupon once you would have added a widget, saved it and then quickly refreshed your blog - probably in a new browser tab - to see how it looked (and whether or not it broke your blog layout!) now you can get a full preview in the Theme Customizer before rolling out the changes to your readers.

We think that this is one of the most important new developments in WordPress v.4, and once you've tried it out we're certain you will agree!



above The Theme Customizer has become a more versatile tool that allows you to preview your widgets

Live widgets



01: Customize your blog

Access the Theme Customizer via Appearance>Customize. Click Widgets to view available widgets for your blog theme sidebars.



02: Adding a widget

Click Add a Widget to display the widgets you can use, and configure the one you want to use. Observe how it updates as confirm options.



03: Save your changes

Widgets can be reordered by clicking and dragging and like other changes will update in the preview. When you're happy click Save & Publish.

Adjust your Screen Options

CUSTOMISE YOUR WORDPRESS V.4 EXPERIENCE BY CONFIGURING SCREEN OPTIONS

HOW DO YOU use WordPress? For most, it is a case of sign in, scramble around looking for the link or feature you're looking for on the Dashboard or New Post page, write your post, and then logout. With the addition of more and more plugins over time, this process can become increasingly slow.

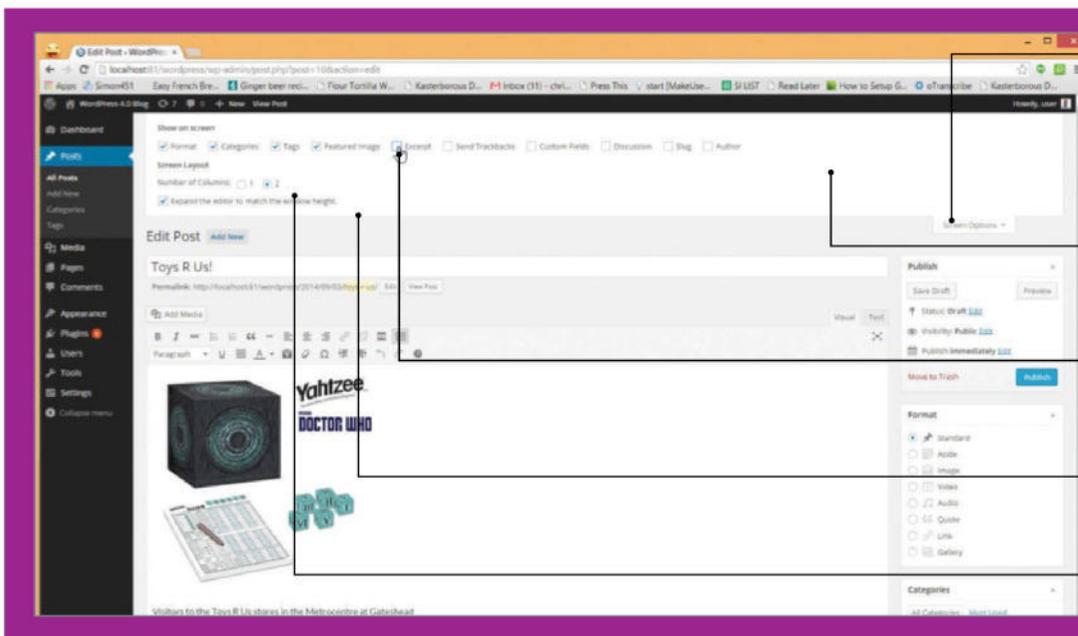
The reason for this is simple: you're not using WordPress right. Using the Screen Options button, available at the top of almost every admin screen in the

Dashboard, you can customise the blogging software's back-end to see only what you need.

For instance, you've installed several plugins to your WordPress v.4 blog, and the Dashboard is beginning to look a bit cluttered. All you need to do in this situation is open the Screen Options box at the top of the browser window, and disable items that you don't need to see, don't use, or don't need to access through the Dashboard. Click the Screen Options button when you're done.

Top tip

The Screen Options button is available across several admin screens in WordPress v.4, such as the Add New Post, All Posts and Dashboard. These options offer freedom to personalise the back-end so you only see the elements you need to edit.



Open the Options

Click the Screen Options button to open the concealed window, where you can make any changes to the layout

The Options are flexible

You can activate as many or as few of the Screen Options settings as you like

Tick it to activate it

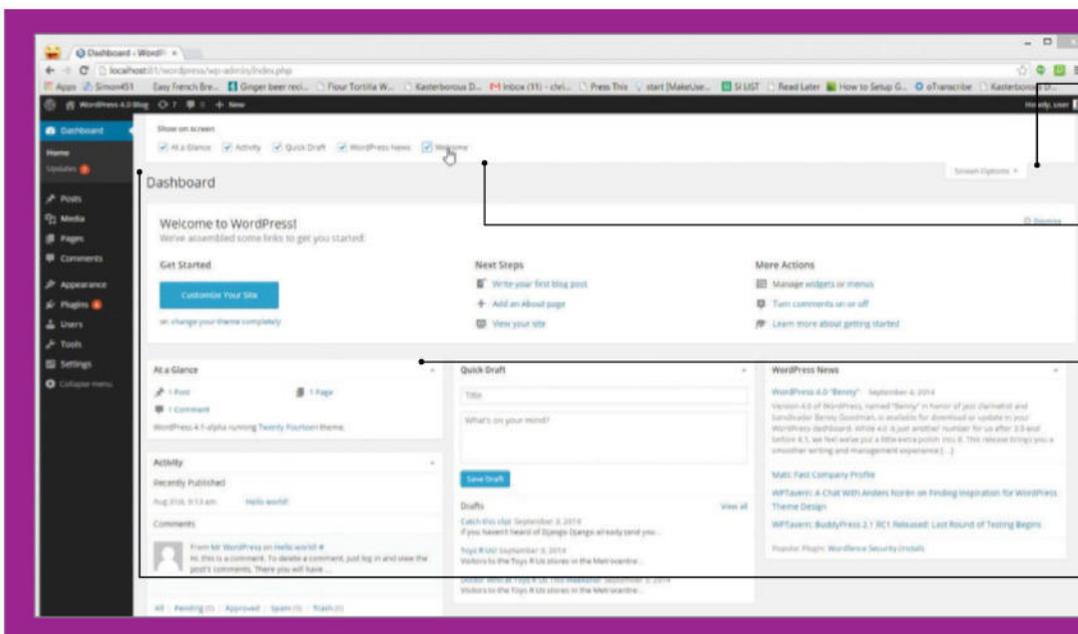
To enable a control, place a tick in the corresponding box. Removing the tick will hide the control

TinyMCE editor

Maximise the space you have to compose your posts by using this option to expand the TinyMCE editor's dimensions

Amount of columns

Too many columns? Use the Number of Columns option to restyle the layout



Click it to close it

Click the Screen Options button to close the window, and carrying on blogging!

Toggle tools

Even controls with their own tool for closing can be toggled off and on

Don't hide, minimise

Rather than disable panels completely, you might prefer to minimise them, expanding them only when you need to use them

Tailor menus

These controls are tailored to the Dashboard screen

Different screens

Different WordPress admin screens feature a different set of options

SUPERCHARGE WORDPRESS



UNLEASH THE FULL POTENTIAL OF WORDPRESS WITH CUSTOM POST TYPES, TAXONOMIES AND PLUGINS



WORDPRESS, THE WORLD'S largest CMS, is powerful right out of the box. For simpler sites you can probably make do with its posts and their categories and tags, and its pages for more static content. Whatever you might need beyond that can often be solved by a plugin.

But if you want to take your WordPress site further and utilise the platform's true CMS capabilities, you will probably want custom post types and/or custom

taxonomies. These are two of the sharpest tools for WordPress developers when they are looking to build more complex sites where there are several different types of content and there is a need for more advanced levels of categorisation.

To understand what custom post types are, all you really need to know is that the posts and pages, which WordPress supports by default, are in fact two post types. You can recreate them with new names and

tweak them to be more tailored for your needs by creating your own custom post types. You can even unregister the standard posts and pages and replace them with custom post types that better fit your needs if you wish.

The same goes for custom taxonomies. The default categories and tags are in fact taxonomies - and you can create your own. This opens the door to a ton of possibilities, as you will soon see.

Supercharge WordPress

Code Library

Custom post types

Obviously there are a lot of settings and alternatives when it comes to creating a custom post type, so in this code snippet we've kept things reasonable. The code works in a theme's functions.php, but should be in a compatibility plugin

```
// Register Custom Post Type//

001 function custom_post_type() {
002 $labels = array(
003     'name' => 'Movies',
004     'singular_name' => 'Movies',
005     'menu_name' => 'Movies',
006     'parent_item_colon' => 'Parent Movies:',
007     'all_items' => 'All Movies',
008     'view_item' => 'View Movie',
009     'add_new_item' => 'Add New Movie',
010     'add_new' => 'Add New',
011     'edit_item' => 'Edit Movie',
012     'update_item' => 'Update Movie',
013     'search_items' => 'Search Movies',
014     'not_found' => 'Not found',
015     'not_found_in_trash' => 'Not found in Trash',
016 );
017 $rewrite = array(
018     'slug' => 'movie',
019     'with_front' => true,
020     'pages' => true,
021     'feeds' => true,
022 );
023 $args = array(
024     'label' => 'movies',
025     'description' => 'Movies',
026     'labels' => $labels,
027     'supports' => array( 'title',
028     'editor', 'excerpt', 'author', 'thumbnail', ),
029     'taxonomies' => array
030     ( 'post_tag', 'actor' ),
031     'hierarchical' => false,
032     'public' => true,
033     'show_ui' => true,
034     'show_in_menu' => true,
035     'show_in_nav_menus' => true,
036     'show_in_admin_bar' => true,
037     'menu_position' => 5,
038     'menu_icon' => '',
039     'can_export' => true,
040     'has_archive' => true,
041     'exclude_from_search' => false,
042     'publicly_queryable' => true,
043     'rewrite' => $rewrite,
044     'capability_type' => 'page',
045 );
046 register_post_type( 'movies', $args );
047 }
```

All the code for creating a custom post type (or several) should go in a function. At the end we'll add that function to the init action with add_action()

The array for supports contains information about what sort of elements the post type should support. In this case it's the post title field, the editor, the excerpt, choosing an author, and featured images

All the details are collected in \$args, including \$labels and \$rewrite, which you'll find in the \$args array as well. These, along with the post type name, are passed to register_post_type()

```
// Hook into the 'init' action
add_action( 'init', 'custom_post_type', 0 );
```

Adding a separate selection in the admin interface might be more manageable than having an overload of categories

Where to use them

With the power of the custom post type unlocked, it's hard to imagine not using them everywhere, right?

Custom post types are great. So great in fact, that it's easy to start using them too much; while custom post types are great, they come with a few caveats. One of the first things you need to remember is that adding more options in the WordPress admin interface might not be a good thing. Less technical users will be daunted by more things to manage, if that's the overall feeling of making additions. On the other hand, adding a separate selection in the admin interface might be more manageable than having an overload of categories to consider when working with content. As always, there's a thin line as to what is reasonable and what's not.

Custom post types really shine on content that differs a lot from the traditional posts and pages. Product directories are an obvious choice, because here you'll not only want to separate the products (ie product post type posts) from the regular post flow of, say, a news section. It's also likely that your product posts will need more boxes and settings than most

Theme template files for custom post types

Custom post types will use your theme's template files if possible, just like any other post type. These are the ones you'll probably be most interested in:

Archive template: archive-X.php, where X is the name of the custom post type.

Single template: single-X.php, where X is the name of the custom post type.

Create a custom taxonomy

SOMETIMES THE DEFAULT CATEGORIES AND TAGS WON'T CUT IT - THIS IS WHERE CUSTOM TAXONOMIES COME IN

What are they?

Understanding what a taxonomy actually is will help you put your custom taxonomies to better use

WordPress ships with a set of post types and also has two taxonomies per default. Both categories and tags are taxonomies, albeit working a bit differently. You can see that when using the admin interface. Categories are a set of checkboxes where you choose one or several, and they can also be hierarchical, which is to say that a category can have another category as its parent. Tags aren't like that at all; they're not hierarchical and therefore have no relationship to each other. In the admin interface that means that the tag box is free text, which often means that the tags will be a little bit more chaotic and less ordered than the categories due to user behaviour.

A taxonomy has terms associated to it. This means that a category, in the category taxonomy, is a term. A tag in the tag taxonomy is also a term. When you create your own custom taxonomy, the items within it will also be terms.

There is actually a third taxonomy shipping with WordPress, being the Post Format taxonomy. This one has special rules, such as that it's not meant to be extended (but obviously you can do that), and you're only allowed to choose one of the defined terms (Quote, Image, Standard, and so forth) for your post. You shouldn't worry (or possibly mess with) the Post Format taxonomy, but it's good to know what the feature actually is.

Why you should use them

Taxonomies bring order to the WordPress galaxy of posts, giving you even more tools to tie your posts together

Categories are among the most powerful tools in the WordPress arsenal. Most sites can manage with just posts and pages (and attachments, obviously) and categories. With categories, you can easily create sections on your site, consisting of a flow of posts. That's what taxonomies do best: they bring order to your content.

Creating additional taxonomies gives you additional order, at least if you think things through and don't overdo it with a taxonomy for everything. That said, some content might need some sort of sorting, be it category- or tag-like, but it shouldn't be mixed with the standard posts. That's when you create a custom taxonomy and that's where they shine. There are obviously other times when custom taxonomies hold their own as well, such as plugins registering hidden taxonomy terms and such, but that's a bit out of the scope of this article.

Much like categories and tags, custom taxonomies can have their own archives. This is really useful, because it means that you're not just limited to sorting content by itself, but you can also make the archives stand out if you like. In fact, much like categories can be used to create sections on a site, you could do the same with your custom taxonomies, bringing further order to the user experience as well as the administrative one.



<above> The purpose of the Book post type is to give the books their own part of the site, keeping them separate from posts and pages

other post types; you don't want to litter your posts and pages with boxes pertaining to size and shipping and weight and costs and whatever it else it is you need to describe and work with a product in such a site.

On <http://tdh.me>, there's a custom post type for books, for exactly the same reason as stated above. These are the times where custom post types really work: when you need a different set of content, whether it's in the interests of being user friendly in terms of the need for a lot of boxes and settings, or because the content just doesn't belong with the regular flows of posts.

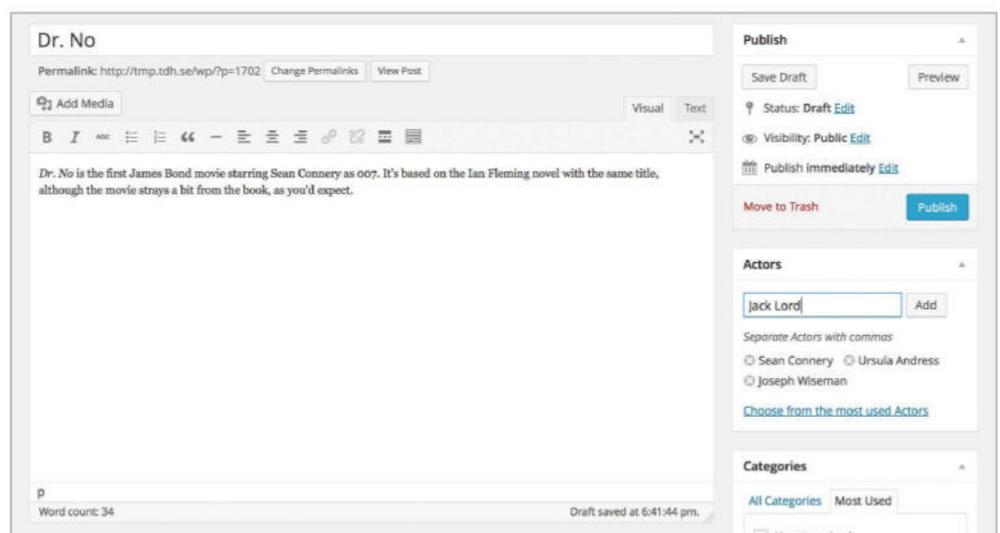
Obviously there are so many other uses for custom post types as well. Sliders, if you have to have them, fit perfectly. Just use a post in a custom post type for each item in the slider, cut everything not needed for the slider posts' content, and you'll have something that's easy to manage for the users. Posts wouldn't do at all here because obviously you don't want slider posts to show up in search results, so that's another strength of custom post types that's worth remembering.

Don't forget mobile users

Remember that mobile apps aren't on par with the browser at all times

Something to remember about custom post types is that they might not work in the apps your users rely on. At the moment most mobile apps - for both iOS and Android - don't support custom post types at all, which means that the users are tied to the web browser when working with these things. Granted, the WordPress admin interface will work in most modern mobile web browsers, but the experience is not as slick as the apps at this time. It's important to be aware of these things because if you've built a news site and want to snap and post a breaking news item really quickly, being able to use an app to do this might be the upper hand you need.

Not surprisingly, this is also an issue for custom taxonomies, so do your homework first if mobile apps are important to the workflow.



<above> Custom taxonomies look and behave like categories and tags, blending well with the WordPress interface

Supercharge WordPress

Code Library Custom taxonomy

```
// Register Custom Taxonomy
function custom_taxonomy() {

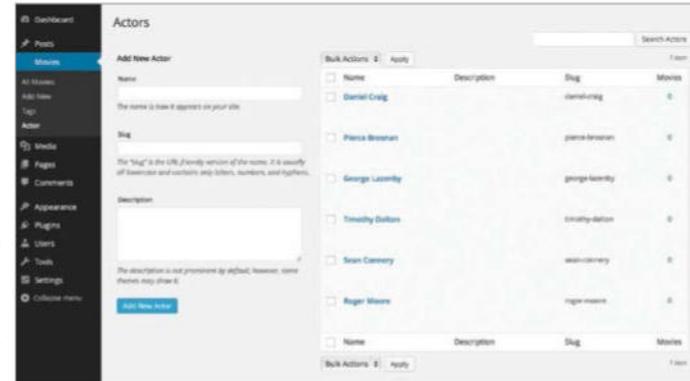
001 $labels = array(
002     'name' => 'Actors',
003     'singular_name' => 'Actor',
004     'menu_name' => 'Actor',
005     'all_items' => 'All Actors',
006     'parent_item' => 'Parent Actor',
007     'parent_item_colon' => 'Parten Actor:',
008     'new_item_name' => 'New Actor',
009     'add_new_item' => 'Add New Actor',
010     'edit_item' => 'Edit Actor',
011     'update_item' => 'Update Actor',
012     'separate_items_with_commas' => 'Separate Actors
with commas',
013     'search_items' => 'Search Actors',
014     'add_or_remove_items' => 'Add or remove
Actors',
015     'choose_from_most_used' => 'Choose from the
most used Actors',
016     'not_found' => 'Not Found',
017 );
018 $rewrite = array(
019     'slug' => 'actor',
020     'with_front' => true,
021     'hierarchical' => false,
022 );
023 $args = array(
024     'labels' => $labels,
025     'hierarchical' => false,
026     'public' => true,
027     'show_ui' => true,
028     'show_admin_column' => true,
029     'show_in_nav_menus' => true,
030     'show_tagcloud' => true,
031     'rewrite' => $rewrite,
032 );
033 register_taxonomy( 'actor', array( 'post' ), $args );
034 }

// Hook into the 'init' action
add_action( 'init', 'custom_taxonomy', 0 );
```

Custom taxonomies are created in a function that is added to the init action with `add_action()` in the end

Whether a custom taxonomy is hierarchical or not decides if it's like categories (value set to true) or like tags (value set to false)

`register_taxonomy()` registers the actual custom taxonomy, with its name (actor), what post types it should work on (posts) and with what rules (passed through \$args)



<above> Showing the Actor taxonomy with some terms

Where to use them

Fine-grained control of your content through custom taxonomies is nice – but where do they really shine?

There are a lot of great examples of places where custom taxonomies can help. Much like the category-powered sections of a simple site, you can add more ways to tie content together. The first thing you need to remember is that you decide which post types – be it default ones shipped with WordPress or custom post types you've created – support the custom taxonomies that you create. This means that you can add in additional taxonomies where you want to, making them relevant across the post types. The same goes for the default categories and tags.

Custom taxonomies are often used to create database-like functionality. One of the better examples is the movie analog, where you use custom post types for things like genre, year of release and actors. This would mean that the genre custom taxonomy would be hierarchical, acting much like the standard categories do. The year of release and actor custom taxonomies would be non-hierarchical, which means they'll behave like the standard tags do. The purpose of storing this sort of data in a custom taxonomy, rather than a post meta box (custom field), is because of the archives you'll get. Let's say for example that you want all the 'Action' movies, 'Action' being a term in the genre taxonomy. Well, just like with any term, you can get an archive easily enough. The same goes for all the movies released in 1987 (the term '1987' within the year of release taxonomy), or the ones where Roger Moore is an actor (the term 'Roger Moore' in the actors taxonomy).

The way you can get archives – and therefore useful sections on your site – from taxonomies makes them a very useful tool. Obviously it's also data you can query should you need to; for example, by creating a page template detailing all the James Bond movies by actor. You'd have to write a separate WordPress query, using `WP_Query`, for that page template, but since the data is there as terms in various taxonomies it's not such a big step.

Template files for custom taxonomies

If you want additional control over your custom taxonomies, you'll need to add the appropriate template files to your theme, otherwise they'll just revert to the default ones. These are the template files that you'll probably want to consider adding:

TAXONOMY ARCHIVE FOR A SPECIFIC TAXONOMY: TAXONOMY-X-Y.PHP, WHERE X IS THE NAME OF THE CUSTOM TAXONOMY, AND Y IS THE TERM SLUG.

TAXONOMY ARCHIVE: TAXONOMY-X.PHP, WHERE X IS THE NAME OF THE CUSTOM TAXONOMY.

GENERAL TAXONOMY ARCHIVE: TAXONOMY.PHP, WHICH WILL BE USED FOR ALL TAXONOMIES.

Needless to say there are a lot of things that can be done with custom taxonomies, much like there are a lot of things being done with the default tags and categories. The big difference is that here you have full control to decide what rules there are for the taxonomies that you create.

Term descriptions are useful

Describe your terms for more useful archive pages

Terms, whether they're residing in the default categories or tags taxonomies, or in a custom taxonomy created by you, have a description field. Most themes forget about this, which is a shame since it's the perfect spot to add a little more reference as to what the archive page the user is viewing is actually all about. The description is managed on your term page in the WordPress admin interface, where you can also change the name and the permalink of the description. Don't forget this very useful tool when developing sites, with or without custom taxonomies.



<above> Adding some information about Roger Moore, a term in the Actor taxonomy

Getting weird 404s?

When working with custom post types and custom taxonomies, sometimes you'll get completely unexpected 404 errors when trying to view archives and such. This is usually WordPress permalinks going wonky, so just go to Settings>Permalinks and update permalinks (you don't have to change anything) and things should be working fine again - assuming you did everything right in the first place, of course!

Compatibility plugins

NOW THAT YOU'VE CREATED YOUR CUSTOM POST TYPES AND TAXONOMIES, LET'S ENSURE THAT THEY'RE PORTABLE

If you've ever read about custom post types and custom taxonomies before in tutorials and blog posts, you'll notice that the most common instruction is to put the necessary code in your theme's 'functions.php' file. That works, technically, but it's a bad idea.

Think about it: sometimes you change your theme, which means you'll get a new functions.php file. That in turn means that you'll have to move your custom post type and custom taxonomy code to the new functions.php, manually copying and pasting. This isn't a big thing obviously, but it's another thing to remember - and a bit of a nuisance.

The better way to do this is using a compatibility plugin, which really is a plugin like any other, but it contains the code you need for things like custom post types and custom taxonomies. These are features and additions to your WordPress site that you'll want to have access to no matter what theme you're using, so the code for them should be portable between themes. By sticking the code in a plugin, it'll always be there and the only related things you'll need in your theme will be things that belong there, like the template files for custom post type single posts, or custom taxonomy archives, and so forth.

You create a compatibility plugin much the same way as you do any other plugin. If you're unfamiliar with this, it's straightforward enough to pick up. All you need is one file, let's call it 'compatibility.php', with the necessary plugin header telling WordPress that it's a plugin, in a similar way to how the header in a theme's 'style.css' does for themes.

```
001 <?php
002 /*
003 Plugin Name: Compatibility Plugin
004 Plugin URI: http://tdh.me
005 Description: These functions
```

```
should not be in the theme
functions.php file, so they are
here instead.
006 Version: 1.0
007 Author: Thord Daniel Hedengren
008 Author URI: http://tdh.me
009 License: GPL3
010 */
// Put your custom post type and custom
taxonomy functions here!
011 ?>
```

That's it, a plugin header with some basic information for WordPress. Having done that, all you then need to do is put the necessary functions, as described previously, in the plugin file. Upload to wp-content/plugins/ and activate the plugin - and there you have it!

Plugins are versatile

Compatibility plugins can be useful for many things

It's not only custom post type and custom taxonomy code that belongs in a compatibility plugin - there are plenty of other features that do as well. The general rule is that everything that needs to work if you change your theme should be placed in a compatibility plugin.

One of the most common mistakes are themes with shortcode functionality, perhaps for including fancy pull quotes or product listings, or whatever really. Shortcodes are great, but if the necessary code containing their functionality is missing, then they're just text in brackets that'll show up within your content. You can easily avoid this by putting the necessary code for the shortcode functionality in your compatibility plugin, much like you do with custom post types and custom taxonomies.

Useful plugins

Post Type Switcher

wordpress.org/plugins/post-type-switcher

Post Type Switcher is an excellent plugin that comes in handy when you need to reorganise your posts a bit. Basically, the plugin lets you move one post from one post type to another, which means that you can use Post Type Switcher to transform posts to pages and vice versa. It also means that any registered post type is available.

THERE ARE OBVIOUSLY A LOT OF PLUGINS RELATED TO CUSTOM POST TYPES AND CUSTOM TAXONOMIES IN SOME FASHION OR ANOTHER - HERE ARE SOME TOP PICKS THAT MIGHT HELP YOU DECIDE WHICH TO USE

Term Management Tools

wordpress.org/plugins/term-management-tools

Term Management Tools is one of those plugins that is just plain awesome. It not only lets you change terms between taxonomies, letting you make categories from your tags for example, but it also has the ability to merge several terms into one. It's very useful and has the added bonus of being completely compatible with custom taxonomies.

Types - Custom Fields and Custom Post Types Management

bit.ly/1h4lLt0

Types is one of those everything-and-the-kitchen-sink plugins you should be wary about using. This one's pretty good though; it gives you the tools to manage custom post types, taxonomies and fields. There are some premium features you can unlock, but the plugin works just fine without paying anything.

Getting started

The top tools and techniques

- 24 The Settings**
Get to grips with the depths of WP settings
- 30 Use widgets in WordPress**
Learn how to customise your blog
- 31 Get to grips with plugins**
Add an extra element to your website
- 32 Manage WordPress Comments**
Start discussions on your blog
- 34 Posting WordPress content**
Format your posts and get used to editing
- 36 Mastering the Media Library**
Take control of the 4.0 Media Library
- 38 Getting hosted with WP**
Explore the things to consider about hosts
- 42 Set up a host**
Get your blog self-hosted easily
- 44 Manage your different domains**
Handle your domains with ease
- 46 Control user profiles**
Add contributors and authors to your site
- 48 Back up your WP blog**
Never lose your content again
- 50 Secure your WP site**
Fight the hackers with ease

👉 By achieving mastery over the settings and their options you're halfway to turning your blog into a success 🎯



The Settings

MASTER THE SETTINGS AND GAIN FULL CONTROL OF YOUR WORDPRESS BLOG

Site title
Once added, your site's title will appear at the top of the browser window, so make sure it's memorable and catchy!

Timezone
Ensure your blog's timezone city is set correctly to ensure that post scheduling works. Some apps also rely on this being setup

Style Date
How do you want the date to appear on your blog? Choose from one of the available options or select a custom format

Set E-mail
When you setup WordPress, your email address is required for sending plugin and moderation updates to. You can change it by updating this field

Start Date
If you plan on using calendar plugins, use the Week Starts On drop down to select the first day of your week

 **CONFIGURING YOUR WORDPRESS website correctly is vital to getting your blog working effectively.** Options for discussion, managing media, specifying a home page and managing permalinks and much more can be accessed via the Settings screens. Need to determine how comments are displayed, or how avatars appear? Want to specify how many blog entries

should appear on a single page? All of these options, and more, can be managed in the Settings menus, which is split into six sections: General, Writing, Reading, Discussion, Media and Permalinks. If you are able to achieve mastery over the settings and their options, you will be halfway there in terms of turning your blog into a success.

Name your blog



01: Site title details

Your site must have a title and a tagline. Both are important, but the tagline is particularly vital for ensuring the most basic level of SEO.



02: Specify the URL

Specify if WordPress is installed in a subfolder on your domain in the WordPress Address (URL) field. Site Address (URL) is the URL for readers to use.



03: Manage the timezone

Setting the right timezone for your blog will help with scheduling posts and managing plugins. You can configure a Date Format and a Time Format.

Writing Settings

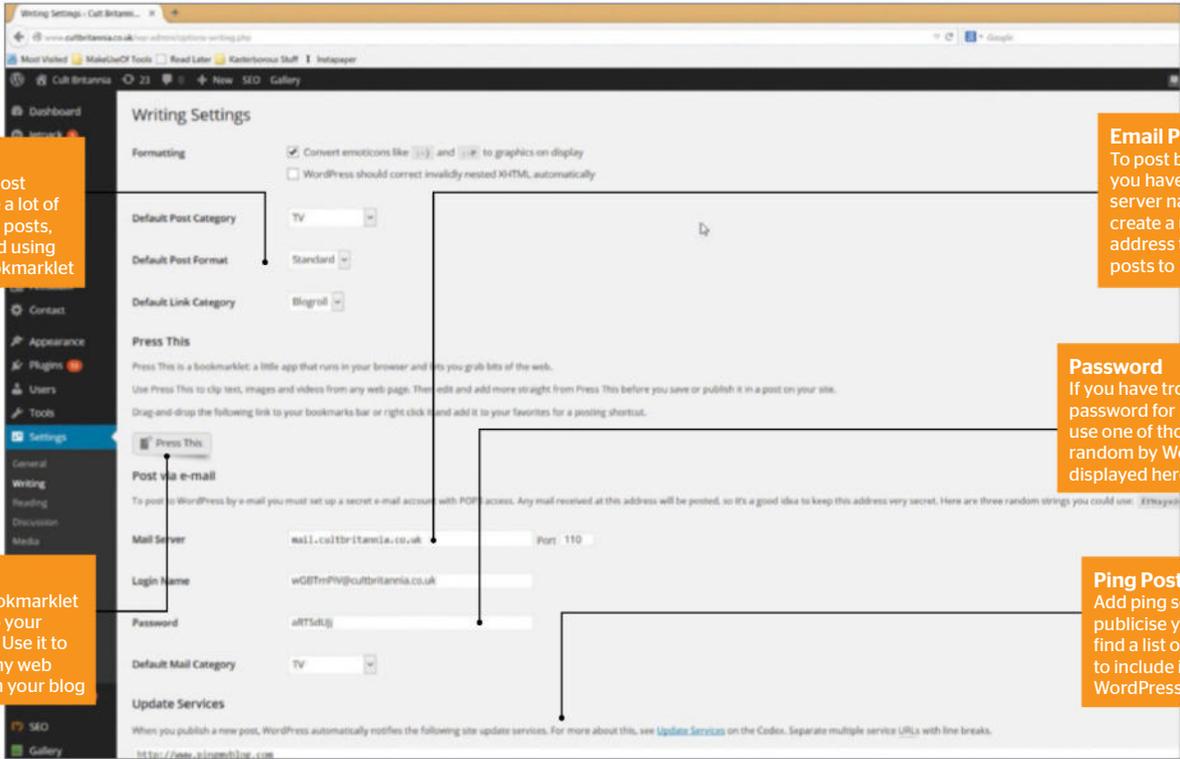
WANT TO UPDATE YOUR BLOG VIA EMAIL? CONFIGURE WRITING SETTINGS!

THE WRITING SETTINGS page covers a range of options, from deciding how emoticons should appear to specifying update services.

One of the most powerful options in the WordPress Settings menu is found here, the ability to post by email. While you will probably have access to a WordPress mobile app (available on almost all smartphones) there is a chance that you may have restricted access in some situations. In this scenario, you can use the 'Post via email' tool

to specify a Mail Server and Port, a Login Name/ email address used solely for this purpose and a Password. Because any message sent to the email address will be published automatically, these details should remain secret. You can also specify a Default Mail Category for your emailed posts. Note that there is also a Default Post Category option (along with Default Post Format) for posts added in the usual manner. Remember to always click Save Changes.

Top tip
Using Press This can streamline your workflow considerably, allowing you to embed images or post or create drafts on the fly.



Category
Setting a default post category can save a lot of time when writing posts, creating drafts and using the Press This bookmarklet

Press This
The Press This bookmarklet can be dragged to your browser's toolbar. Use it to clip media from any web page to include on your blog

Email Post
To post by email, ensure you have entered a mail server name, and also create a unique email address to send your posts to

Password
If you have trouble creating a password for posting by email, use one of those created at random by WordPress and displayed here

Ping Posts
Add ping services to help publicise your blog. You can find a list of update services to include in this field on the WordPress.org website

Emoticons and more



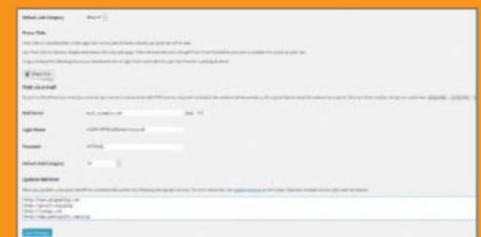
01: Formatting emoticons

If you're a blogger who likes to use emoticons, use the Formatting option to specify whether you would like WordPress to show graphical smiles.



02: Press This bookmarklet

Drag this bookmarklet to your browser favourites bar. When you spot a post you want to link to, click Press This to copy the link into a draft post.



03: Ping Update Services

Get more views for your blog by adding a list of the most popular update services to ping. The more you add, the more services will pick-up your posts.

Getting started

Reading Settings

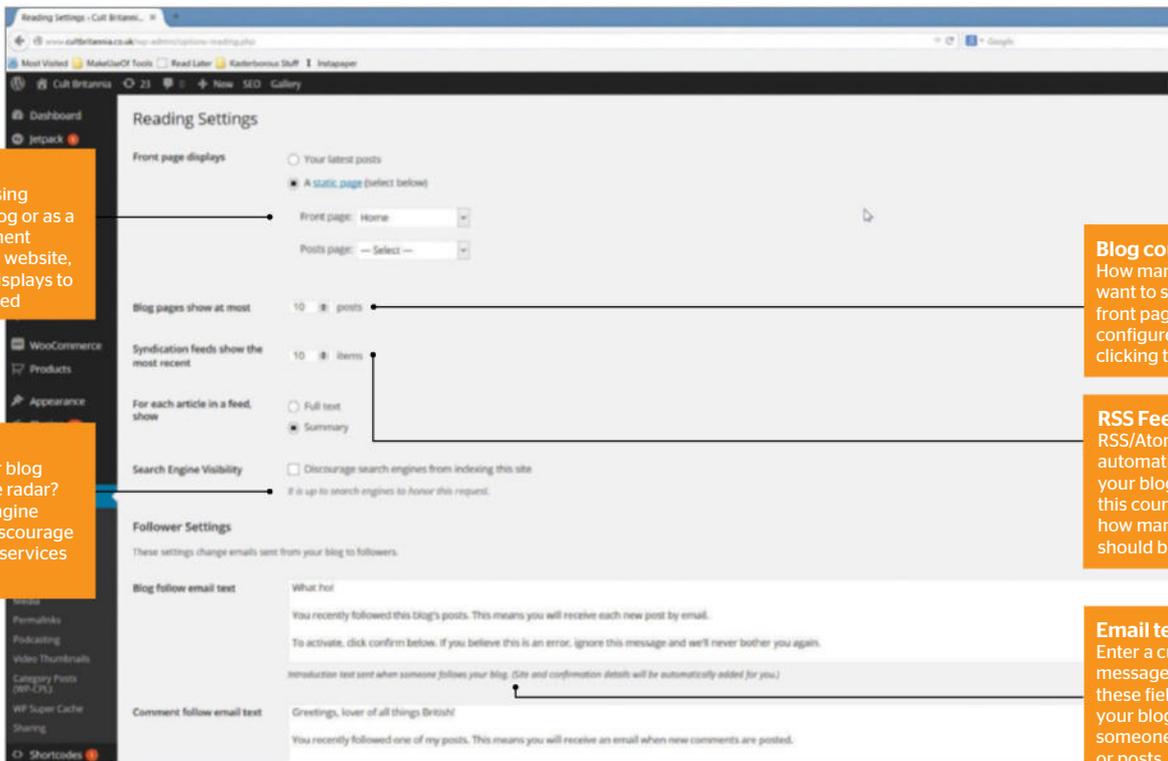
MANAGE HOW YOUR BLOG DISPLAYS POSTS, AND WHERE THEY CAN BE FOUND

IS YOUR BLOG a blog, or is it a website? There are many reasons for using WordPress as a content management system, and if this is the path you've chosen then heading to the Settings>Reading screen will enable you to alter what the front page of your site displays. If you want to show the blog, then display Your latest posts. However, if you want a static page to be displayed, use 'A static page' to select the appropriate option from one of the drop-down menus. (Some WordPress themes require the static

page option to be set in order to display a flexible home page.)

Significantly, the Reading Settings also display the Follower Settings, one of the key ways to introduce your blog to readers who follow your blog or one of the posts on it. Here, ensure you add a professional, customised response rather than relying on the default option, and make sure your reader feels welcome. After all, you want them to come back again and again!

Top tip
By configuring the two email text boxes with some amusing promises about your blog, you can ensure readers return regularly.



Front page
Whether you're using WordPress as a blog or as a content management system for a static website, use 'Front page' displays to configure as needed

Search
Want to keep your blog private and off the radar? Tick the Search Engine Visibility box to discourage Google and other services indexing your site

Blog count
How many posts do you want to see on your blog's front page? You can configure this setting here, clicking the arrows to adjust

RSS Feeds
RSS/Atom feeds are created automatically each time your blog is updated. Use this counter to determine how many recent items should be included

Email text
Enter a custom email message to your readers in these fields, introducing your blog and its aims when someone follows your blog or posts

Page display

01: Blog page count
The blog page on your site is set to display ten posts by default. Increasing this will provide more content for your readers.

02: Feed management
Syndication feeds (such as RSS/Atom) display ten feeds, and this can also be increased. Choose whether to display the full article or a summary.

03: Search Engine Visibility
If you don't want your site to be picked up by search engines, the best way to do this is to select 'Discourage search engines from indexing this site'.

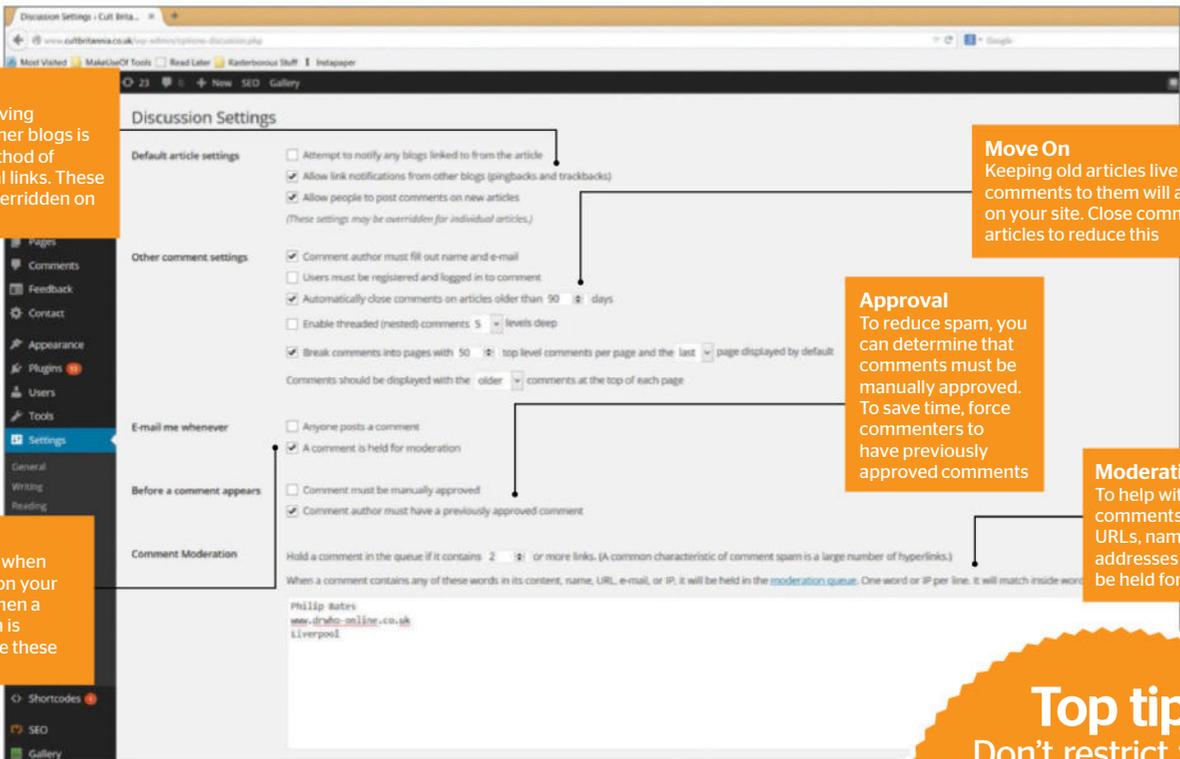
Discussion Settings

ENCOURAGE DISCUSSION AND BUILD COMMUNITY ON YOUR BLOG, WHILE MINIMISING SPAM

CONFIGURING THE DISCUSSION settings correctly will enable you to make a definitive statement about what you expect from your readers, and what they should expect from your blog.

Use the 'Allow people to post comments on new articles' option to accept comments in the first place (individual post settings will override this). Move onto

the 'Comment author must fill out name and e-mail' and 'Users must be registered and logged in to comment' options to require your readers to take responsibility for their comments. Team these settings with the Akismet plugin and you can virtually guarantee your readers zero comment spam when they visit your blog. Show readers you have a spam-free blog and they'll join in with the discussion.



Pingbacks
Sending and receiving pingbacks with other blogs is an automated method of creating reciprocal links. These defaults can be overridden on individual posts

Move On
Keeping old articles live by adding new comments to them will affect caching on your site. Close comments on older articles to reduce this

Approval
To reduce spam, you can determine that comments must be manually approved. To save time, force commenters to have previously approved comments

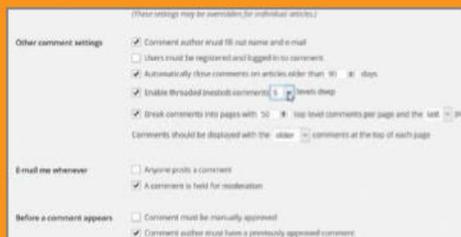
Moderation
To help with moderating comments, specify words, URLs, names, email addresses and even IPs to be held for moderation

Use alerts
You need to know when comments arrive on your blog, especially when a moderation action is required, so enable these email alerts

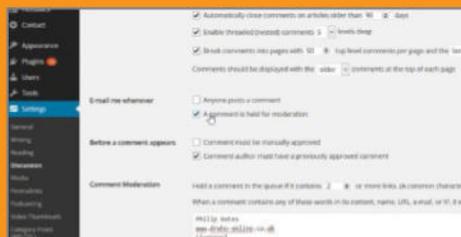
Top tip
Don't restrict your readers too much from commenting, lest you scare them off. Try the Comment author must fill out name and e-mail option.

 Reduce spam and readers will be encouraged to join in with any discussion you inspire 

Moderate and manage comments



01: Using nested comments
Make reading comments easy for readers by using nested comments, the method of indenting each reply to a single comment.



02: Comment moderation emails
Use the 'Email me whenever' and the 'Before a comment appears' settings to have email alerts sent to you when comments require moderation.



03: Moderation and Blacklist
The Comment Moderation and Comment Blacklist fields can be used to filter out comments from spammers and troublesome users.

Getting started

Media Settings

SPECIFY DIMENSIONS FOR IMAGES ADDED TO YOUR BLOG FOR UNIFORM MEDIA RICHNESS

Pixels
How wide and how high should your images be? These dimensions are measured in pixels and can be easily adjusted

Resize
The default dimensions for thumbnails and featured images can be resized on your blog from this screen, along with any images you include in posts

Cropping
Rather than having your thumbnail images appear extremely small, use the cropping option to have WordPress crop them to show a segment of the image

Uploading
Specifying which directory images are uploaded to should occur during setup. To change, alter this file path. You can also specify a full URL path

Saving
Made changes? Remember to save them and then check how the images are sized on your main blog page, adjusting anything that doesn't seem right

GETTING THE IMAGE sizes right on your blog is very important. One wrong dimension and your layout could struggle to contain the information you're sharing!

Hopefully this won't happen, and certainly shouldn't with WordPress' Media Settings, where image sizes can be specified to the pixel for thumbnails, medium and large images. Just input the sizes you want and click Save Changes. You can also decide whether to crop thumbnails or have them resized to the exact dimensions you selected.

Be aware that some themes will override any dimensions you add here, so to make sure they're being applied check the Theme Options page where appropriate. It is also possible to instruct WordPress to upload images to a specific file path, but in most cases you won't want to change this.

 Image sizes can be specified to the pixel for thumbnails 

Fine-tune your images



01: Specifying image dimensions

Setting a new dimension for your images is easy. Once the width and height have been added, save changes. Fine-tune by using up and down arrows.



02: Check image sizes

You shouldn't just leave it at that, however: open your blog's front page and check that the image sizes have been applied correctly.



03: Organise your images

Ensure that the 'Organize my uploads into month- and year-based folders' option remains ticked. Disabling can result in problems later.

Permalink Settings

YOUR BLOG WILL LIVE OR DIE BY YOUR PERMALINK CHOICE. CHOOSE WELL!

PERMALINKS CAN BE a problem for many users. So many blogs have fallen by the wayside simply because the owners didn't understand the importance of using permalinks to build attractive URLs, addresses that search engines are likely to index favourably.

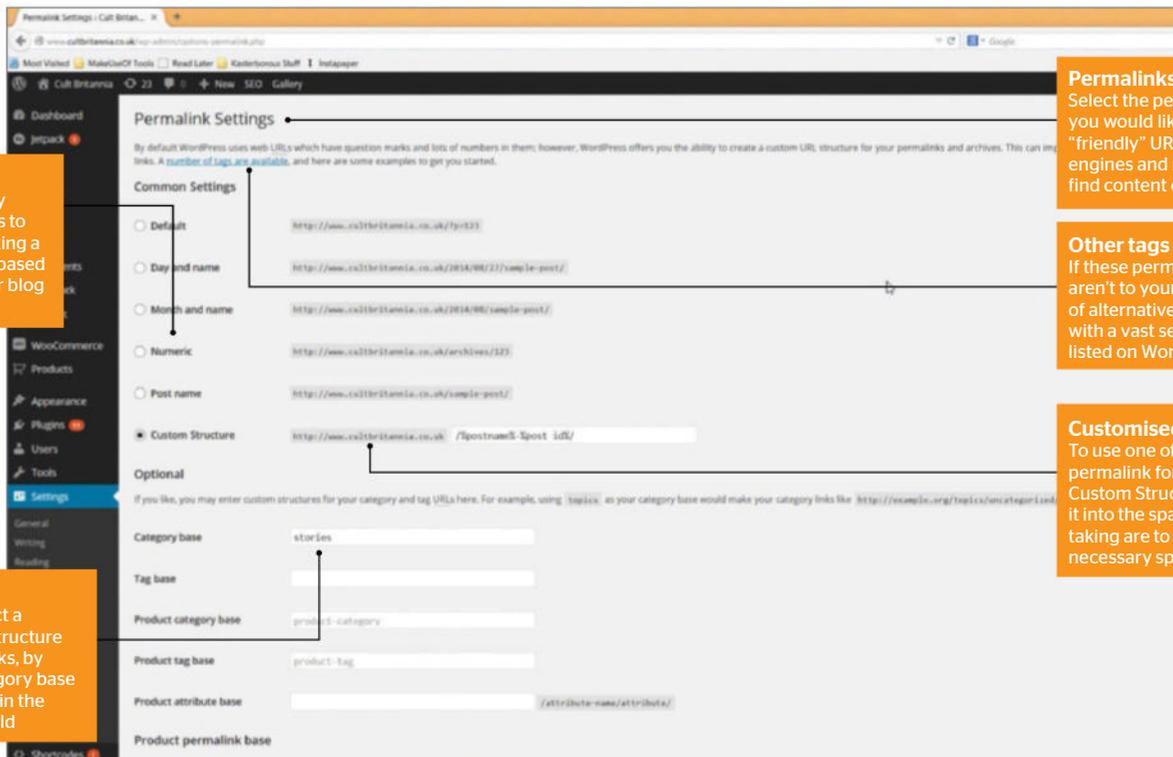
Instead, these blogs were left to struggle with URLs of the format www.yourblog.co.uk/?p=123. It tells Google nothing, and it tells you nothing.

WordPress' Permalink Settings provides you with the option to choose four easy-to-read permalink styles,

each of which includes useful information. (Note that changing permalink style may cause problems with some plugins, which will need time to re-index your posts.)

With a choice made, all you need to do is click Save Changes and wait a couple of moments before checking your website. The original URL format will still work and any links to it will resolve (hence "permalinks") but it is now masked with something that is more user-friendly, and ideal for Google to index.

Top tip
If you run a busy blog with regular updates throughout the day, use the Day and name permalink. For less busy blogs, choose Post name.



The choice
There are so many permalink formats to choose from, making a choice should be based on how often your blog is updated

Categories
You can also select a category-based structure for your permalinks, by specifying a Category base (such as "topics") in the corresponding field

Permalinks
Select the permalink format you would like to create "friendly" URLs for search engines and readers to use to find content on your blog

Other tags
If these permalink settings aren't to your liking, a number of alternatives are available, with a vast selection of these listed on WordPress.org

Customised
To use one of the custom permalink formats, select Custom Structure and enter it into the space provided, taking care to include necessary spaces

Customise permalinks

01: Which permalink option?
Choosing the correct permalink option depends on your strategy for SEO and promotion. It can also be based on how regularly your blog is updated.

02: Set Custom Structure
You may also consider a custom structure for focusing on employing user- and search engine-friendly permalinks for your blog entry URLs.

03: Category base permalinks
Tag- and category-based permalinks can also be established, but this only really works if your blog has a heavy reliance on categories and limited tags.

Using widgets in WordPress

WIDGETS CAN ADD INTERACTIVITY TO A WORDPRESS SITE



WIDGETS ARE NOT the most well-known feature of WordPress, but you will likely see them in action every time you visit a WordPress powered site.

A selection of useful examples is built into the platform by default and these can be customised in limited ways, but you can also use the text widget as a method of quickly adding your own code to the home page. Whether you want

to show the latest posts or display a gallery of images, carefully placed widgets can act as a gateway to what would otherwise be hidden areas of your site and you can also download specialist widgets on almost any topic. The main point to remember with widgets is that overuse can lead to an ugly interface so try to limit their use to only the ones that add worth to your site and which look consistent with your site.



Widgets can act as a gateway to what would be otherwise hidden areas of your site



Customise
The Editor can be used to customise the areas holding your widgets using code. You can build consistency

Plugins option
Widgets are available from the Plugins option. It's not obvious, but many are available to try

Defaults
The default widgets included in WordPress can be customised in limited, but useful ways

Sidebar
A sidebar with too many widgets can look busy and draw the visitor's attention away from your content

Text widget
The text widget is a gateway for you to use your own code to add something special to your page

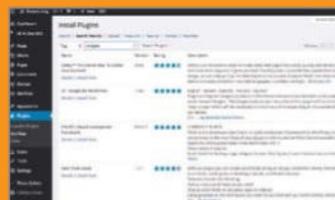
```
<div id="primary" class="sidebar">
<ul>
<li id="text-1" class="widget widget_text"><h3 class="widgettitle">Widget Title for First Text Widget</h3>
<div class="textwidget">Text within the text widget area.</div>
</li>
<li id="text-2" class="widget widget_text"><h3 class="widgettitle">Widget Title for Second Text Widget</h3>
```

Find and edit widgets



01: A compatible theme

You need to make sure your theme supports widgets before you start. Go to Appearance and then select the Widgets option. The available areas for widgets will be displayed alongside a list of widgets.



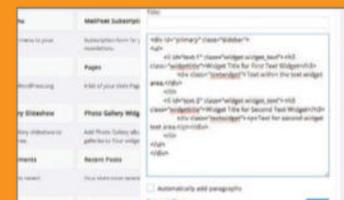
02: Find new widgets

Widgets are stored in the plugins area and can be found by searching for 'widgets'. Before selecting any widget, click the Details option and then Screenshots to ensure it will fit your site design.



03: Edits and previews

Go to Appearance / Customise to see a preview of your main page. In the left-hand column you can now customise each widget and see the changes previewed immediately. It's simple and very efficient.



04: Use your code

The text widget included by default looks quite innocuous, but you can use embedding code, Javascript and HTML to add advanced functionality to your sidebar without using a specialist widget.

Get to grips with plugins

PLUGINS CAN MAKE ANY WORDPRESS SITE UNIQUE



IT IS EASY to be all too consumed by web design and producing quality content when setting up a WordPress blog, but plugins should never be ignored because they are the jewel in the crown of the platform and can help to make any WordPress site unique, intuitive and a generally better experience for the reader. Used wisely, they can add useful features, but you

should be careful to not use too many as this can lead to slower performance and a bloated design which does little more than confuse. Each plugin is different and each will come with its own set of instructions so we will concentrate on giving advice on the best ways to use individual plugins and the system as a whole. If you use them for just the features that you require to be essential, they will add a huge amount of capability to

 Plugins are the jewel in the crown of the platform 

your blog which will keep visitors coming back time and time again.

Add new plugins
There are literally thousands of useful plugins available by simply clicking this button

Change settings
The settings for each plugin, if available, will be located in the left sidebar

Suspicious plugin
If you suspect a plugin is causing performance issues, deactivate it to test the theory

Visit the site
The plugin sites are great sources of added information and for sourcing developer help

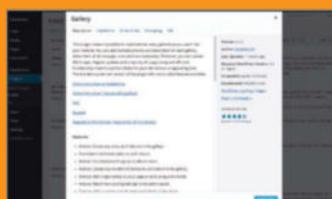
Edit plugins
You can edit plugins by hand if you are versed in the art of PHP coding

Choose your plugins wisely



01: Limit your plugins

When you first click the Plugins option you will likely see two plugins already installed. You should activate, or install, Akismet as it deals with spam comments, but remember to not use too many plugins.



02: Add new plugins

Click 'Add new' to see plugins that are available and then search for any relevant term. Before installing any plugin tap on the Details option to ensure it is compatible with your WordPress version.



03: Plugin options

When a new plugin has been installed, if there are settings included you will see them in the left sidebar at the bottom. The settings are separated from your main WordPress installation for stability.



04: Edit the plugins

Most plugins can be edited by hand and if you know how to code, simply click the Edit option for the plugin in the main list to be taken to the .php file for that plugin. You have complete control.

Getting started

Manage WordPress Comments

ONE OF THE MAIN REASONS FOR BLOGGING IS TO SPEAK TO PEOPLE, BUT WHEN THEY BEGIN TALKING BACK YOU'LL NEED TO MAKE SURE THEIR VOICES ARE HEARD ABOVE THE NOISE

TUTORIAL OBJECTIVE

Efficiently manage WordPress comments, block spam and make changes based on site policy

TIME REQUIRED

30 minutes



WITH A POPULAR blog you should be attracting at least a couple of comments per post. It's great to engage with your readers, but sometimes they can prove problematic, leaving links to unsavoury sites, being aggressive to other readers or simply spamming.

Fortunately, WordPress offers a collection of tools that you can use to deal with bad comments, such as marking them as spam (in conjunction with the Akismet plugin that installs with WordPress), viewing the history of your commenters and tracing their IP address. You can even edit comments that are left on your blog.

Once you have got to grips with these tools, you'll be able to manage comments effortlessly, perhaps scheduling a time to login and check for any pending thoughts and problems that might arise from them. Keep your readers happy!

01 Quickly check comments

You can start checking your comments by signing into the Dashboard and clicking on the Comments menu... but it's a bit slow, isn't it? So stop it.

Instead, whenever you're signed into your WordPress site, use the WordPress Admin Bar that is striped across the top of your site's posts and pages.

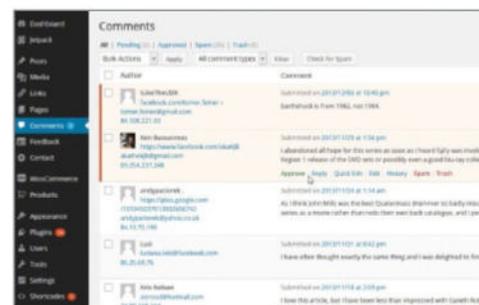
The fourth icon from the left is a speech bubble. Click to jump straight to the comments page.



02 Comments page dissected

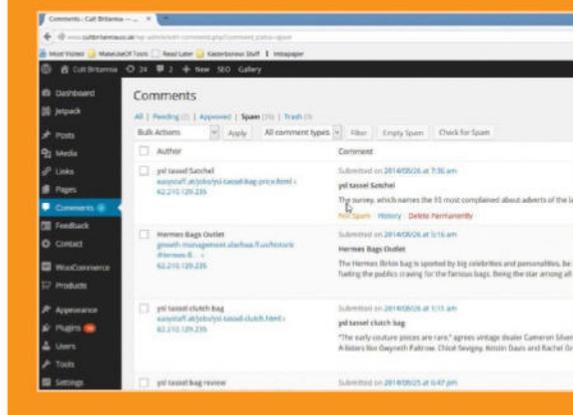
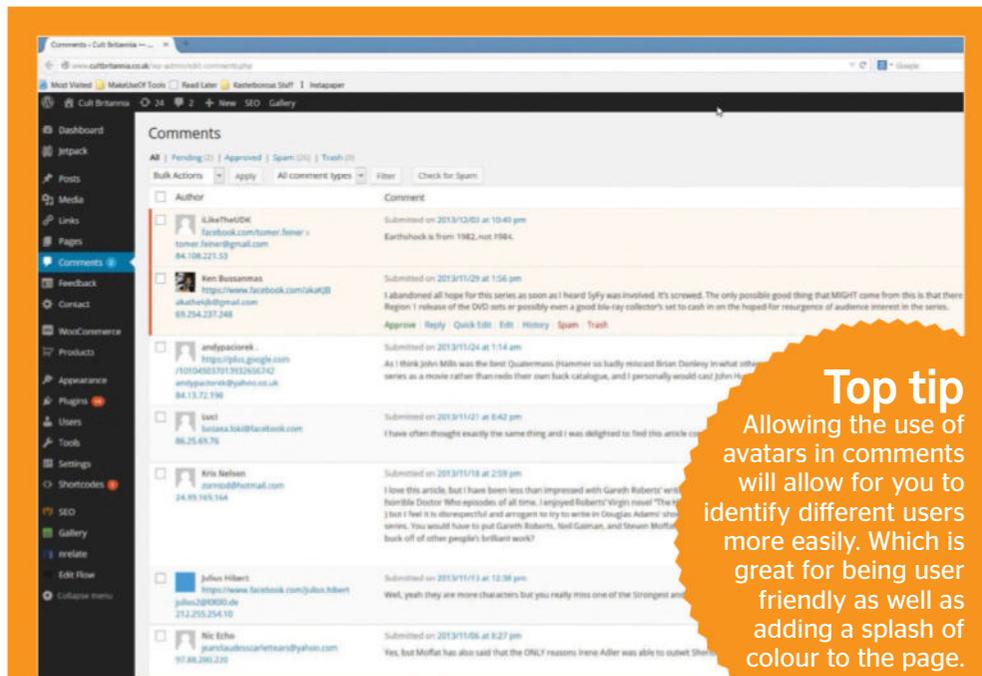
You've probably used the comments page before, but do you really know it? As well as the ability to switch between All, Pending, Approved, Spam and Trash views, you'll find bulk actions and a filter to distinguish comments and pings from other blogs.

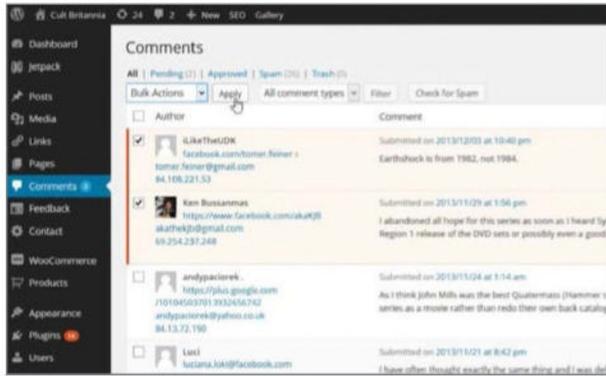
The left column displays details about the commenters, their email and IP addresses. The middle column displays the comment and the date it was left.



Top tip
Allowing the use of avatars in comments will allow for you to identify different users more easily. Which is great for being user friendly as well as adding a splash of colour to the page.

<top>
• Every comment on your blog can be managed using the menu, enabling you to trash, edit, mark as spam and much more
<left>
• Comments detected as spam by Akismet are collected in a separate page where they can be reviewed and bulk deleted or restored if mislabelled

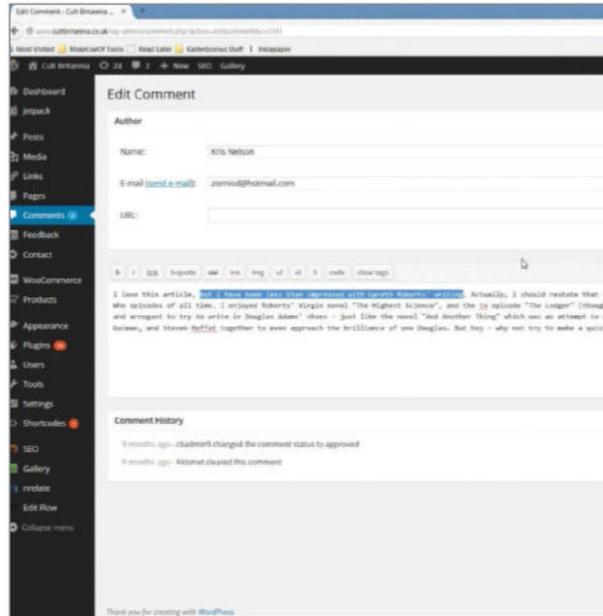




03 Bulk editing comments

While it is easy to approve or mark comments as spam individually, what do you do if you need to discard with several unwanted items of feedback from visitors?

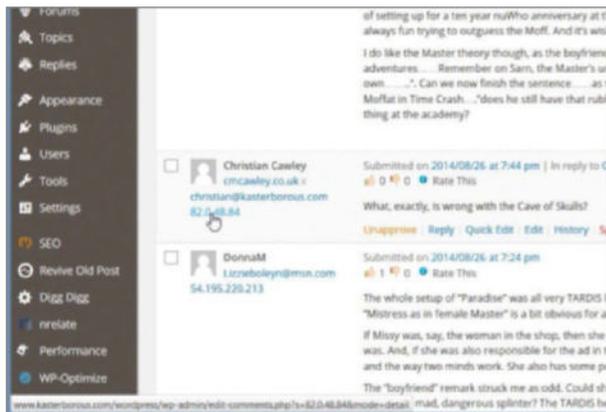
WordPress features a bulk comments management tool, just tick the box to the left of each comment you want to reclassify, then use the drop-down menu to select the appropriate action.



04 Editing a comment

Although you may reasonably consider your blog a bastion of free speech, there might be cause to alter a comment slightly, perhaps for legal reasons or to remove a link if you don't feel that it is relevant.

This is easily done by hovering over the comment with your mouse pointer and selecting one of the two editing options, Quick Edit or Edit. With your changes made, click Update Comment to save.



06 View comment history

With any luck you'll collect a group of regular commenters as your blog grows, and you can check their activity over time by clicking on the IP address and viewing all comments sent from the same device.

You can also view the background to an entry in the Comments screen by hovering the mouse over a comment and clicking History, which will show if the comment has been moderated.

05 Identifying commenters

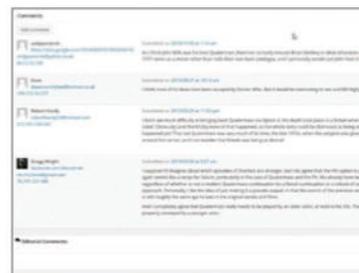
Who is commenting on your blog? More to the point, who is spamming or trolling your readers? Use the information on the left, particularly the email address and IP address to view any data collected by WordPress about the commenter.

If you consider a commenter to be trouble, you can use an IP blocking plugin like Ban User By IP to prevent them engaging with your blog in the future.

07 View post comments

If your blog is particularly busy with many comments on various posts, you might prefer to moderate your readers' thoughts on a more focused basis. This is possible by clicking the post title on the right-hand side of the Comments screen.

The edit post view will open, and you'll find the comments for that post somewhere beneath the text entry box, where they can be edited, reclassified as spam, etc.

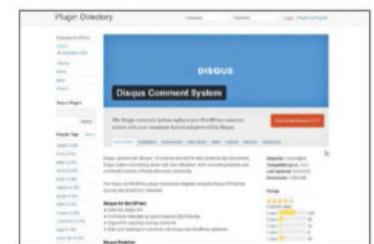


Outsourcing comments



01: Facebook comments

Rather than leave your web server to handle comments, employ third party services. Readers who leave feedback through a Facebook comments plugin will lure friends with similar interests.



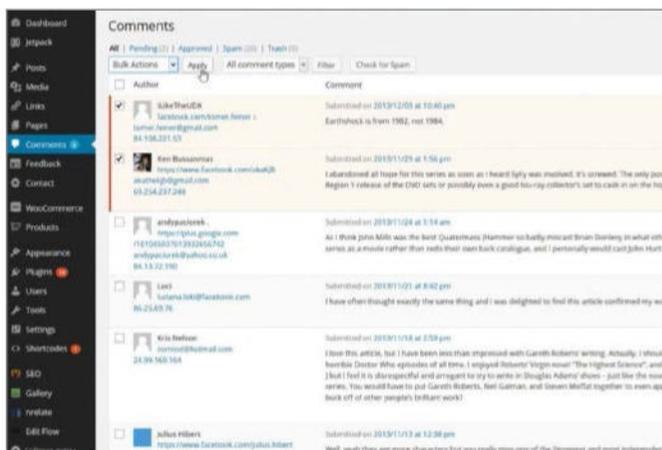
02: Plugin to Disqus

Disqus is popular, used on newspaper websites and WordPress blogs alike. Like Facebook, it offers a single sign-in so readers don't have to login each time they visit your site.



03: The Jetpack plugin

To coax responses from your readers, activate the comments function in the Jetpack plugin, enabling readers to sign-in with existing Facebook, Twitter and WordPress.com accounts.



Posting WordPress content

UNDERSTAND HOW TO QUICKLY POST PROFESSIONALLY FORMATTED AND ATTRACTIVE CONTENT, AND HOW TO SCHEDULE YOUR POSTS IN A LOGICAL ORDER SO THAT YOUR BLOG IS REGULARLY UPDATED

TUTORIAL OBJECTIVE
Post new content to your WordPress blog

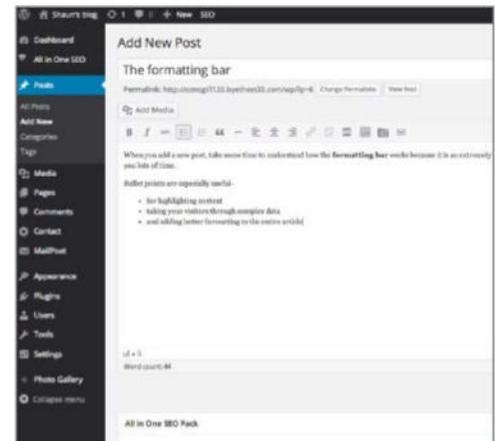
TIME REQUIRED
10 minutes



WHEN CREATING A blog, no matter what platform you are using, the content is by far the most important aspect of what you are building. It builds a readership initially, it will keep visitors coming back and it will help improve your clout with the all important search engines. Content should be formatted in a consistent manner and it should be obvious as to what the topic is, and WordPress is well placed to help you create attractive online articles without the need to code every piece of formatting in each paragraph. You can still use advanced code when necessary, but we will highlight some general rules for content creation and also show you some of the more useful features available on the WordPress platform. If you remember that content is king, your blog will be much more popular than you ever expected.

01 The formatting bar

Even if you like to code your posts by hand, take some time to familiarise yourself with the formatting bar. It is much quicker in normal use for formatting text, adding bullet points and especially for inserting media. If you wish to see and amend the underlying code, just click the Text option and continue working.



02 Focus on content

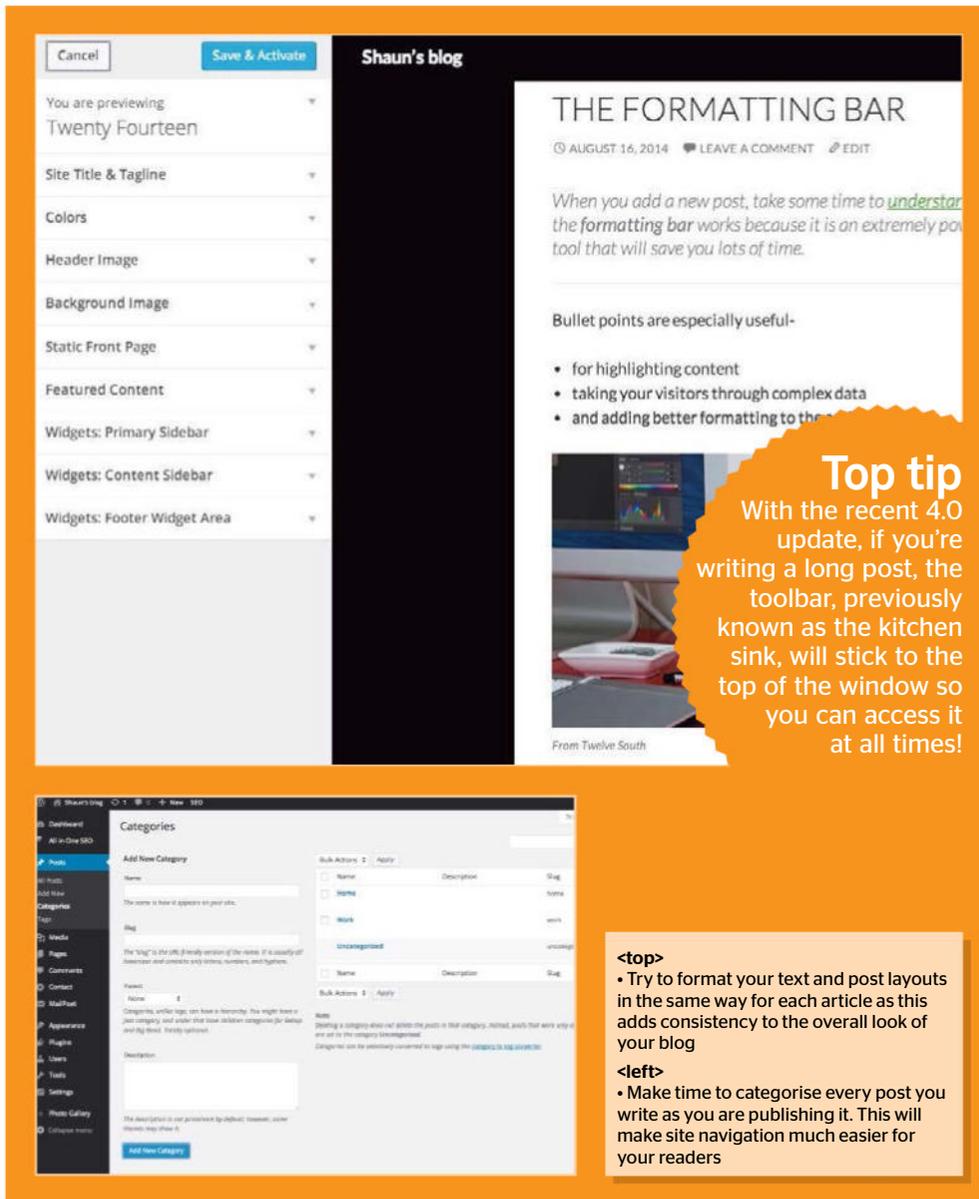
The WordPress dashboard can be a busy place to work in, but clicking the Distraction Free Writing icon top-right will remove all of the extra tools and let you work in a much cleaner environment. Your work will be saved as you continue and it could replace your standard writing software.

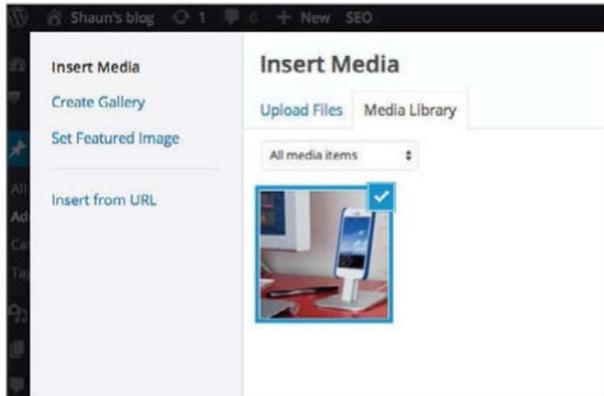


Top tip
With the recent 4.0 update, if you're writing a long post, the toolbar, previously known as the kitchen sink, will stick to the top of the window so you can access it at all times!

<top>
• Try to format your text and post layouts in the same way for each article as this adds consistency to the overall look of your blog

<left>
• Make time to categorise every post you write as you are publishing it. This will make site navigation much easier for your readers





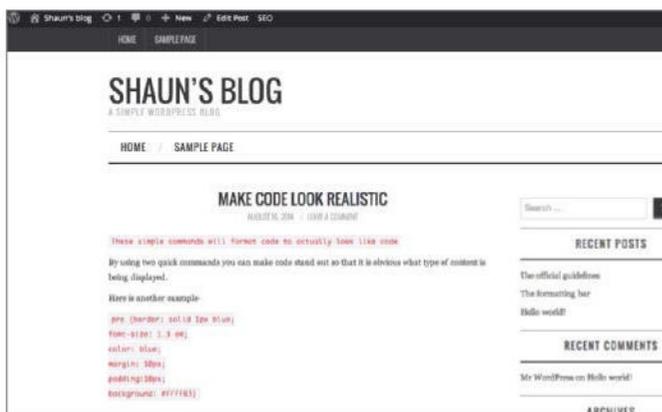
03 Insert Media

Try to use the automated tools to add images to any post. You will be able to add a description for the image and also more information which is useful for search engine results. Media is often overlooked as a method of gaining more traffic so use the tools WordPress offers to increase your readership.



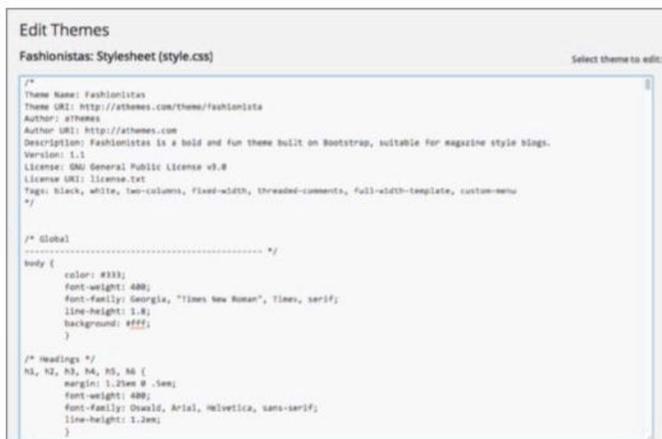
04 Perfect previews

You will see a preview option in the right-hand column when adding new posts and you should always use this before publishing any content. When selected it will show your content exactly how your readers will see it and will highlight any inconsistencies. Don't rely on just your knowledge and assume everything looks correct.



06 Edit the stylesheet

To change the font for all of your posts, navigate to Editor and then look for the Stylesheet (style.css) file. When opened, you should see the Global font choices at the top and all you need to do is type over the current font and change the font weight, size etc. You can also insert your own preferences, but back up the contents of the file before making changes.

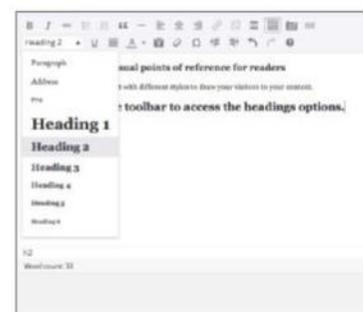


05 Displaying code

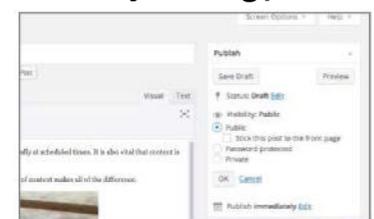
The use of `<code>` and `</code>` to surround text is useful for transforming code into a format that looks realistic. It will immediately make the reader understand what they are looking at and is particularly useful if you are demonstrating code within a much longer article that is filled with varied content.

07 Understand writing styles

Clicking the Toggle Toolbar option will bring up a selection of new formatting tools to use and the headings option which is the most important. Appropriate use of headings will draw the readers into the content of your post and make it less likely that they will skim past it without fully engaging in your work.

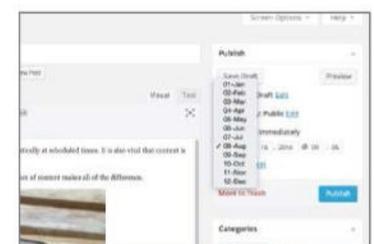


Publish your blog post



01: A public post

By default all of your posts should be set for public viewing, but you should double check this by clicking the Visibility option in the publish panel on the right.



02: In the future

Click the 'Publish immediately' option and then select a time and date of your choosing. The publish icon will change to Schedule and when clicked the post will be saved.



03: Published and scheduled

See an overview of your content by clicking 'Posts' in the left-hand sidebar. Scheduled items will be listed at the top with publishing date displayed.

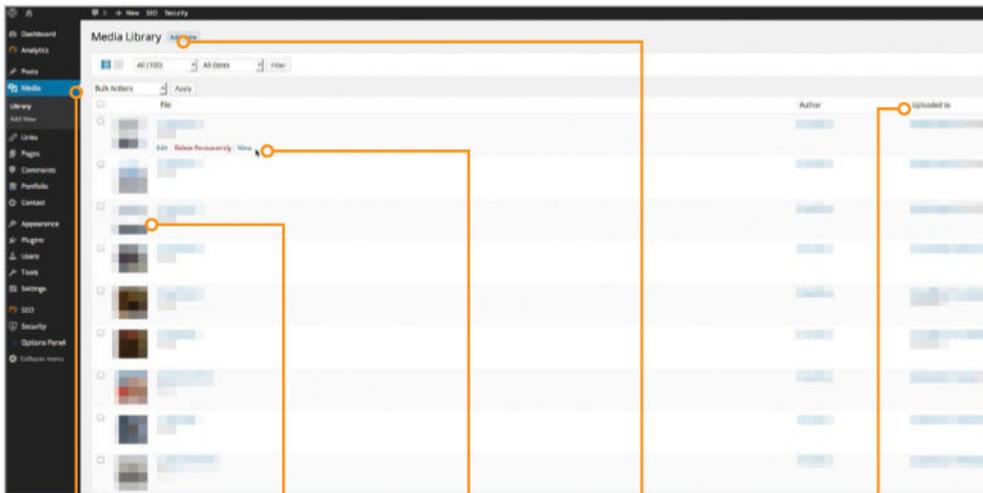
Mastering the Media Library

THE WORDPRESS MEDIA LIBRARY IS ESSENTIAL FOR MANAGING YOUR BLOG ASSETS, CHIEFLY IMAGES AND VIDEOS. HERE WE EXAMINE THE LATEST VERSION AND HOW TO PERFORM THE KEY ACTIONS, SUCH AS UPLOADING AND EDITING

TUTORIAL OBJECTIVE
Uploading, editing and allocating images or video via the WordPress Media Library

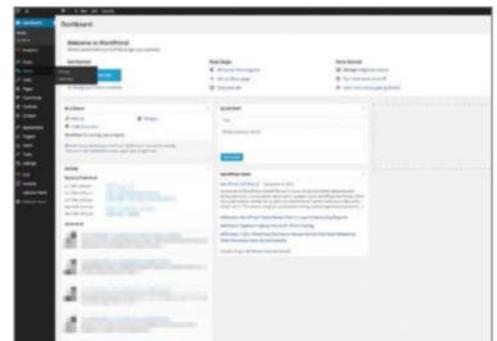
TIME REQUIRED
10 Minutes

 IN ADDITION TO the text you publish within your WordPress blog, you'll have a wealth of media assets alongside. Whether it's images, video or sound clips, WordPress makes the process of managing these files via the Media Library. Accessible via the latest version 4 Dashboard sidebar, you will find all of the existing uploads itemised chronologically by default. As you add more this list can invariably grow fairly large and the Media Library is therefore essential for good WordPress housekeeping. Over the next few steps we'll guide you through the more important features of the Media Library, along with deeper pointers for advanced use. With a focus on uploading, editing, attaching and detaching media, plus a glimpse at the Add Media facility, you should find everything required for a quick course in WordPress media management!

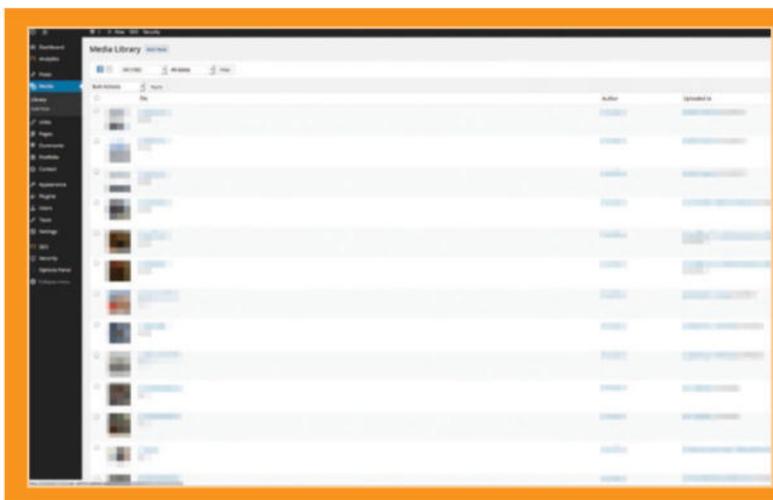
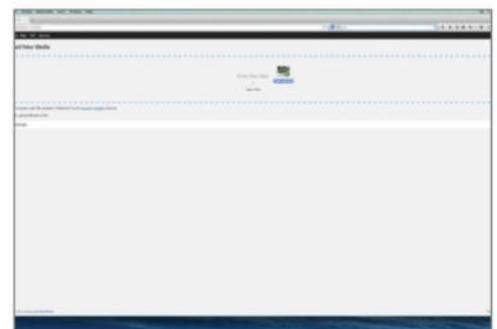


- Sidebar**
The Media Library is located below the Posts section of the WordPress Dashboard sidebar
- Uploaded files**
Uploaded files are in chronological order by default, listing a thumbnail preview, filename and file type
- Options**
Hover over an asset in within your library and link options to Edit, Delete Permanently and View appear
- Add new**
The Add New button launches the Upload Media screen, which is where you can browse or upload new files
- Uploaded to**
'Uploaded to' identifies the post the asset is attached to. 'Author' identifies who uploaded the post

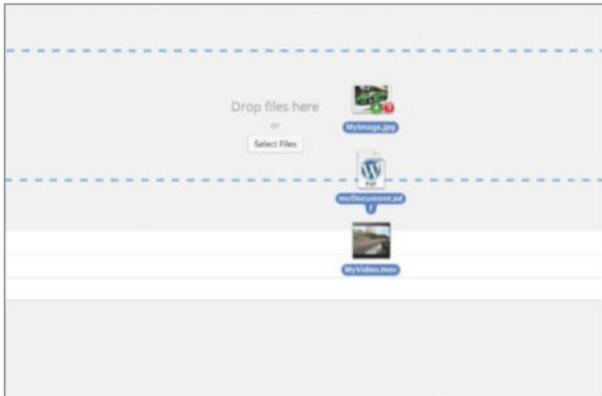
01 The Media Library
The Media Library is found below the Posts option within the Dashboard sidebar. Hover over the option and a popup menu has direct links to the Library or Add New facilities. Selecting the Library provides access to the typical list view, itemising each file currently uploaded. You can also toggle the Gallery view to preview every file with larger thumbnails.



02 Uploading files
Click the Add New button with either view selected and you will be presented with a dotted box. Here you can simply drag and drop multiple desired files into this area or click the Select Files button to browse. Each file should not exceed the maximum file size (8MB) and if you do experience problems, you may switch to the built-in browser upload instead.

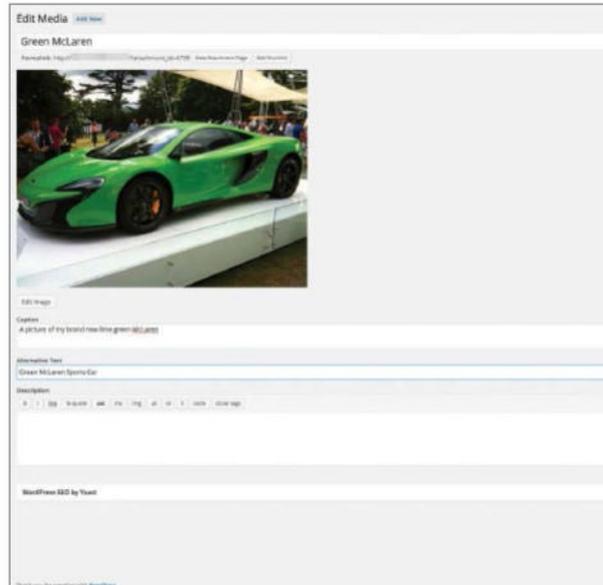


<left>
• The Media Library opens by listing the uploaded files chronologically, giving basic details on name, file type, the user who uploaded and the current attachment



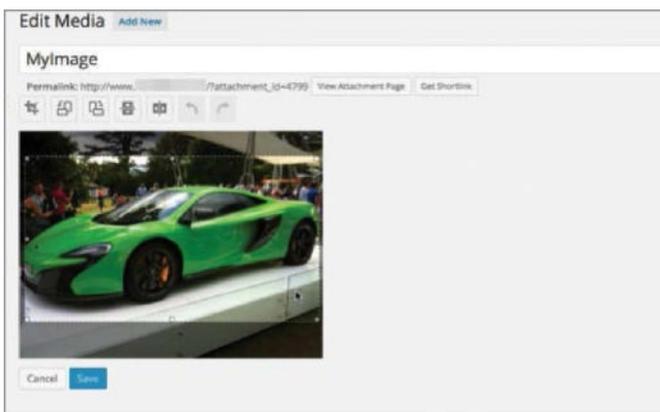
03 Various file types

Typically you will be uploading images and video. WordPress accepts JPG, JPEG, .PNG and GIF, along with MP4/M4V, MOV, WMV, AVI, MPG, OGV, 3GP and 3G2. Besides audio WAV and MP3 formats, you can also upload PDF or Microsoft Office document types. These can be linked within your posts to provide a download link.



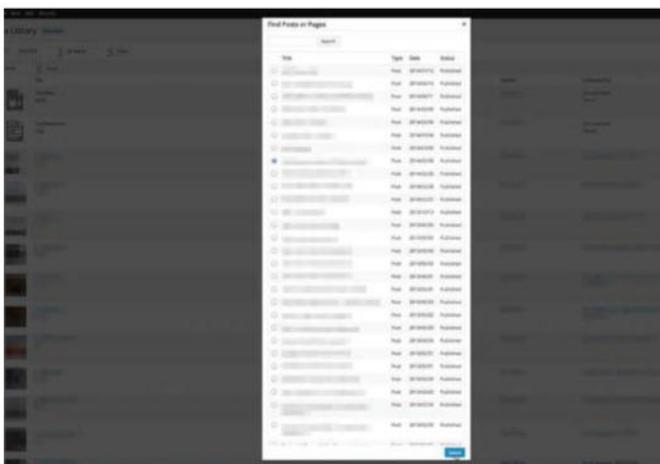
04 Edit media

Once files are uploaded, an Edit link appears below the upload box. You can also access the Edit options from the main Media Library and this where you assign information to the asset. The fields are the same for each type and will be applied by default to that file when added to a post. Name, Caption and Description can be set and you can also grab the direct download link.



06 Attaching media

Media assets will reside in your library whether you allocate them to a post or not. To insert them you can use the Add Media button within the post editor, or use the Attach link within the Media Library to allocate. From here you can select an existing post from the list. This just associates the file.

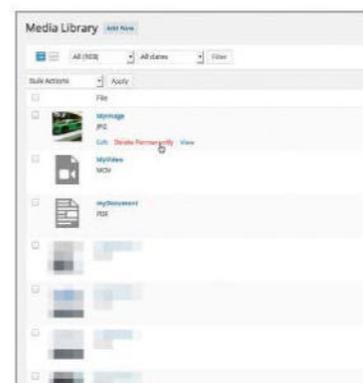


05 Edit Image

In addition, image assets may be edited very basically by clicking the Edit Image button. You should really process your images before upload but the options here are useful for performing rotations or flips and chiefly for applying crops. New dimensions can also be set to scale the image larger or smaller as desired, choosing to retain the original image within the thumbnail.

07 Deleting media

Media files within your Library can be deleted at any time. Hover over the file in the list view and click Delete Permanently, or use the same link within Edit Media. Click OK when prompted to confirm and the file will be removed from the Library and any associated post.



Manage new blogs



01: Posts>Add Media

When adding new media directly into a new post, you'll see a slightly different screen. The Insert Media dialog lets you pick library assets or drop onto the Upload Files tab.



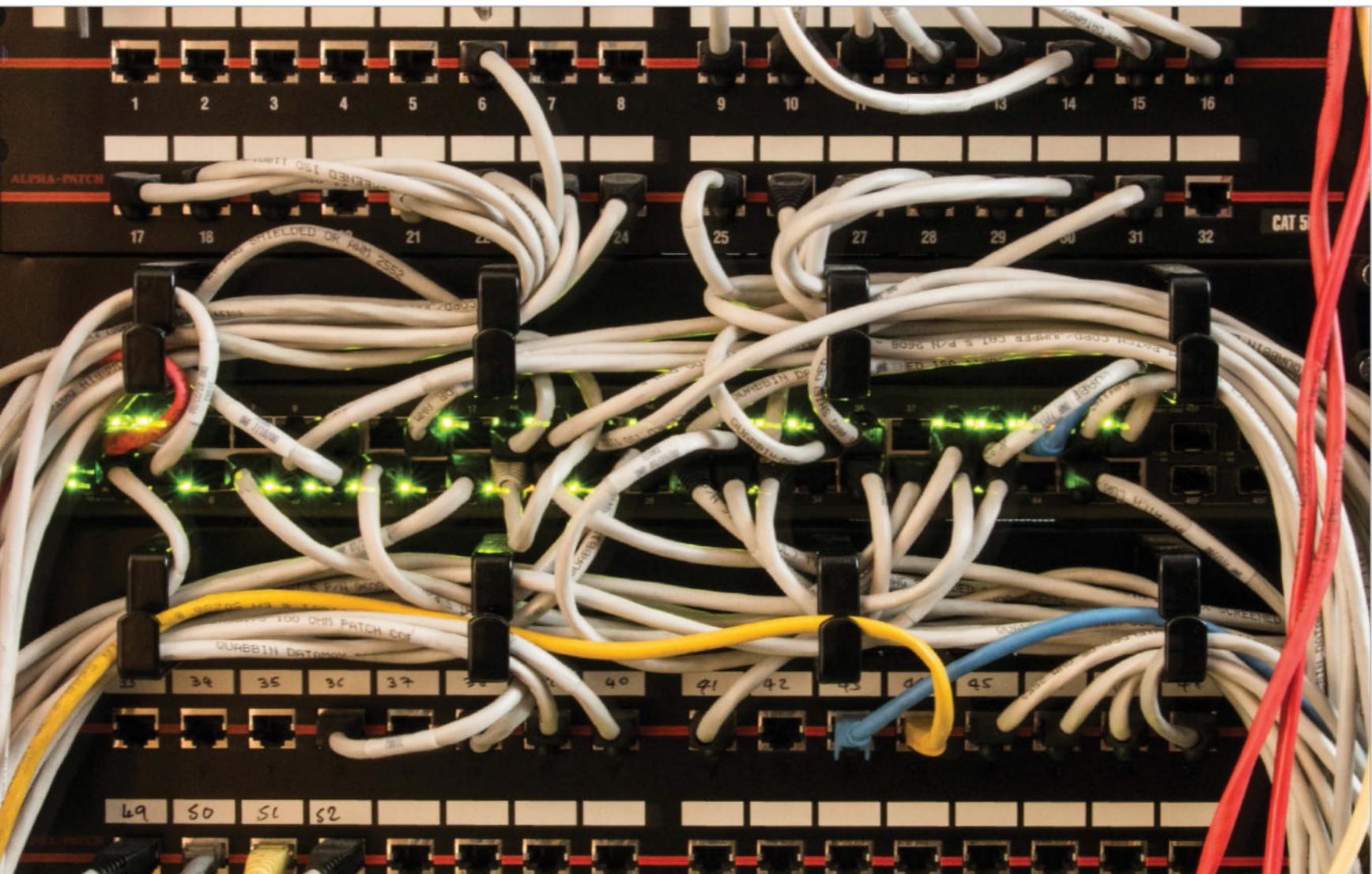
02: Create Gallery

Here you can make multiple image selections by checking each image you want in your gallery. Clicking Create New Gallery lets you drag the images into a desired order before inserting.



03: Set Featured Image

This is where you allocate the main image representing the post on the front of your blog. The principle remains the same, allowing asset selection from the library or drag and drop upload.



Getting hosted with WordPress

CHOOSING THE RIGHT WORDPRESS HOST REQUIRES RESEARCH, PATIENCE, AND A GOOD UNDERSTANDING OF HOW THE PLATFORM WORKS



THE BEST ADVICE we can offer you when choosing a new WordPress host is to make sure that you understand what is required to offer a reliable and speedy experience for you and your visitors. There are many technical areas that need to be researched to ensure a positive online experience over time and some of these are not obviously promoted by hosts. We will cover the most obvious advice and also some areas that are easily overlooked, and hopefully at the end you should have a good idea of what you will

need to run your WordPress environment. Pricing is of course important, but even more so is the reputation of a host and the reviews of its customers. If you can find a host that offers fast and free support, and is able to give you some help along the way, you will be half way there. If they have a deep understanding of WordPress and the way it works, you should be assured of an experience that is fit for your site visitors and the way you want to run your blog. It's time to see what a good host should be capable of providing to a WordPress blogger.

Managed WordPress hosting really works

SOME WEB HOSTS offer managed WordPress hosting which takes away most of the hassle when initially installing the software. It is not just designed to make things easier, however, because a hosting setup that is purposely designed for WordPress will ensure the fastest experience for your visitors and much less administration over time. Most packages will automatically install WordPress version updates and some will even ensure that all of your plugins are kept up to date all of the time. Even more importantly, they are built on infrastructure that is designed to work with the way WordPress stores data and this will ensure that you do not need to keep updating your package to account for database limits. Backups of your data are also usually included for peace of mind and throughout the experience, you should not just see faster performance for your visitors, but much saved time in administering the site on a daily basis. The only real downside is cost because managed

Support. Speed. Security. Quit Worrying And Let Us Run WordPress For You

EverCache Technology

Google says they lose 20% of their traffic for each additional 100 milliseconds it takes a page to load. Speed matters. Google also incorporates your page-load time into your site's search rankings. Faster sites win, literally. That's why WP Engine hosting services custom-built our EverCache technology to deliver WordPress fast enough for Google, and at scale.

[Learn More](#)

Insanely Fast. Robust Scalability.

Never configure a caching plugin again. Our WordPress hosting architecture is hand-tuned to deliver you the fastest WordPress hosting around. And we give you our word that we'll never take your site offline for having too much traffic.

[Learn More](#)

<above> There are many upsides to managed hosting if you are prepared to pay

sites will almost always be served on a singular basis and traffic limits may be restricted unless you are prepared to upgrade. You will need to decide if the managed route is right for you and most of your decision making will come down to how optimistic you are for the potential of making money from your venture in the future. Managed hosting will always be worth considering.

Shared hosting is not always an ideal solution

SHARED HOSTING IS a very common platform for hosts to sell WordPress solutions on and their main advantage is that these plans are often cheap in comparison to others. Boasts of unlimited bandwidth and disk space are all very well, but you should be aware that on a shared plan you are sharing servers with other users. This may cause intermittent performance from time to time and likely a generally slower service than you would experience from a dedicated server for your site. There is a place, however, for shared hosting and that is when starting out. If your potential host offers an easy upgrade path to a singular server for your site then you may wish to risk a shared plan while you ascertain the exact needs for your online presence. Shared hosting can work as a short-term solution and it will save you money while your are testing.



<above>

• Shared hosting can work for those who are starting out in the world of WordPress blogging, but is not ideal for long-term usage

Top tip
Try to understand your requirements and learn about how WordPress works before you begin researching hosts to make sure you get the right service.



<above>

• Hosts dedicated to WordPress tend to offer a more reliable experience

Always look for 'WordPress'

IT CAN FEEL romantic to decide to set up every single part of your hosting manually and there are of course many advantages to doing so, the main one being a forced gain of knowledge during the process. However, you can still maintain a lot of control over your WordPress installation if you choose a provider that will do a lot of the legwork for you. From the initial installation of the software to systems that are designed to work alongside WordPress, a host that offers 'WordPress' hosting will likely be a better bet for the majority of bloggers. Database limits should be ample and because so many other WordPress installations are working on their servers, the entire space should be tried and tested for added reliability. It is basically a half-way house between standard hosting and Managed WordPress setups and works well for the majority of users.

👤 Pricing is important, but even more so is the reputation of a host 👤

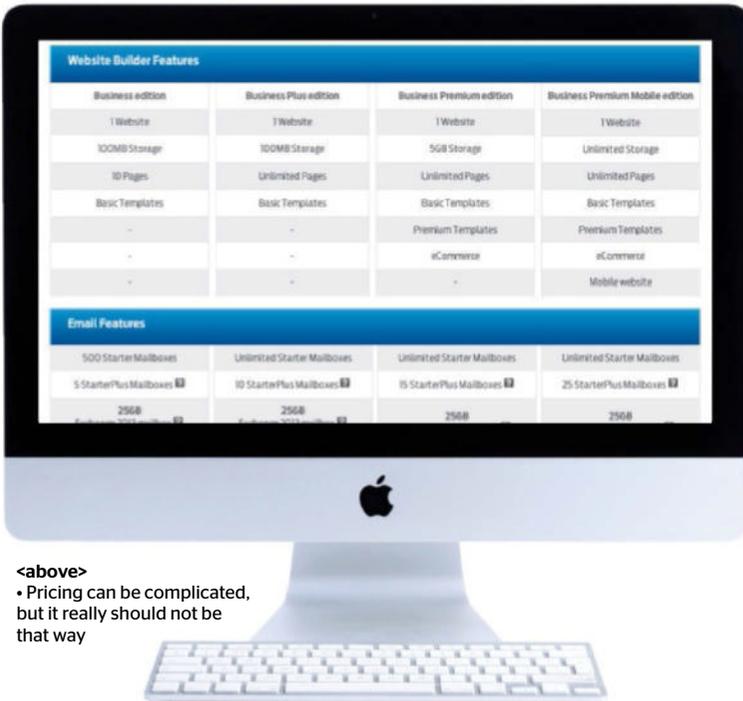
Getting started

Top tip
Almost every web host will boast uptime figures of +99 per cent, but you should research thoroughly to ensure that the figures claimed are accurate.

What should you really pay for?

THERE IS NO definite advice for what features should be included when choosing a web host, but you should be aware of a trend in the industry of selling individual features at separate prices. Web hosts will usually sell domains, but it is often cheaper to buy one from a dedicated supplier. Some also offer services such as domain privacy, Outlook support and other web related features that can soon add up to a much higher cost than you initially expected. When deciding what you need, make sure that the main features are available at reasonable prices and do not be afraid to use multiple organisations for your hosting and domains. Sometimes it can actually be advantageous to use more than one company for resilience and to ensure that not all of your online eggs are in one virtual basket. Pricing should always be obvious and very easy to understand.

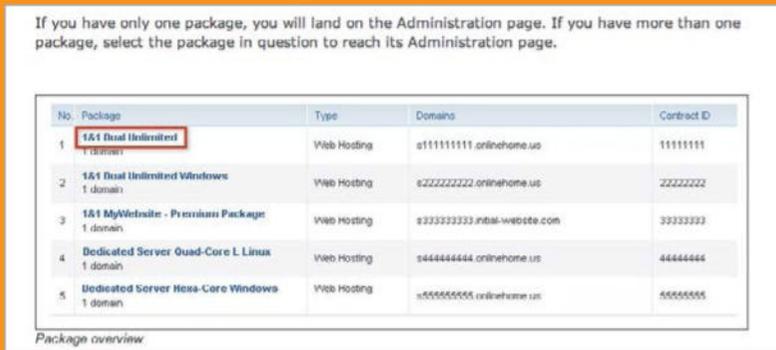
🔍 Be careful when checking all of the features a host offers 🧩



<above>
• Pricing can be complicated, but it really should not be that way

Understand the technical limits of WordPress hosting

DEPENDING ON HOW long you expect to run a WordPress blog and what your ambitions are, you should be very careful when checking all of the features a host offers. MySQL databases are required for WordPress and checking the available limits is crucial to running and adding content to a blog over time. Some hosts limit MySQL database sizes to 100MB or even lower and even if these appear to be ample at the start, after a year or two you may hit the limit and need to transfer your database contents to another provider. The problem is that moving databases requires lots of technical knowledge so if you can be assured of longevity right from the start you will save yourself a lot of trouble in the future. Remember that many providers do not publicise the maximum limit for their databases so make sure you ask before signing up.



<above> Be aware of every single specification you require before you sign up

Other specifics to be aware of

THE TREND FOR hosts to advertise disk space and bandwidth limits is useful as a guide, but there are other technical areas that you should familiarise yourself with before settling on your chosen web host. WordPress can work with a PHP Memory limit of 16GB, but you should be looking for 64MB to ensure that the site will run speedily over long periods. Also, as WordPress is based on MySQL and PHP, always opt for a Linux hosting package – other options will work, but the benefits from using Linux will be felt every time you use WordPress. You should also consider more general aspects of a host such as their available times to deal with problems and if they offer a telephone number for support queries. Read reviews on each host to gauge the general view of their services and don't always be swayed by price. Offers that look too good to be true usually are and, as we all know, you almost always get what you pay for. Take your time investigating all of the available WordPress hosting options because the wrong initial decision could cause months of pain, wasted time and much frustration.



<above> Make sure you cover every single base when choosing a new web host

Four of the best hosts

A DIVERSE COLLECTION OF WEB HOSTS AND SERVICES FOR HOME USERS, SMALL BUSINESSES, DESIGNERS AND DEVELOPERS

bluehost

www.bluehost.com
\$24.99 - \$169.99

bluehost is one of the oldest WordPress providers and offers very impressive features, but the price range may be too high for some. Every plan includes dedicated backup storage so your data is always safe. The blogger package include 2GB of RAM, 30GB of storage and 30GB of backup storage.



HostGator

www.hostgator.com
\$7.46 - \$56.21

There are a variety of low-priced hosting package along with specialist WordPress hosting packages. The WP options come in three varieties, Starter, Business and Pro. All packages offer unlimited email accounts and storage space and allow for one site on the cheapest package going up to 20.



TSOHOST

www.tsohost.com
£1.25 - £19.99

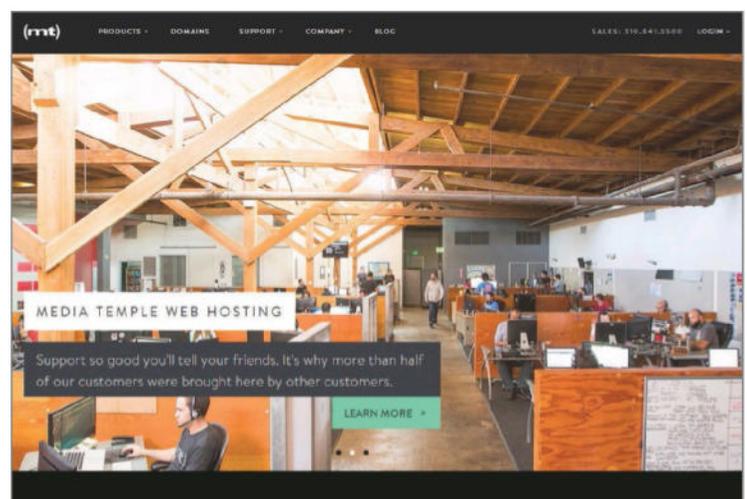
A UK-based provider with low-cost plans starting at £14.99 a year. The Lite package offers 500MB of web space and 3 MySQL databases. For larger sites there is the Standard package at £2.99 a month. For 10GB of web space try the Pro package. Alternatively, get 100GB of web space with the Ultimate package



Media Temple

www.mediatemple.net
\$20.00 - \$240.00

A popular web host with web professionals and agencies, it provides a range of specialist WordPress packages that covers all bases. It's Personal package offers 30GB of web space. For \$60 a month users can get 100GB of storage, 10 sites, 1 free domain and 2 Google Apps for work. If more is needed try the Agency package at \$240 pm.



TUTORIAL OBJECTIVE

Set up a host for your WordPress.org site

TIME REQUIRED

30-45 minutes

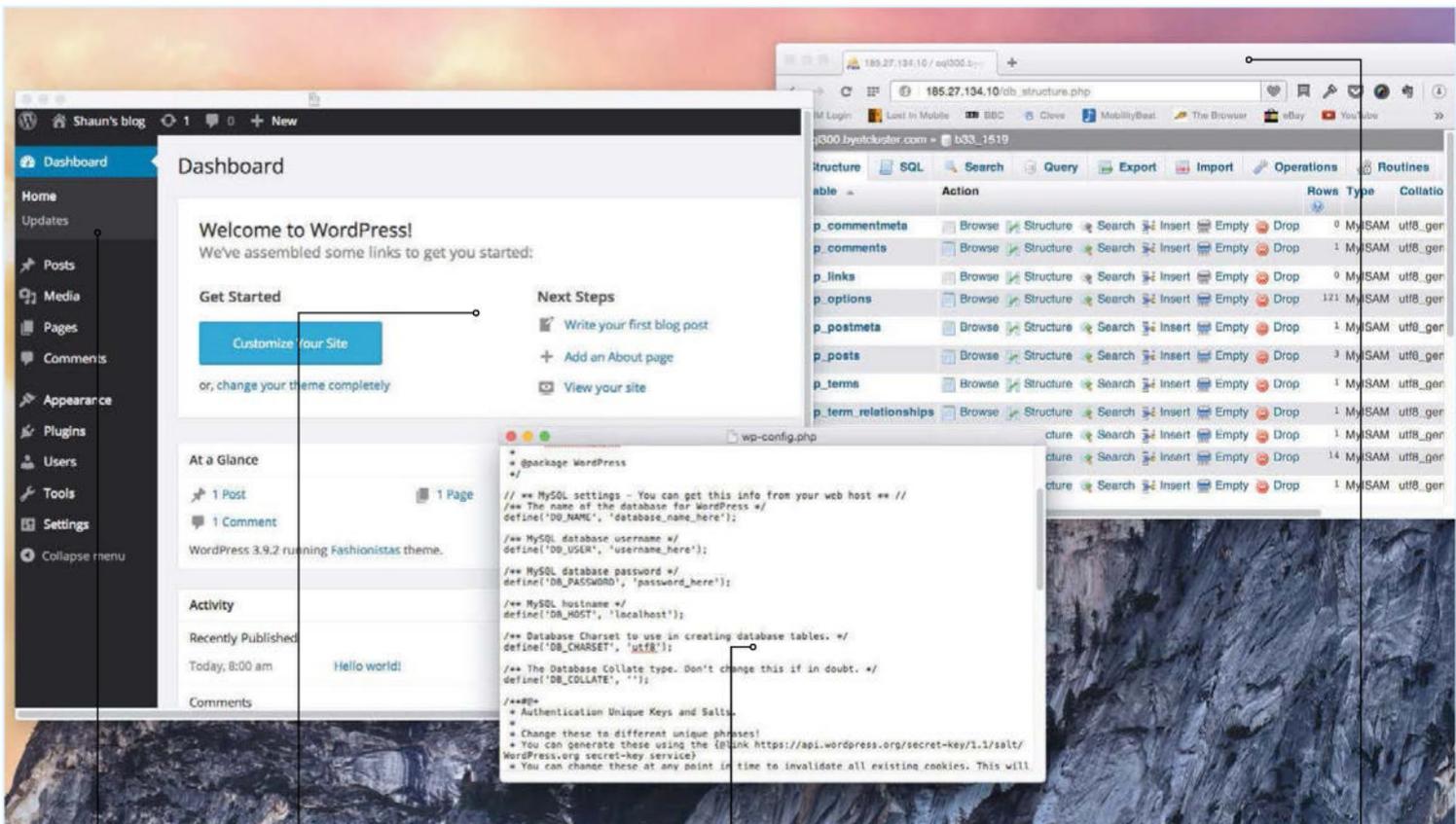
Set up a host for your WordPress

YOU HAVE OPTIONS AVAILABLE TO YOU WHEN SETTING UP A NEW WORDPRESS HOST AND WE WILL EXPLAIN THE BASICS OF MANUAL AND AUTOMATIC INSTALLATIONS



WHEN YOU SIGN up for a host, you should be given all of the tools you need to manage a WordPress installation. This will include database facilities and ftp data to upload large files, but some hosts will also offer automatic install scripts to make the initial WordPress setup as efficient as can be. You can choose to undertake every step of the process manually using the detailed instructions available from WordPress or you can use a script, but no matter what you use there are some areas to look out for. We will cover the main points to ensure that your

new site is secure and reliable and also offer some instructions on what you need to do and the tools you will require. One common mistake is to edit WordPress files using a word processor which you should never do. Make sure you use a standard text editor and that you do not have any capitalisation features enabled in your ftp software. This is due to certain features of processors that will create havoc with any coding in the files, for example, when coding you do not want to have smart quotes (") in your text rather than straight quotes (").



Dashboard

Once installed, you should never need to visit any screen apart from the WordPress Dashboard

Updates

Updates should be installed as soon as they are available and can be done automatically

Text editor

Be prepared to have to manually amend WordPress files using a text editor

Database

The database setup is crucial to ensuring a smooth WordPress implementation



01 The control panel

Once you have signed up for a host you should be given your account details, including a user name and password for the control panel. Enter these and make sure that you have all of the options you require available. You may also see WordPress options.



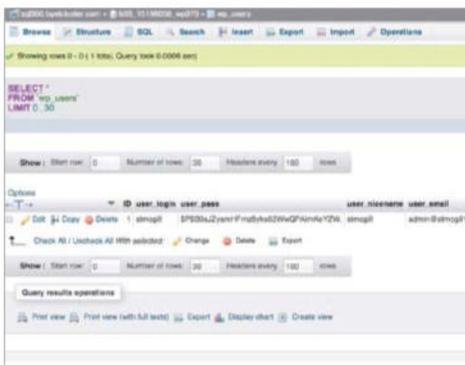
02 Download WordPress

Go to wordpress.org and download WordPress. Unzip it and then rename the wp-config-sample.php file to wp-config.php. Before you proceed make sure you have an ftp client installed and a text editor. Do not use a word processor to amend files.



03 Create a database

In the MySQL section of your host's control panel, create a new Wordpress database, making sure you have full admin permissions. You will need to make a note of the MySQL DB Name, MySQL User Name and MySQL Host Name plus the MySQL password.



04 Dive into PHPMyAdmin

You can access the PHPMyAdmin facility in your control panel from the MySQL screen and this will be required to let you add new users and to see the exact passwords for each user. This area is open to error so read up before you make changes.



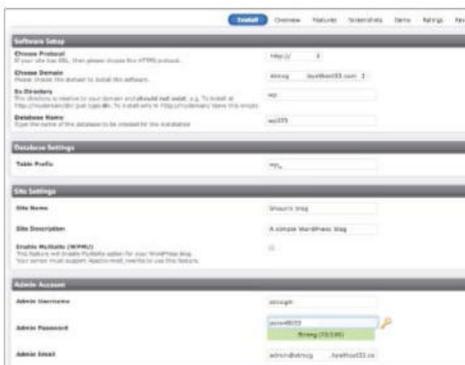
05 Understand the structure

WordPress offers a 'Famous 5-Minute Install' resource at bit.ly/1kbYHGz which shows you the exact structure for a new WordPress installation. You can either follow the basic guide or use the detailed instructions to ensure the manual install works.



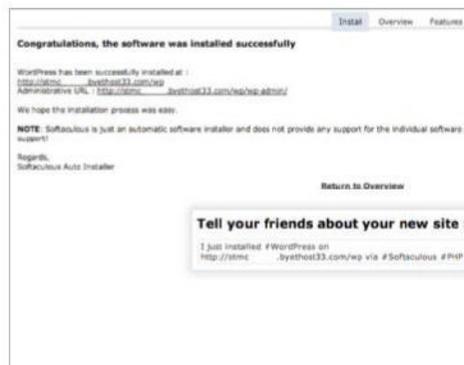
06 Use a script

If you have chosen a host that works with WordPress, you should see a one-click option to install the software. The process is quick and the databases you require should configure automatically. This option is recommended unless you have specific needs.



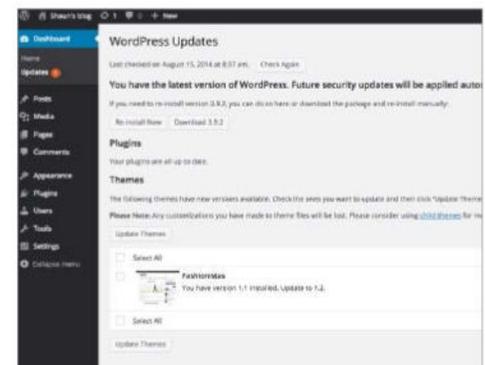
07 Security is important

You will be asked during the automatic install process to choose a user name and password. You should always change the user name from Admin to something unique and make the password as long and complex as possible. Hackers like to attack WordPress.



08 Remember the details

Once the install has completed, you will be given the URL to manage your WordPress site with. Remember this and consider if you want WordPress to be installed in a sub-directory or home. Choose a sub-directory if you will use your space for other tasks.



09 Check for updates

When the WordPress dashboard is displayed, you should click the Updates option first. Make sure you are running the latest version to ensure security and even your plugins can be updated and maintained from the same screen. Always remember updates.

TUTORIAL OBJECTIVE

Set up a domain name for your blog

TIME REQUIRED

15 minutes

Manage your different domains

IF YOU MANAGE AND SET UP YOUR DOMAINS CORRECTLY, THE REWARD WILL BE A SMOOTHER AND POTENTIALLY HIGHER AMOUNT OF TRAFFIC COMING TO YOUR BLOG



SETTING UP AND managing a domain for your WordPress blog is a part of a process that is crucial to get right and will make a huge difference to the eventual popularity of your online presence. The name is important, of course, and demands proper research, and the settings will also ensure that popular search engines and anyone else interested can see your work without seeing errors. We will take you through

a setup process, but remember that these can vary depending on who your web host is, and we will also offer advice on areas that are often forgotten or completely ignored. If you give as much care and attention to your domain setup and management as you do to the design of your site, this will act as the perfect springboard to create a group of followers who can find and follow you without restriction. Take your time, understand the details and it will work.

Home directory

Point your domain to your home directory or the /wordpress folder

Provider

Check your domain provider privacy options or those available from ICANN

Subdomains

Subdomains help to break up a big site and to offer easier visitor navigation

DNS

The way DNS works should be understood to ensure domains work properly

Domain Settings
View and edit the current settings of your domain.

Domain: lostinmobile.com

Basic Settings

Status: Active

Destination: Weespace (/wordpress) [Edit](#) [?](#)

Domain transfer lock: Enabled [Disable](#) [?](#)

Authorisation code: @jqwn9EC

Subdomain Overview

Subdomain	Status	Destination
<input type="checkbox"/> store.lostinmobile.com	✓	Wespace /.

1 subdomain

Domain Contacts

DNS Settings [Edit](#)

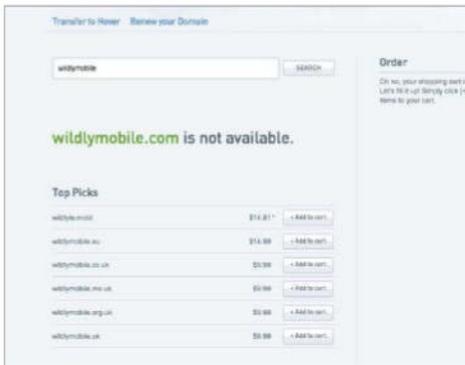
Name servers: 1&1 nameserver [DNS Check](#)

Name server 1: ns-uk.1and1-dns.co.uk

Name server 2: ns-uk.1and1-dns.biz

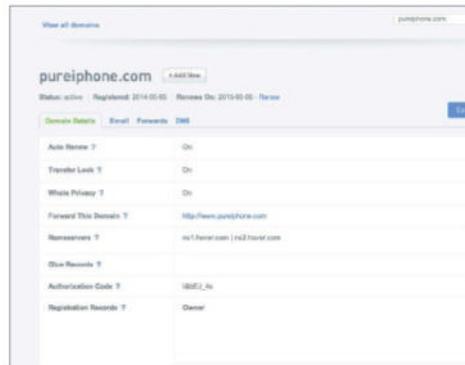
Name server 3: ns-uk.1and1-dns.com

Name server 4: ns-uk.1and1-dns.org



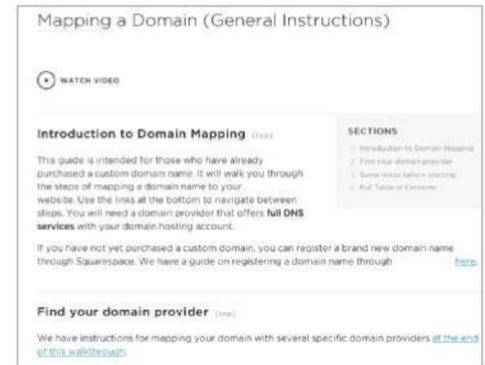
01 The domain name

Choosing a name for your blog is hugely important so be prepared to take some time to find one that works well. Expect to see most names already taken, but persevere and you will be rewarded. All domain providers offer simple domain search tools.



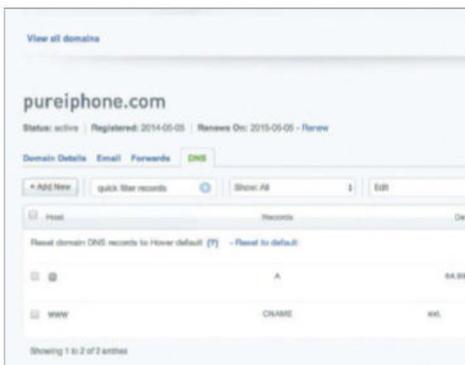
02 Domain management

Once you have purchased a domain, your provider will offer an interface where you can manage how your domain works with your site. Expect to see Email, Forwards and DNS options which are required to ensure your domain works in search engines etc.



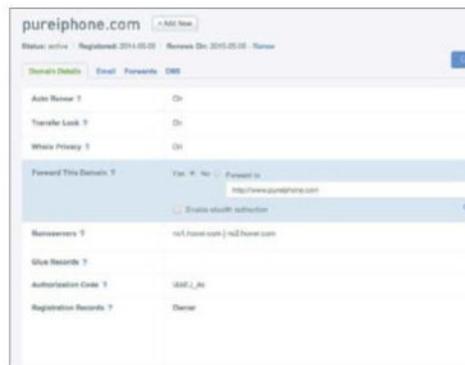
03 Web host details

Your web host should provide all of the information you require, but the least you will need is a target host address and a forwarding address. With luck, they will provide a step-by-step guide to linking your domain with all the relevant information included.



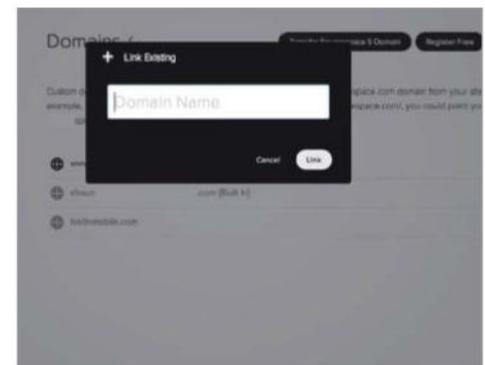
04 Create a CNAME

In the DNS area of your domain provider's control panel you will need to create a new CNAME and enter it as instructed by your web host. You will also need to have an '@' record listed with a default IP address, but the specifics will come from your host.



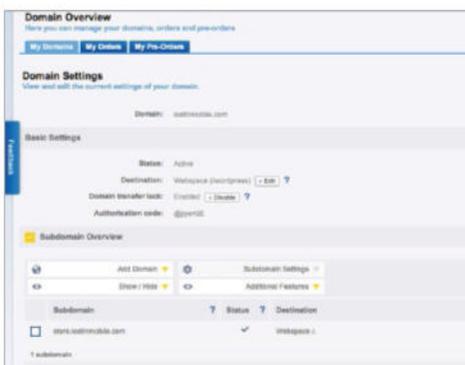
05 Forwarding your domain

Once the CNAME has been created, you will need to forward your domain which will initially be set to go to your domain provider. In the main domain control panel look for the Forward option and enter your new domain name into the field.



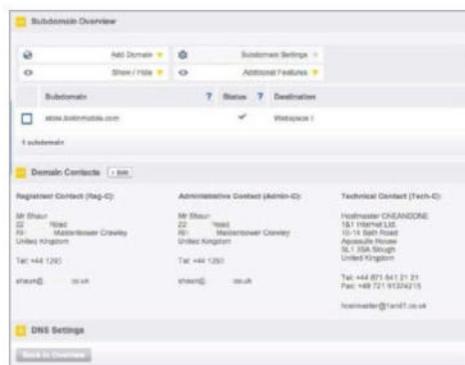
06 Link the host

To complete the setup, go to your web host's control panel and make sure you input your domain in the required field in general settings. This is necessary to mask the underlying web host address and ensure that your domain is always used and remembered.



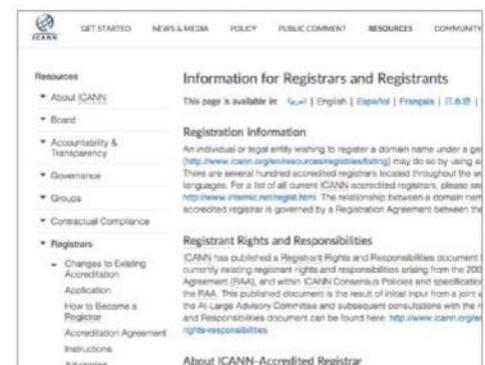
07 Create a subdomain

Under your domain name in the main control panel you should see an option to create a subdomain. These can be used for major parts of your website and will be placed 'before' your main domain name. Follow the instructions to add it and wait for activation.



08 Domain privacy

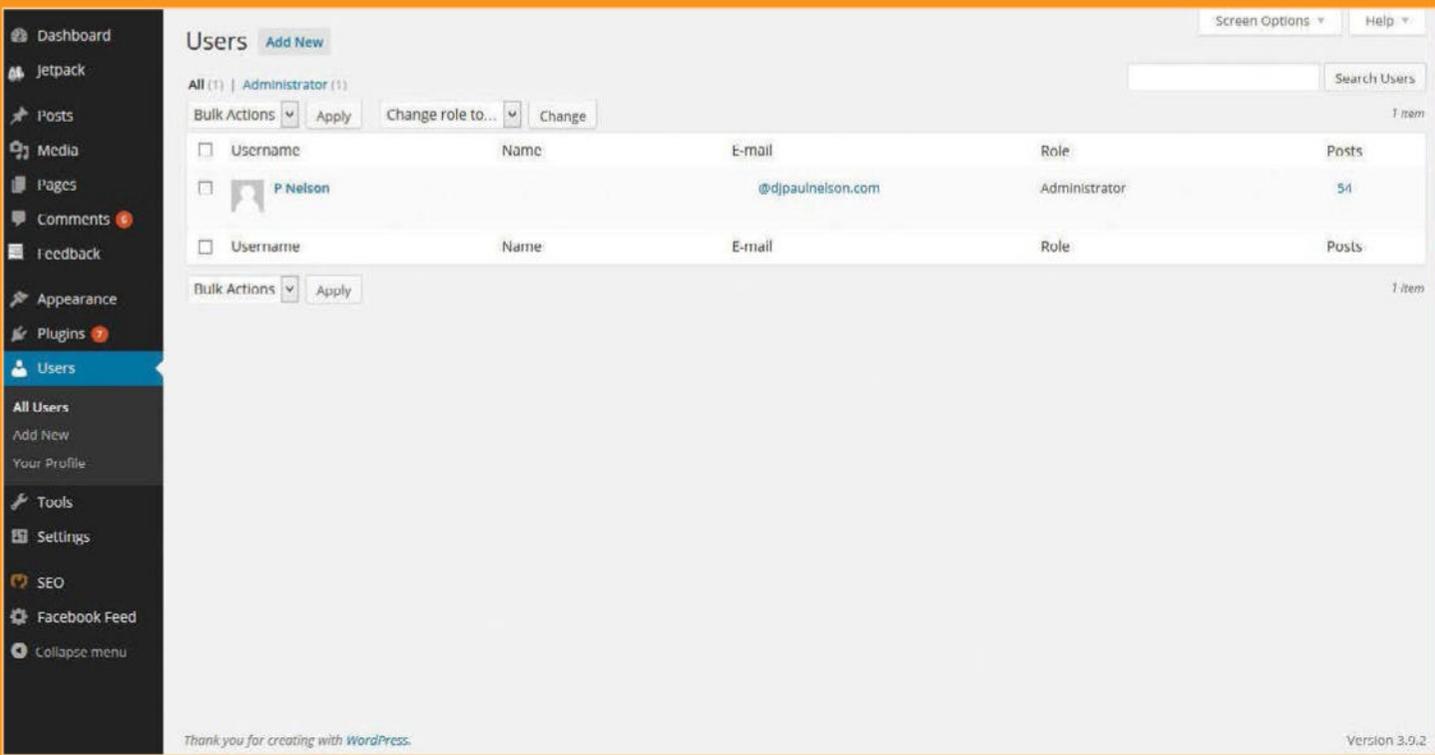
Remember that your personal details will be added to your domain registration (with good reason). Most domain providers, however, will offer a privacy package which you should investigate if you are concerned about publishing your details online.



09 Understand your rights

When you purchase and run a domain you should make yourself fully aware of your rights and responsibilities. Go to www.icann.org to read about privacy services and understand every technical term to ensure you are using your domain correctly.

Getting started



Users Add New

All (1) | Administrator (1)

Username	Name	E-mail	Role	Posts
<input type="checkbox"/>	P Nelson	@djpaulnelson.com	Administrator	54

Thank you for creating with WordPress. Version 3.9.2

<above>

- The Dashboard includes a dedicated section where users can be added, managed and deleted as required. You'll find it within the Users tab

<left>

- With the right permissions your invited users can create, upload and edit their own posts. You can retain full control over what content is published



TUTORIAL OBJECTIVE

Learn how to set up new users with suitable permissions to work on your blog.

TIME REQUIRED

5 minutes

Control your user profiles

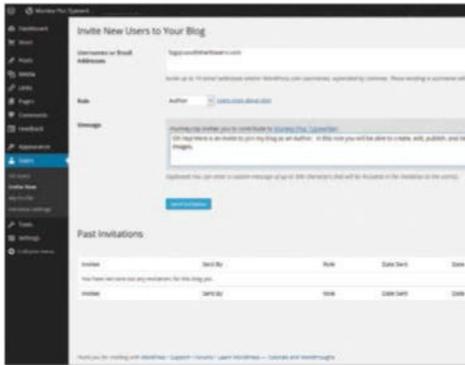
WORDPRESS CAN CATER FOR LARGER PROJECTS REQUIRING MULTIPLE USERS TO CREATE AND UPLOAD CONTENT. AS AN ADMINISTRATOR YOU CAN SET UP VARYING LEVELS OF ACCESS



IT'S NOT UNUSUAL to find that some WordPress based sites are made possible due to the contributions of multiple people (as opposed to being the work of one person). This is made

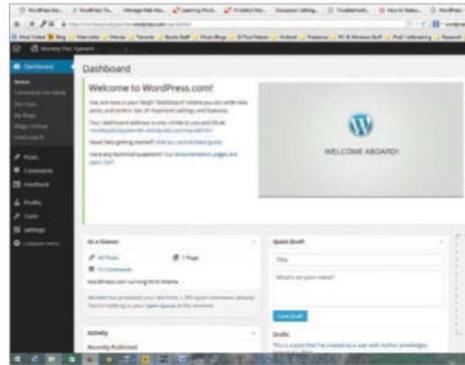
possible thanks to the support of multiple users that is built into the WordPress Dashboard. As an owner of a WordPress blog you can invite other people to your site as a user. With multiple people being involved on a project you will need to control the level of access available to each individual. To help

with this WordPress also includes a hierarchy of roles that can be assigned out as required. These range from the basic role of a Follower who can read and comment on posts. At the other end of the spectrum is the Administrator, for whom nothing is off limits. Then there is the life of the in-between, you have your Contributors who edit posts and delete them but cannot publish them. An Author can publish posts but cannot customise the blog the way Administrators and Super Admins can!



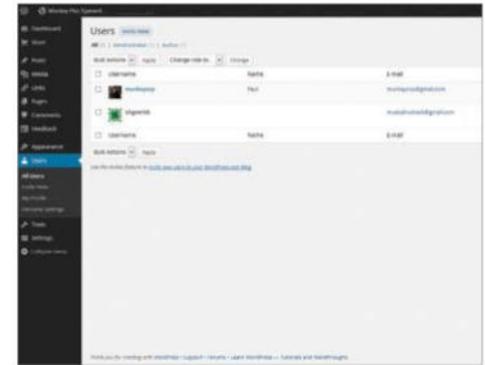
01 Adding a user

You can invite new users to your blog via the Users section of the Wordpress dashboard. Simply enter a Wordpress username or an email address. Up to ten invites can be sent at once. Use the Role box to ten invites can be sent at once. Use the Role box to determine which role will be available to your invitees.



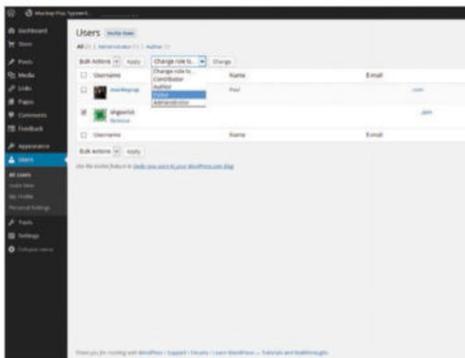
02 Invite accepted

Your invited recipients will receive an email requesting them to accept the invite. However, they will need to set up an account (they will be walked through the process). Once this is done they will be able to access your blog as per the permissions you set up.



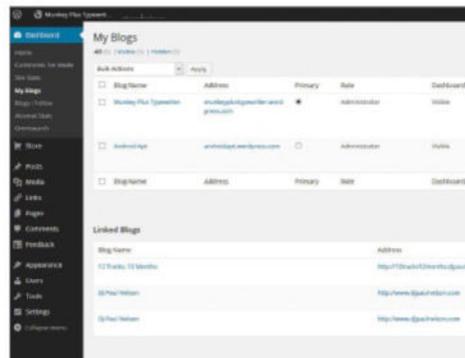
03 Your user list

Back on your Dashboard you are able to view your blog's users via the Users tab. If you have multiple users you can select from the role types above main window to filter out a particular group. Roles can be adjusted and unwanted entries can be deleted.



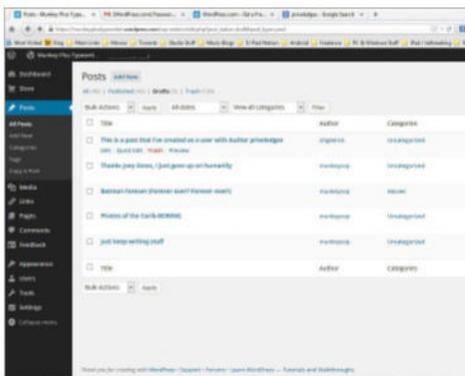
04 Managing users

Making changes to users and their permissions is simple. Select the check box next to a user and select a role from the Change Role To menu. Click on the Change button to apply the selected role. This process is also used to delete users.



05 Your other blogs

If you have been invited to contribute content to another blog you can find it within the My Blogs section of the Wordpress dashboard. This will list sites hosted on **Wordpress.com** for which you are a Contributor, Author, Editor or Administrator.



06 Content control

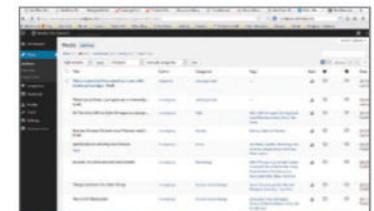
Granting users with basic Author privileges is handy for when you want to keep control over what content is published on your blog. Any content created by an Author is saved as a draft. As the Administrator you have control over whether it is published online.



07 Role flexibility

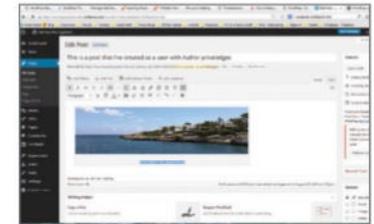
The roles available do come with limitations. For example, a Contributor can delete their own posts which may not be ideal for an Administrator. There are plugins, such as the User Role Editor, that allow you to adjust the finer details of permissions for each role.

Types of User Roles



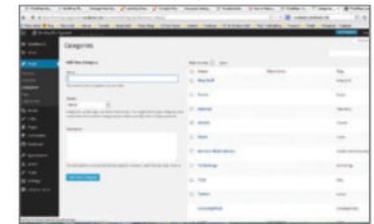
01: Contributors

Contributors can create and edit their own posts but cannot publish them. This is done by the Administrator. Once published the Contributor cannot edit it further.



02: Authors

Authors can create, edit, publish and delete only their own posts. They can also upload images and files. They cannot modify other users posts nor can they edit the pages.



03: Editor

The Editor can create, publish, edit and delete any post, as well as moderate comments, manage categories, links and tags. It is a step below The Administrator.

TUTORIAL OBJECTIVE

Learn how to create backup files for restoring your WordPress database

TIME REQUIRED

5 minutes

Back up your WordPress blog

PREPARE FOR THE WORST BY CREATING A BACKUP OF EVERYTHING STORED IN YOUR WORDPRESS INSTALLATION. YOUR BACKUPS CAN THEN BE USED TO RESTORE LOST OR CORRUPTED INSTALLS



TAKE A MOMENT to think about everything on your blog. Every post, every shared link,

every image that you have ever put on your site since starting it. If your installation was

somehow corrupted would you be comfortable with losing all of it? This is why backing up your site is a recommended task. The question of how regularly is largely down to your own preference. If you post often, then more frequent backups may be required. Heavier users are known to keep backups on a local drive plus an external drive. It really

is a question of how much you are prepared to lose if the worst happened.

The process of performing a backup can vary from one setup to the next. There is also a difference depending on whether your blog is hosted by WordPress or by yourself. WordPress hosted blogs have the luxury of having WordPress themselves handling the backups. Self-hosted users should find that their provider likely provides a backup solution. Check with them to find out what services they can offer.

Table	Action	Rows	Type	Collation	Size	Overhead
wp_commentmeta	Browse Structure Search Insert Empty Drop	240	InnoDB	utf8_general_ci	360 KIB	-
wp_comments	Browse Structure Search Insert Empty Drop	71	InnoDB	utf8_general_ci	128 KIB	-
wp_links	Browse Structure Search Insert Empty Drop	0	InnoDB	utf8_general_ci	87 KIB	-
wp_options	Browse Structure Search Insert Empty Drop	728	InnoDB	utf8_general_ci	1.2 MiB	-
wp_postmeta	Browse Structure Search Insert Empty Drop	2,789	InnoDB	utf8_general_ci	416 KIB	-
wp_posts	Browse Structure Search Insert Empty Drop	158	InnoDB	utf8_general_ci	590 KIB	-
wp_StreamPad_Tracks	Browse Structure Search Insert Empty Drop	46	InnoDB	latin1_swedish_ci	176 KIB	-
wp_terms	Browse Structure Search Insert Empty Drop	814	InnoDB	utf8_general_ci	96 KIB	-
wp_term_relationships	Browse Structure Search Insert Empty Drop	669	InnoDB	utf8_general_ci	80 KIB	-
wp_term_taxonomy	Browse Structure Search Insert Empty Drop	406	InnoDB	utf8_general_ci	0 KIB	-
wp_usermeta	Browse Structure Search Insert Empty Drop	15	InnoDB	utf8_general_ci	40 KIB	-
wp_users	Browse Structure Search Insert Empty Drop	1	InnoDB	utf8_general_ci	48 KIB	-
12 tables	Sum	4,618	InnoDB	latin1_swedish_ci	9.1 MiB	0 B

Databases

The left hand side panel lists the databases within your installation. Click on an entry to select it

Help

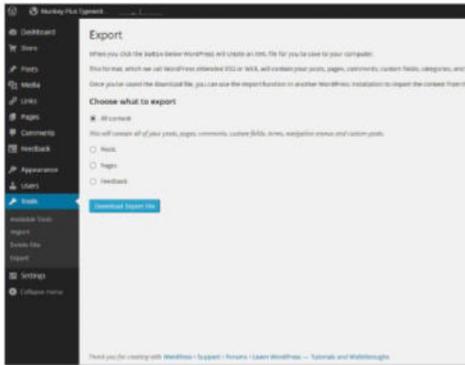
phpMyAdmin can be a little daunting for newcomers. The fourth icon along (the question mark) contains helpful documentation to assist

Current database

The larger right hand side section will display whatever database has been selected from the list on the left hand side. You can select individual entries from here if required

Tools

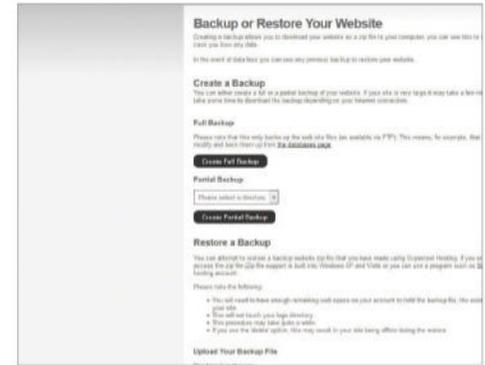
The main tools and functions (including the Export function) can be found along the top of the right hand section



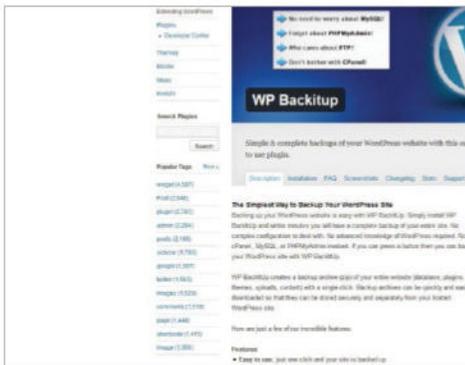
01 WordPress-based backup
If your blog is hosted on WordPress (ie has a wordpress.com url) you can use the Export tool to save an XML file. This can save posts, pages and comments but not media such as images. Use the import function to restore your saved data.



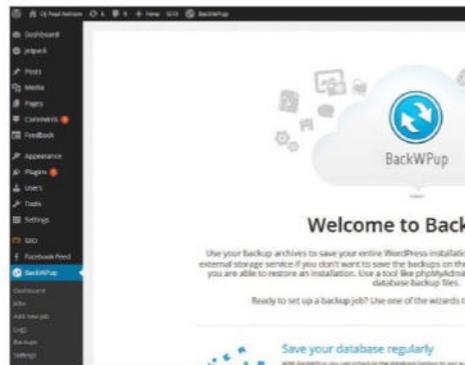
02 Self-hosted backup
Depending on which hosting service you have chosen, you may have a database backup service available to you. Look for a MySQL option. In here you may find a back-up option for the database that contains your WordPress installation.



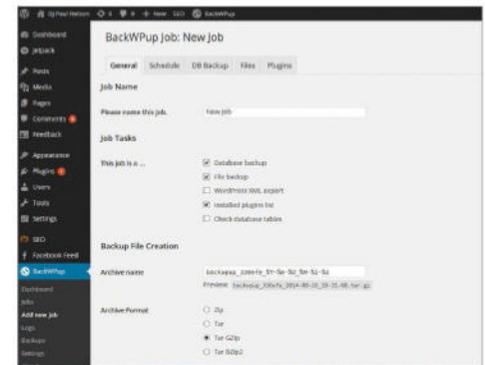
03 Self-hosted full backup
Your hosting company may also provide a full back-up solution that encapsulates all of the files stored on the server itself. This may take time to save but would include everything that makes your website what it is.



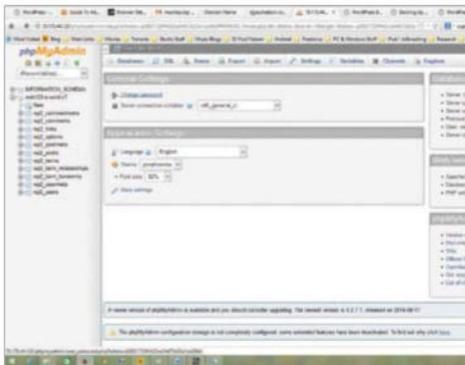
04 The Automated Solution
There are also plugins that can simplify the back-up process for you. These can be useful for less experienced users as it bypasses the need for the trickier aspects such as MySQL and PHPMyAdmin. These tools can also be used to automate the process.



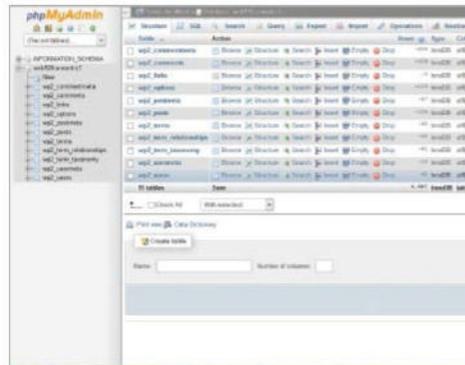
05 Introducing BackWPup
A well-regarded free plugin is BackWPup. It provides an impressive set of tools that can back up your files to services such as Dropbox. It works by creating jobs where you control what is backed up and when. Install the plugin and select Create a Job.



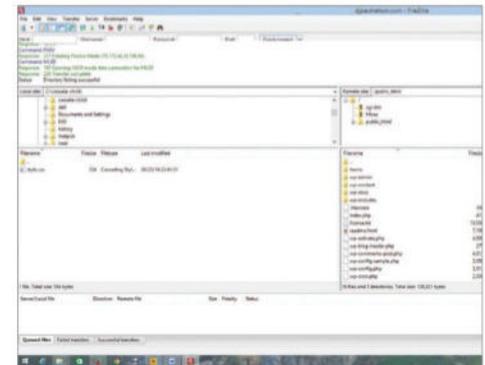
06 Creating a job
In the job dialogue screen you can select the data that is to be backed up. Tabs across the top of the screen allow you to select where on your server your backups are kept. If you have multiple plugins installed it can also back those up to save time when restoring.



07 Backup with phpMyAdmin
The common tool phpMyAdmin can be used to back up your WordPress database. To get started, click on Databases in your phpMyAdmin panel. This step may not apply depending on your version of phpMyAdmin.



08 phpMyAdmin Export
If you have more than one Database, select the one that applies to your installation. The Structures view tab will display your default tables. Use the export option to determine the data you wish to backup.



09 Copy your files
Using an FTP client you can also log in to the server side of your WordPress installation. You can then browse to the WordPress folders and copy/download them to your local drive. You can also zip or compress them once downloaded to further save on space.

Secure your WordPress site from hackers

IN THIS TUTORIAL YOU'LL LEARN SOME ESSENTIAL HANDS-ON TECHNIQUES AND RESOURCES WHICH CAN HELP TO HARDEN YOUR WORDPRESS SITE AGAINST MULTIPLE THREATS

TUTORIAL OBJECTIVE

Secure your WordPress blog from the hackers with a few simple steps

TIME REQUIRED

30 minutes



IT IS ESTIMATED that WordPress is currently used to power over 60 million websites worldwide. Around 25 per cent of new sites also choose the free CMS

as their foundation. WordPress has become exceptionally popular with users and, as a result, exceptionally popular with the army of hackers and spammers lurking out there who would like nothing better than to exploit your website for a variety of nefarious purposes.

WordPress is a solid and secure platform. But, like any web-based system, it requires constant upkeep and attention to stay one step ahead of the ever-evolving security threats. The platform is updated often and goes to great lengths to address new security issues with each subsequent release. However, there are several techniques and resources you can implement to ensure that your website remains as fortified as possible.

Some of these tips are very simple things to employ that will make a difference to the ongoing security of your site, and indeed your PC or laptop and general online presence. Some require a little more know-how but once complete will ensure that you're safely protected.

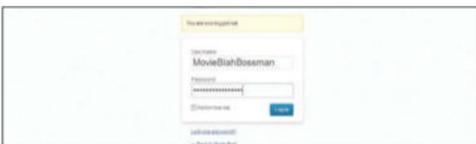
01 Change your login

Still using the original Admin username? This is the first thing bots and exploits will look for, so change it. Log in with that username and create a new Administrator-level account with a more distinctive username. Then log out and log back in again using the new account so you can delete the original one.



02 Creative passwords

Nobody likes having to remember 20 different passwords, but it's vital that your account password is as unique and character-rich, as possible. Use uppercase and lowercase letters, numbers and punctuation characters. If it resembles somebody swearing in a comic book (B*%1E#S!) you're on the right track.



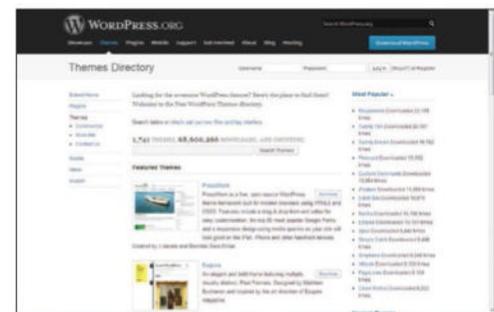
03 Keep it updated

One of the most common causes of vulnerabilities for WordPress sites is continuous use of outdated versions. It is vital that you keep your installation up to date. WordPress will notify you in the Dashboard when a new version has been released. Follow the prompts and update. It takes a few minutes and could save you a few hours in the long run.



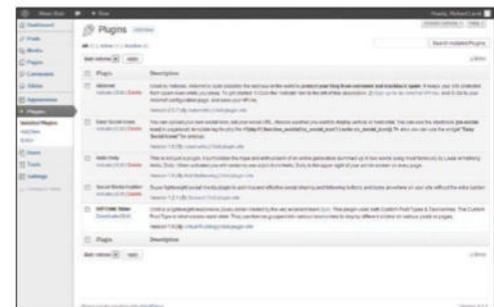
04 Avoid free themes

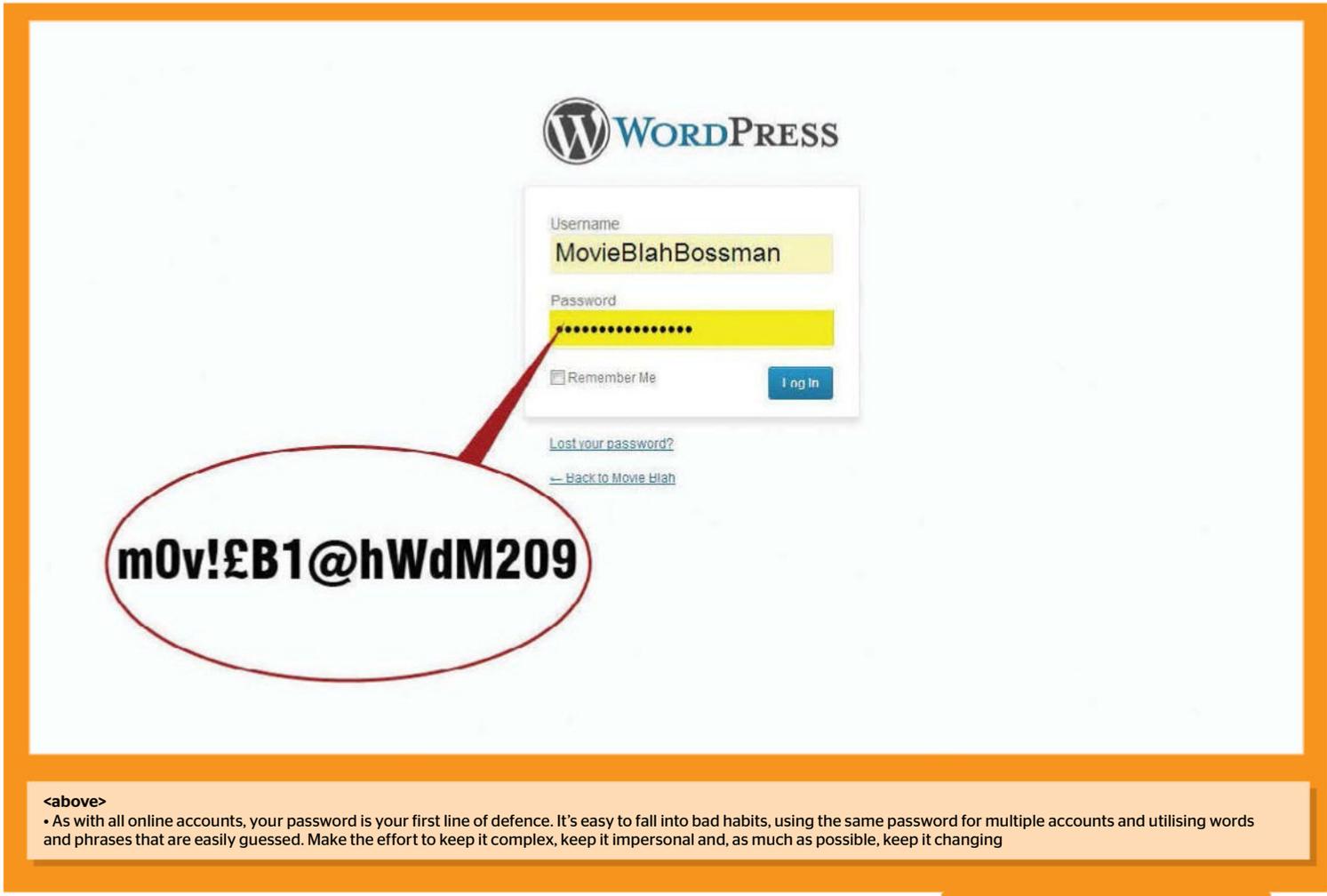
There are countless websites out there that offer free, pre-built themes for your WordPress site. Beware. Most of these themes come packaged with a few invisible surprises under the hood. It's much better to stick to trusted sources through the WordPress.org site, build your own theme using a free framework, or buy one at reputable sites such as Theme Forest.



05 Plugin awareness

Plugins can be vital additions to your site, giving you great functionality beyond the basics. However, some plugins can present an open door to hackers. Make sure you get your plugins only through the WordPress extension, and check the reviews for any warnings. And, like the platform, be sure to keep them updated.





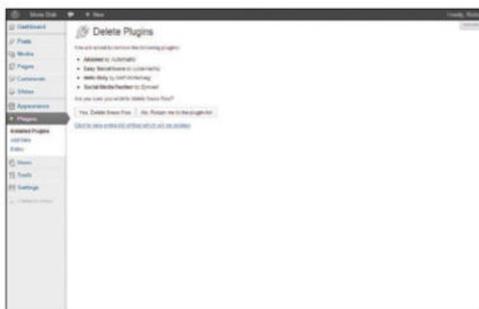
The screenshot shows the WordPress login interface. The username field contains 'MovieBlahBossman' and the password field is filled with dots. A red callout bubble points to the password field and contains the password: **m0v!£B1@hWdM209**. Below the login form are links for 'Lost your password?' and 'Back to Movie Blah'.

<above>

- As with all online accounts, your password is your first line of defence. It's easy to fall into bad habits, using the same password for multiple accounts and utilising words and phrases that are easily guessed. Make the effort to keep it complex, keep it impersonal and, as much as possible, keep it changing

06 Keep only what you need

Do you have a bunch of plugins on your site that you don't use? Even a deactivated plugin can be a threat. Remove as many inactive plugins, themes and files as you can, including the readme file in the root folder. Simple rule: the fewer the scripts, the fewer the vulnerabilities.



clean reinstall of the site and content is the only way to be sure you are rid of any malware.



08 Keep your PC clean

It's not just your WordPress website that you need to keep an eagle eye on. It is essential that you make sure you have a good antivirus running on your PC or laptop, too. Ensure that this is reputable and also kept up to date. You don't want to end up being the one that infected your own website simply because you placed a few corrupted files there! This should be a matter of course even if you don't own a website and can save you a lot of time and money in just a few clicks.

Top tip
For that little extra precaution, there are security plugins available, including Better WP Security, Wordfence, and Sucuri Scanner.

07 Back it up

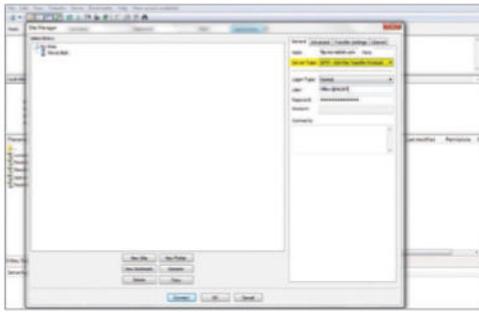
The importance of keeping your site backed up at regular intervals cannot be stressed enough. Not all attacks and hacks will cause you to lose it, but you don't want to be the one who got caught out. And sometimes, a



Getting started

09 SFTP not FTP

All connections to your server for file updates should be done through SFTP, rather than just FTP, assuming your host provider allows it. If they don't, consider moving to a host that does. The extra encryption protocol is a valuable safeguard against your login details being intercepted by bad boys and girls.



10 Protect the config file

Advanced security can be achieved by adding an .htaccess file in your site's root. If you don't already have one, open a text file and rename it .htaccess. Place it into your site's root folder with the code listed below. The code listed above # BEGIN WordPress prevents your database login details from being accessed in the browser in the event of a PHP failure.

```
001 # don't allow wp-config.php to load
002 <Files wp-config.php>
003 order allow,deny
004 deny from all
005 </Files>
006 # BEGIN WordPress
007 <IfModule mod_rewrite.c>
008 RewriteEngine On
009 RewriteBase /
010 RewriteRule ^index\.php$ - [L]
011 RewriteCond %{REQUEST_FILENAME} !-f
012 RewriteCond %{REQUEST_FILENAME} !-d
013 RewriteRule . /index.php [L]
014 </IfModule>
015 # END WordPress
```

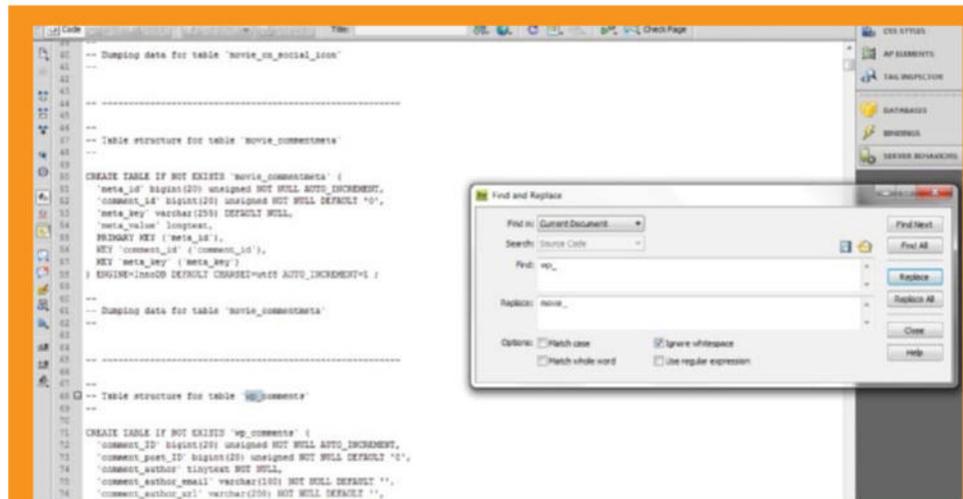
Forbidden

You don't have permission to access /projects/wordpress/wp-config.php on this server.

11 Change WordPress prefix

This is a step for fresh installs only (see the box above for existing sites). By removing the default 'wp' prefix for all database entries, you make it much harder for attacks to find access. Simply open wp-config.php in the root, scroll down to find the table prefix and change the wp_ to something else, such as movie_.

```
001 $table_prefix = 'wp_';
002 To
003 $table_prefix = 'movie_';
```



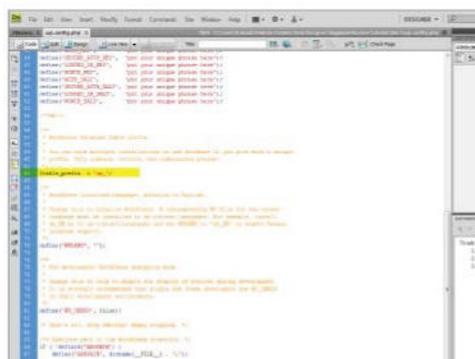
Changing WordPress prefix for live sites

We covered changing the wp_ prefix for database tables on a fresh install in Step 11. The method for existing sites is a little more involved. You will need access to your database through PHPMyAdmin.

Perform a full backup of your database and keep it safe somewhere. Then take two exports of your database in text file format. Keep one as an original and open the other in a text editor. Replace all instances of wp_ with your new prefix. Go to your site admin area and deactivate all your plug-ins. Then drop your existing database and import your new, edited, text file. Edit the wp_config.php as in Step 11, then reactivate your plug-ins and check functionality. Lastly, got to Settings> Permalinks and refresh them by clicking Save Changes.

Top tip

If you don't want to undertake these .htaccess changes yourself, then Bulletproof Security is an excellent, free plug-in that does all the work for you. Highly recommended.



12 Prevent directory browsing

To prevent anyone from accessing files in your WordPress directory by typing the directory path into the browser, place the code below into the .htaccess file, above # BEGIN WordPress. Placing a blank index.html file into every directory will have the same effect. However, this is quicker and simpler.

```
001 # prevent directory browsing
002 Options -Indexes
```

13 Protect the .htaccess file

It may seem odd to place code within the .htaccess file that, in essence, protects itself, but with a great deal of your security nested here, why not play it safe? Any access to this file could mean access to the fortifications you have worked so hard to put up. Let's lock every door.

```
001 # protect the htaccess file, _____
002 <files .htaccess>
003 order allow,deny
004 deny from all
005 </files>
```

14 IP address restrictions

If you and your contributors have static IP addresses, you can use the .htaccess file to restrict admin access to just those IPs. This technique offers a great security option, with obvious restrictions to accessing your own site should you suddenly find yourself at an unauthorised IP address. Just pop the code into the .htaccess file, filling in the IPs.

```
001 AuthUserFile /dev/null
002 AuthGroupFile /dev/null
003 AuthName "Access Control"
004 AuthType Basic
005 order deny,allow
006 deny from all
```

```
007 # authorised IP address
008 allow from ???.???.???.???
009 # authorized IP address
010 allow from ???.???.???.???
```

15 Limit login attempts

Restricting the amount of login attempts that can be made by any IP gives you an added layer of security against 'brute force' attacks. Install the Limit Login Attempts plug-in through the plug-in search facility. This gives you a customisable series of features and notifies you when an IP lockout has been enforced.



16 Disable HTTP Trace

Cross Site Tracing (XST) and Cross Site Scripting (XSS) are common attack methods. They work by using a server's default trace HTTP TRACE function to steal cookie and server information through header requests. You can guard against these attacks by turning off the functionality. Just place the above code in your .htaccess file, above # BEGIN WordPress.

```
001 RewriteEngine On
002 RewriteCond %{REQUEST_METHOD} ^TRACE
003 RewriteRule .* - [F]
```

17 Protect against SQL injections

SQL injections are one of the more common forms of attack on WordPress sites. Most web hosts take every precaution to protect against these exploits, but you can add your own check by inserting this code into the .htaccess file. Place it just underneath RewriteBase /, below # BEGIN WordPress

```
001 # return 403 Forbidden when someone puts
script tags or GLOBALS or _REQUEST stuff in
the URL
002 #
003 RewriteCond %{QUERY_STRING}
(\<|%3C).*script.*(\>|%3E) [NC,OR]
004 RewriteCond %{QUERY_STRING} GLOBALS(=|\
[|\\%[0- 9A-Z]{0,2}) [OR]
005 RewriteCond %{QUERY_STRING} _REQUEST(=|\
[|\\%[0- 9A-Z]{0,2})
006 RewriteRule ^(.*)$ index.php [F,L]
```



Code library

The HTACCESS file in full

Although there are some security measures that can be implemented in the .htaccess file at a cost to site functionality, they have been avoided here

The .htaccess file is a vital and versatile resource for adding extra layers of security to your site. Use it

```
001 # don't allow wp-config.php to load
002 <Files wp-config.php>
003 order allow,deny
004 deny from all
005 </Files>
006 # prevent directory browsing
007 Options -Indexes
008 # protect the htaccess file
009 <files .htaccess>
010 order allow,deny
011 deny from all
012 </files>
013 AuthUserFile /dev/null
014 AuthGroupFile /dev/null
015 AuthName "Access Control"
016 AuthType Basic
017 order deny,allow
018 deny from all
019 # authorised IP address
020 allow from ???.???.???.???
021 # authorized IP address
022 allow from ???.???.???.???
023 RewriteEngine On
024 RewriteCond %{REQUEST_METHOD} ^TRACE
025 RewriteRule .* - [F]# BEGIN WordPress
026 <IfModule mod_rewrite.c>
027 RewriteEngine On
028 RewriteBase /
029 # return 403 Forbidden when someone puts script tags or
GLOBALS or _REQUEST stuff in the URL
030 #
031 RewriteCond %{QUERY_STRING} (\<|%3C).*script.*(\>|%3E)
[NC,OR]
032 RewriteCond %{QUERY_STRING} GLOBALS(=|\
[|\\%[0- 9A-Z]{0,2}) [OR]
033 RewriteCond %{QUERY_STRING} _REQUEST(=|\
[|\\%[0- 9A-Z]{0,2})
034 RewriteRule ^(.*)$ index.php [F,L]
035 RewriteRule ^index\.php$ - [L]
036 RewriteCond %{REQUEST_FILENAME} !-f
037 RewriteCond %{REQUEST_FILENAME} !-d
038 RewriteRule . /index.php [L]
039 </IfModule>
040 # END WordPress
```

This is a comprehensive list of .htaccess tricks, but further research will uncover some more advanced ideas

If you get 500 Internal Server errors when trying to load the site, the .htaccess file is always worth exploring first

Remember that WordPress is able to edit any code between the BEGIN and END WordPress tags

 It is vital that you keep your installation up to date. WordPress will notify you in the Dashboard when a new version has been released. Follow the prompts and update 

Themes

Add personality to your blog

56 The 20 best WordPress themes

Make your website your own with a beautiful WordPress theme

66 Create your own theme

Start from scratch and create your own theme framework

74 Build a responsive WordPress theme

Take the next step and make sure your website is responsive

78 Customise a WP theme

Make a standard WordPress theme your own with the customisation tools

82 Convert a static site with a child theme

Convert a static website so it is compatible with WordPress

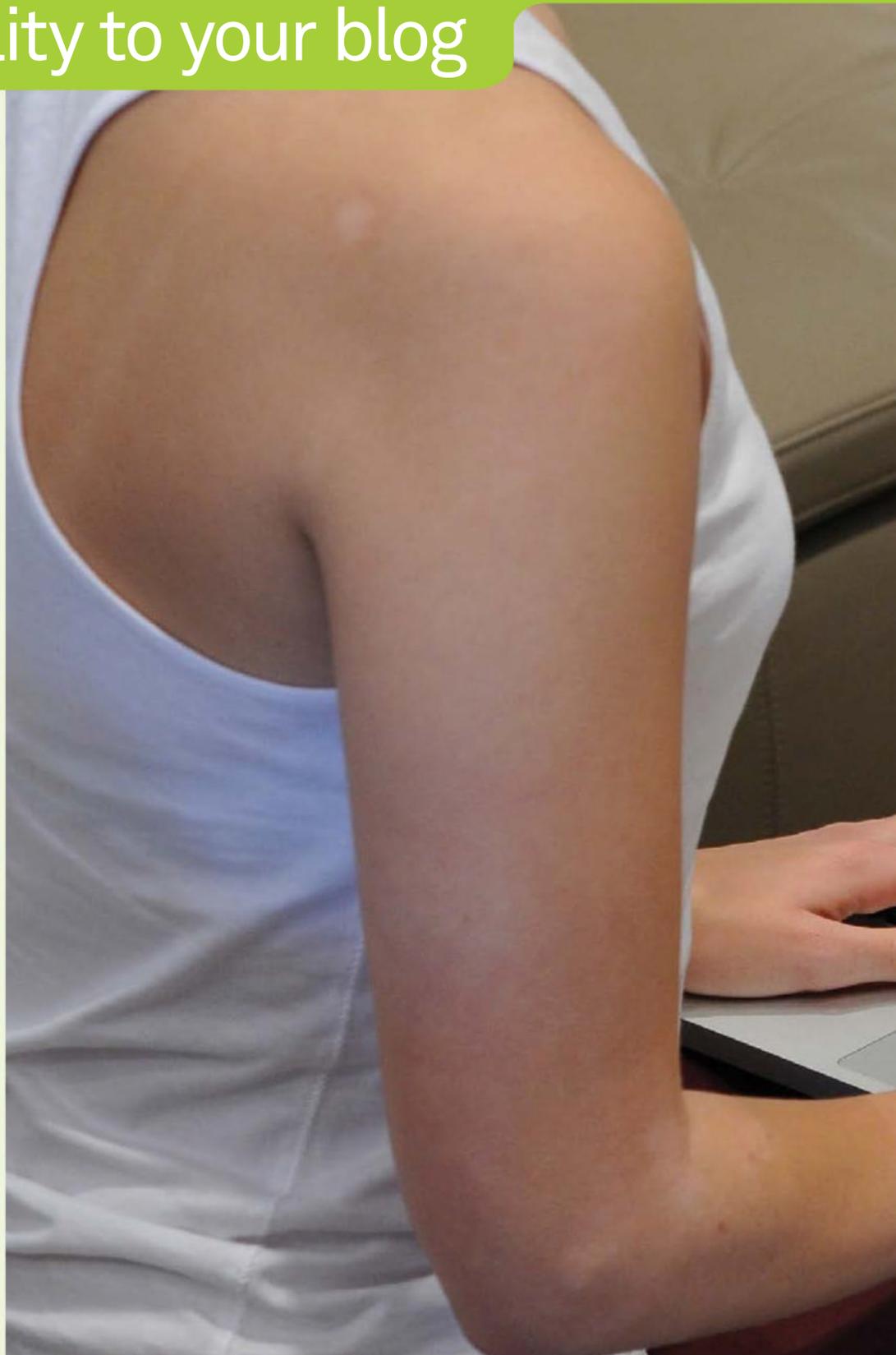
86 Create a mobile-friendly site

Take your WordPress site into the modern age by making it adaptable

90 Transform HTML to WP

Take your HTML site and make it WordPress compatible

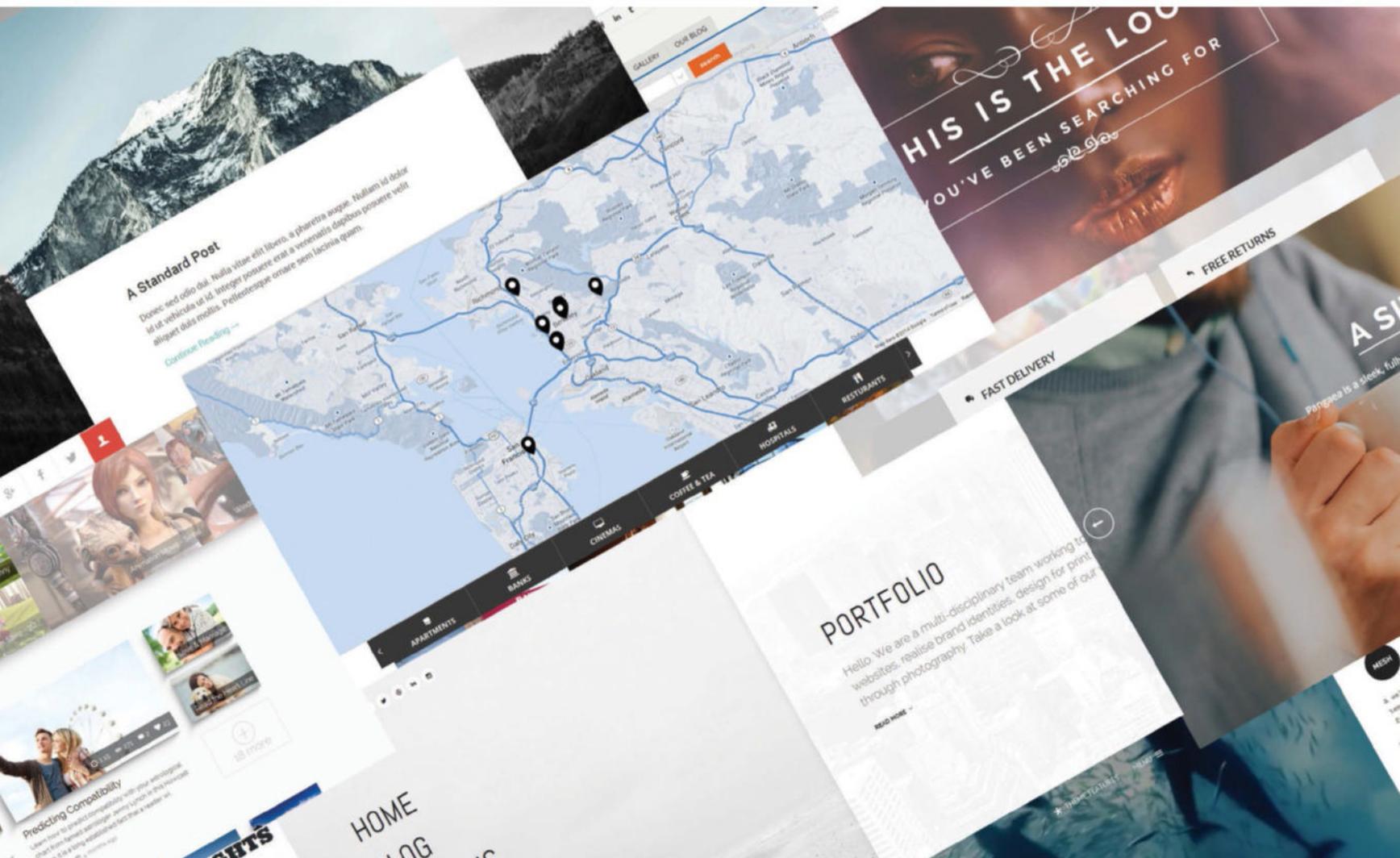
🌱 One of the most powerful things with WordPress is its versatility when it comes to themes 🌱



Top tip

As an easy option, a mobile plugin such as WPTouch can convert your content into a mobile-friendly layout.





The 20 best WordPress themes

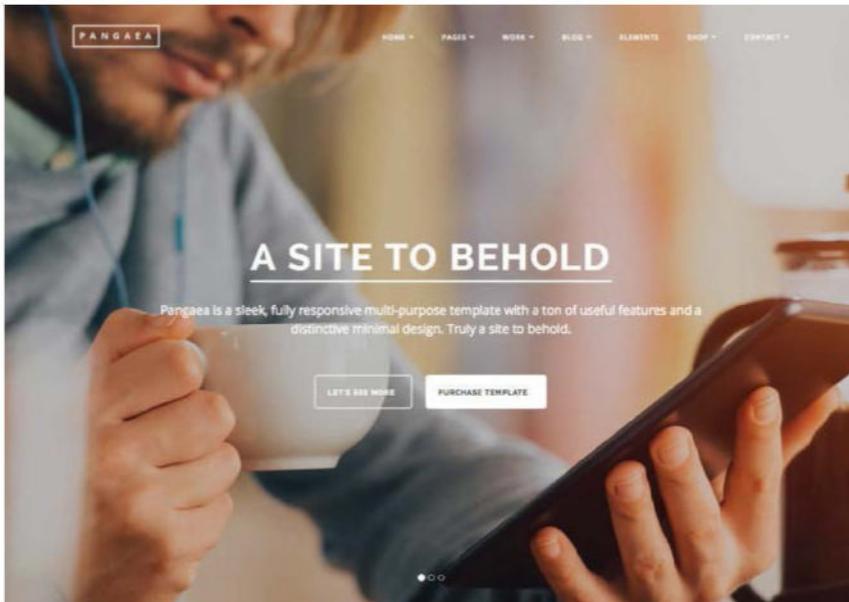


THEMES AND WORDPRESS GO HAND-IN-HAND. THE SCIENCE BEHIND CHOOSING THE RIGHT THEME FOR THE RIGHT JOB IS EXPLAINED HERE...

Themes

Pangaea

Source: bit.ly/1p1IDIU
Price: \$17
Best used for: Multi-purpose



THE PANGAEA THEME is built by bradweb and is a fullscreen, contemporary, responsive multi-purpose site. The fullscreen nature of the theme makes it ideal for any site that wants to make an instant impact with some stunning photography or imagery. The design has a spacious and minimalist aesthetic that works across desktop, tablet and smartphone.

If the fullscreen slider doesn't work for what you want then there are a host of alternative home page designs. In fact there are eight designs in total. These come under the titles of standard, video, Ken Burns, slider, one page, portfolio, freelance and corporate, hence the multi-purpose nature of the theme.

Layouts are critical to the appearance of a website and the option to choose a layout that works well for your content is important. Again, the theme excels with an impressive selection of layouts to choose from. There are 2, 3 and 4 column layouts in various guises: grid, gapless and fullscreen. The alternative, and currently popular option, is single portfolio page, again in different guises.

In addition to the home page style, the Pangaea theme provides a host of pages eg About Us, that can be added at will, and work with the selected style. The fluid nature of this theme means that there are hundreds of options for creating a contemporary and unique site design.

Hemlock

Source: bit.ly/1qOoZlZ
Price: \$39
Best used for: Personal blog



HEMLOCK IS A classic-style blog with a touch of style and class that makes it clean and contemporary. Rarely has a standard blog theme looked this good. It is refined, sleek and doesn't have a mass of annoying additions to distract users. The standard blog style uses wide images, classy serif fonts and a simple colour combination that adds that little bit of elegance. Individual posts retain the same style, but include neatly styled pullquotes, subtle social media buttons and biographies.

There is the option to change from the classic layout, if you really need to, and adopt the classic WordPress sidebar. This gives the option to include more content on the home page without spoiling the style. For more flexibility there is the option for different style posts such as video, music and gallery.

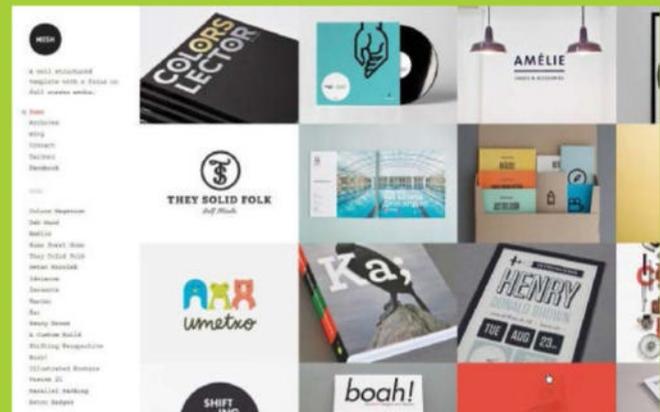
Mesh

Source: themezilla.com/themes/mesh/
Price: \$59
Best used for: Personal

FOR THOSE LOOKING to display their portfolio in a clean and contemporary style the Mesh theme is a great starting point. The theme adopts a simple left-sided navigation system while the main presence of the sites is dedicated to an image-based grid.

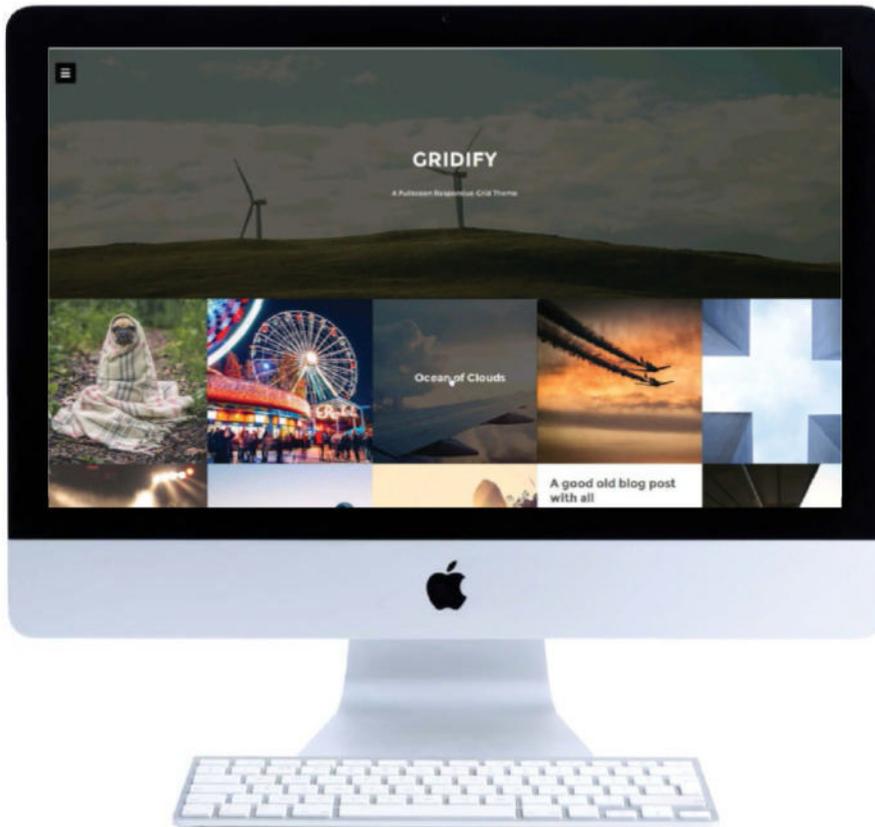
Mesh is fully responsive and has a lightweight back-end meaning that the theme is quick and nimble. The image grid is conveniently filterable so visitors can instantly decide which elements they wish to view.

Mesh has a number of customisable elements which gives the option to take the theme to a new level. It includes a number of custom-built widgets to add Twitter, Flickr, video and advertising. There is also a collection of custom pre-built page elements to ensure that you get the layout you want.



Gridify

Source: www.ceeceee.com/gridify
Price: \$44
Best used for: Portfolio/Photography



GRIDS ARE POPULAR. They lay out content in a neat and easy to digest format for the user and they neatly slot into the responsive style. Plus, with the right image selection they look visually appealing, modern and artistic. Everyone's a winner.

As its name suggests, Gridify stays true to the popular grid-based theme, which is very much image-led and visual. The theme uses a full width image header to introduce the subject matter, while neatly arranging the rest of the imagery into five columns. Each and every image had its very own rollover effect which introduces the title of the associated post.

To break up the barrage of imagery blocks of text can replace an image. This can come in the form of a standard post, a comment and audio or video. Be careful with what you choose, as too much will spoil the aesthetic of the site design.

Individual posts are simple and clean, but still very much in keeping with the theme's stance. An image heads the centred post window with the text running underneath. Nothing too clever, but it works perfectly for the theme. Sitting to the side is an off canvas menu that only makes an appearance when called into action.

 Each and every image had its very own rollover effect which introduces the title of the associated post 

JRNY

Source: jrny.wpengine.com
Price: \$43
Best used for: Photo blog



SOME THEMES ARE just gorgeous to look at and JRNY is one of those themes. It uses beautiful fullscreen photography combined with contemporary fonts to create an experience definitely worth looking at. While the image grabs a user's attention the theme is effectively very simple. Each image is accompanied by a title and other typical post text. A rollover effect is used which brings the text into play. Scrolling down the page reveals more fullscreen images.

Delving into the individual post design reveals more of the same with the featured images topping the page and well thought out typography adding to the ambience. To keep the style consistent throughout the theme, images are not constricted to the boundaries of the text but are let free to fill the full width of the page. Sitting neatly at the bottom of individual posts is the popular related post option. But, this is a single option, once again taking on the full width image persona.

To keep in fitting with the fullscreen and full width imagery an off canvas menu is used. This slides into view when called, pushing the content aside and disappearing when no longer needed.

Customising the theme is quick and easy. There are four grid layouts to call into action, a bespoke Theme Customizer and the option to add a Load More facility to keep the posts manageable.

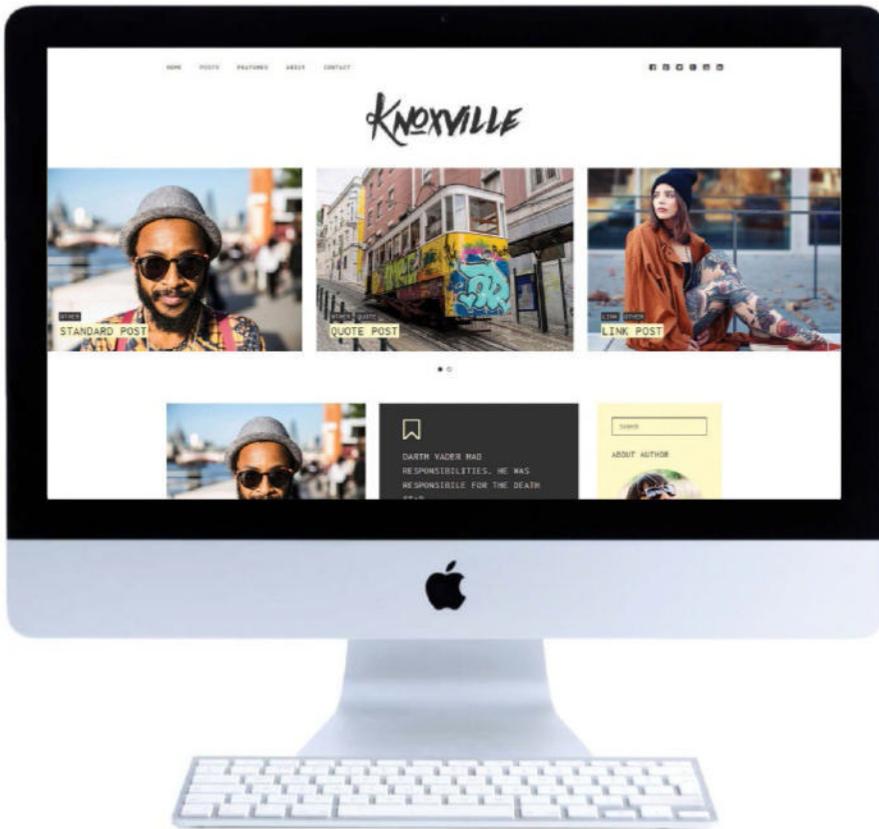
Themes

Knoxville

Source: www.gt3themes.com/wordpress-themes/knoxville

Price: \$44

Best used for: Storytelling



EVERY WEBSITE TELLS A STORY, it just depends what type of story it is selling. The Knoxville theme looks to the personal and allows users to tell the story of their life. Relive those great moments, retell glorious tales and reveal your inner most feelings to the world.

Knoxville is a personal blog theme that leans heavily on visual impact to tell a story. The background is kept to a minimal white to give more impact to the images that will wow visitors. The colour palette for the theme is kept to a minimum with shades of black and yellow adding a splash of colour. Sitting alongside the minimal colour palette is a complimentary sans serif font in the form of Inconsolata. This is used across the whole blog in varying sizes and a couple of weights to bring the design together.

There are five different layouts on offer, all of which adopt a clean and modern style, with the option to deviate from the default colour scheme and typography choices thanks to the Live Customizer. There is also the almost obligatory slider hogging the major headspace of the home page. In addition there are different post formats available and in keeping with its modern theme Knoxville is responsive and retina-ready.

🌿 The background is kept to a minimal white to give more impact to the images that will wow visitors 🌿

Mont

Source: bit.ly/1KUTFdc

Price: \$42

Best used for: Magazine/blog



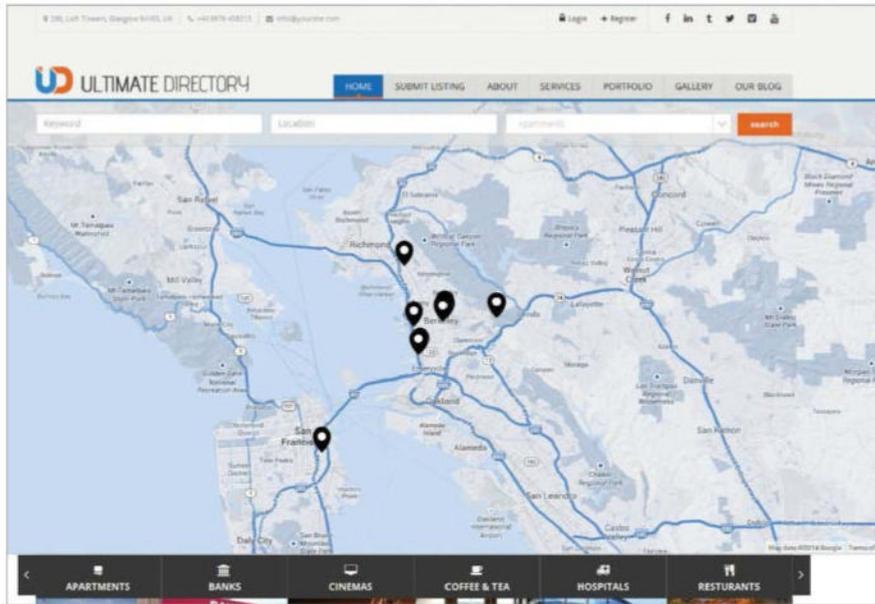
THE MONT THEME adopts the magazine style but adds a modern twist to make it a comprehensive and content heavy option.

For those who are looking to create a magazine-based site then Mont is the perfect answer, but it is no one-trick pony. It has a number of layout options that instantly offer a different style to present any content. For example, there is the magazine all module option which embraces all the elements that the theme has to offer.

Users get a pride of place image slider to present content, a news ticker, a host of category based options and reviews. This can be manipulated and rearranged to fine-tune the layout. The alternative is to select one of the other layout options. These provide the option to put sidebars left, centre or right along with the content. If these layouts don't exactly match your preferences they can be tweaked to suit. Whatever option is selected there is no doubt that the theme gives the impression there is a lot going on, a lot for viewers to absorb.

Mont, like all good themes, is fully responsive and includes a theme customiser which makes it easy to find the perfect variation of theme that you want.

UD Source: bit.ly/10aOE91
Price: \$49
Best used for: Directory



UD IS SHORT for Ultimate Directory which gives a big clue to what this WordPress theme is all about. The theme is a content-focused directory portal that can be used to list any type of business entity or activity. Its flexibility is what makes it appealing to users who can modify the theme to work with any type of directory or listing they want. As with most contemporary theme it boasts a responsive design making it mobile-friendly. Plus, it offers PayPal integration, an FAQ and 404 page template to complement the theme's core purpose.

There's a lot going on with Ultimate Directory. The theme is designed and laid out so it pushes a lot of information to the viewer.

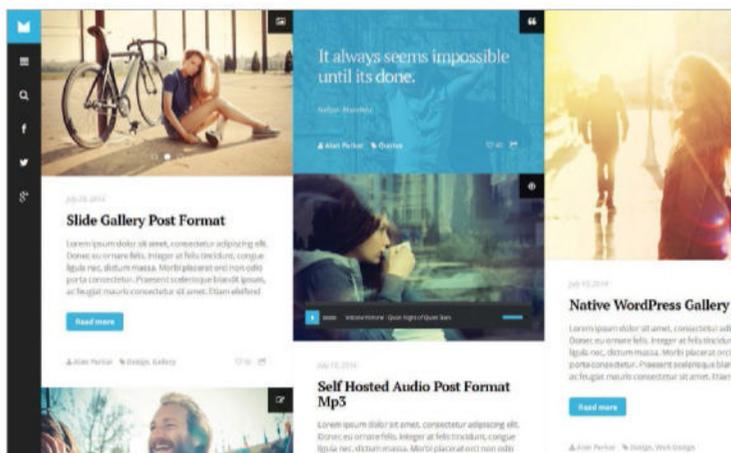
The core component is a large map, which offers a search facility that allows users to add a keyword, choose a location and select a type before the outcome on the map. As you might expect, each location on the map comes with a neat popup with an image and more information.

All the appropriate elements that are needed for a directory are included, including submission forms, a Yelp-like reviews section and the option to create different membership levels.

This is a very comprehensive theme that's perfect for those looking to create a directory for their specific subject matter.

Mono

Source: demo.favethemes.com/wp/mono
Price: \$48
Best used for: Personal blog



MODERN AND MINIMAL is a simple and concise description of the Mono theme. The theme is aimed at the personal blogger but avoids the clichés and adds style. The layout of the theme is grid-based which it uses to great effect for mobile devices such as tablets and smartphones.

The navigation is an element that avoids the clichés, adopting a simple vertical strip to the left of the page. Easy access to the complete menu is provided via the popular hamburger icon. The search facility doesn't hide away with a single-click taking it fullscreen. On the home page posts are accompanied by a featured image, which can be switched out for an alternative such as a video. Individual posts adopt the same minimalist design but scaled up. They also make good use of the sidebar to add further content.

Roua

Source: demo.stylishthemes.co/roua/
Price: \$43
Best used for: Portfolio/Personal Blog

BUILT BY STYLISH themes, the Roua theme fits the bill perfectly. It is undoubtedly stylish and brings together a host of popular and contemporary elements that set it apart from many other themes. Roua adopts the popular fullscreen opener but it adds a subtle touch to the premise. There is a faded background image coupled with minimal text to ensure that the content is the focus.

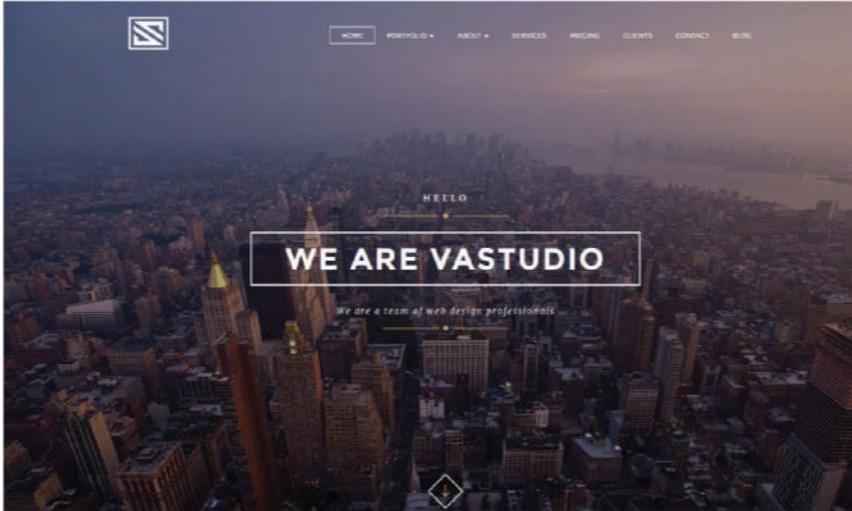
The content is accompanied by a simple menu icon, keeping the menu hidden until called upon. The menu uses the off canvas style and pushes the content to the side when active. The theme also adds in a host of social media icons. The blog element is portrayed as simple text until rollover when a full screen background image makes an appearance and adds a touch of class.



Themes

VAstudio

Source: themes.fastwp.net/vastudio1
Price: \$43
Best used for: Portfolio/Agency site



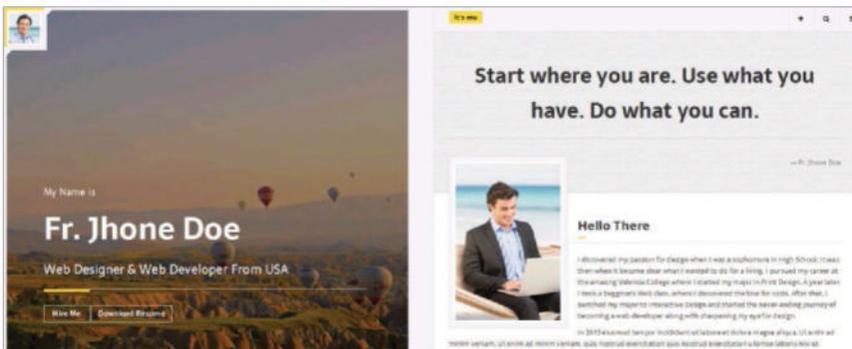
THE VASTUDIO THEME is another one of those multi-talented themes that give the owner a host of different options. It is at its core a creative one page theme with a focus on creative agencies, digital studios, personal freelancers and photographers. On offer is a fullscreen parallax option along with fullscreen video background, fullscreen background slider and custom height parallax. Each of the different options adds a twist on the primary focus which is a fullscreen home page.

To complement the different design option there are a host of pages including contact, about us, services, clients, portfolio, blog and pricing.

Behind the scenes the theme uses a visual composer, which makes it even easier to create a unique layout. Plus, the theme includes a host of icon fonts, CSS3 effects and animations, optimised code and is fully responsive.

It's me

Source: <http://klbtheme.com/itsme>
Price: \$44
Best used for: Portfolio/CV



AN ONLINE PRESENCE is critical for anyone looking for a new job and even more important for those in the creative industry. An online portfolio/resume/CV is instantly available for prospective employers to look at. So, it needs to be good, it needs to make an impact and the It's me theme covers all these bases.

The theme splits itself straight down the middle with space for a big image to introduce yourself and plenty of space to the right to add details. The left-sided image is fixed meaning that it will always be in view so make sure that it's a good one. Sitting in the top left corner is the option to add a personal thumbnail to allow viewers to see what you look like. Again make sure it's a good one. The right side of the page is dedicated to content. It is here that the user places all their relevant information. This is a space to sell yourself, so make sure that it's good.

Everything

Source: themes.kubasto.com/everything
Price: \$64
Best used for: Multi-purpose

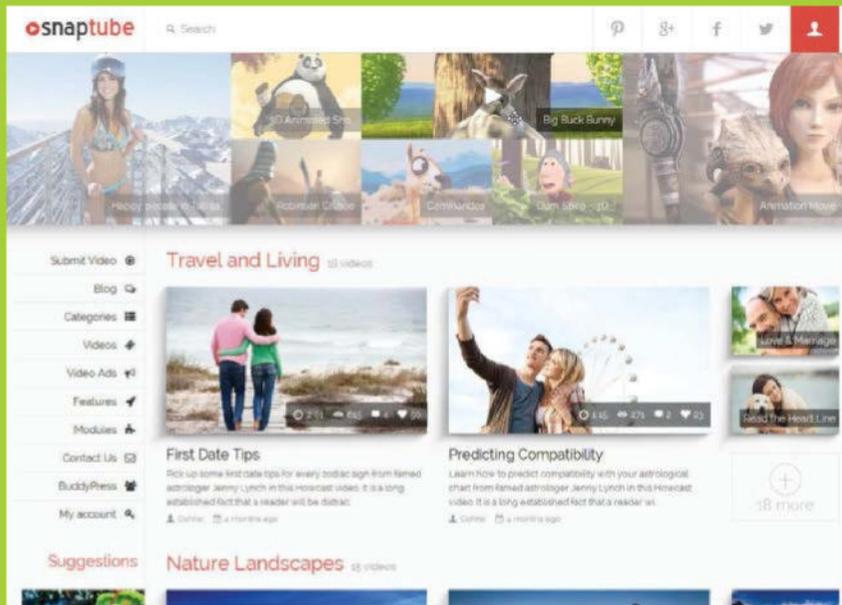
THIS THEME CLAIMS to have everything and while this may not be quite true it does have a massive amount of options. Everything has the potential to be suitable for a variety of site types from creative portfolio to big corporate site to personal blog. If you are looking for something more functional then the site could take on the role of an online shop, or a video or image driven site. In fact, as the creators state, you name it, and Everything can create it. The flexibility instantly makes the theme an interesting and welcoming option. The theme offers a couple of colour schemes, dark and bright and as you might expect it's 100% responsive. And, in keeping with modern mobile devices it is also retina ready so your sites will look good on all the latest high resolution screens.



Everything has the potential to be suitable for a variety of site types, from creative portfolio to personal blog

Snaptube

Source: bit.ly/1unY3fc
Price: \$48
Best used for: Video



THE VIDEO IS an often forgotten element of the WordPress theme. It makes it as a background and often makes itself known in most posts. However, a dedicated theme is a rarity, but Snaptube happily fills the void left by others. The theme makes sure that its core focus, video, is very much in evidence on the home page. The popular image slide concept is called into action, substituting images for video. The full width slider gives users plenty of space to present a video collection, while giving the user plenty to contend with.

The basic layout is standard stuff with videos neatly separated into a host of categories. There are no simple images here; users can get direct access to any video on the home page if desired. Individual posts add more credence to the video-watching experience supplying descriptions and embed codes.

If the layout is not what you are looking then this is when the theme's features can be called into action. You can build your own custom layouts using the drag and drop interface. The theme is responsive and includes a host of features that add to its appeal. The addition of Google fonts support, retina ready and good video support make this a must for those looking to create a YouTube sensation.

Rebloom

Source: bit.ly/WhE18u
Price: \$43
Best used for: Multi-purpose

WHEN IT COMES to WordPress themes it can be difficult to find a theme that has that spark of originality that'll set your site apart from others. It is difficult to come up with a unique and interesting angle for your blog based on the standard WordPress themes, but Rebloom does a good job of trying.

The standard home page adopts the popular fullscreen image and couples this with an animated vertical navigation menu. The placement makes for a good user experience but it could offer more potential. And this is exactly what Rebloom does. It offers a variation of the home page with image slider and Ken Burns effect, plus there is the far more creative alternative layout. This offers a central navigation system which opens up the page and gives users two options to view simultaneously.

Another useful addition is the simple Chapters layout, again an interesting addition to a theme definitely worth a first, second and third look. These are not the only features/designs that grab the attention.

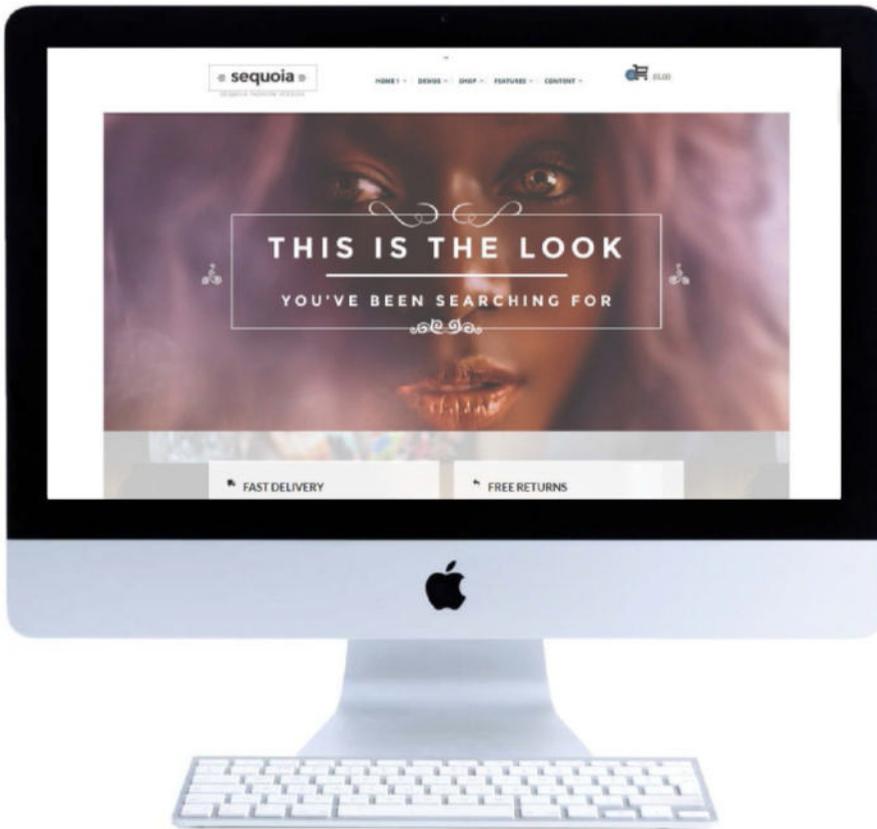
The blog, while simple, still manages to be creative and functional. On the more practical side the responsive theme works really well on all desktop, tablet, smartphone and is also retina ready.



Themes

Sequoia

Source: bit.ly/1ro2ypX
Price: \$59
Best used for: Online shop



THE SEQUOIA THEME is at its very core an e-commerce theme, making it the perfect option for those who are looking to get online and start selling, but with an added touch of style and sophistication. The theme is described as 'A WordPress theme mainly designed for usage with a WooCommerce plugin powered e-commerce site'. With the main parent theme there are an additional three child themes for starting with a specific site or e-shop category – Fashion, Food or Handmade products.

This means that it has a core theme with a host of themes that can be used in conjunction with the core theme. Each of the child themes has a number of different styles. For example, Fashion has four built-in choices, while Food and Handmade have a couple each. These are all well-presented with contemporary styling, on trend fonts, typography and colour schemes. Plus, six header styles ensure that the ideal option is found for the shop.

On a more practical level and to provide stability and peace of mind the build of the theme is based on the very popular responsive 'mobile first' framework Zurb. This is extremely well-supported and documented if you fancy making any changes.

However, we will leave it to the creators of Sequoia to perfectly describe its talents, 'There are no limits to what kind of sites can be created with Sequoia'. Enjoy.

With the main parent theme there are an additional three child themes

WPJobus

Source: alexgurghis.com/themes/wpjobus/
Price: \$53
Best used for: Business



THE WPJOBUS IS a theme with more than just one purpose. It has an overall focus but at its heart it acts as a job board, personal resume and company profile. If you run your own business or company and want to tell everyone who you are, what you can do and even let other people know what jobs you have on offer, this is the theme for you.

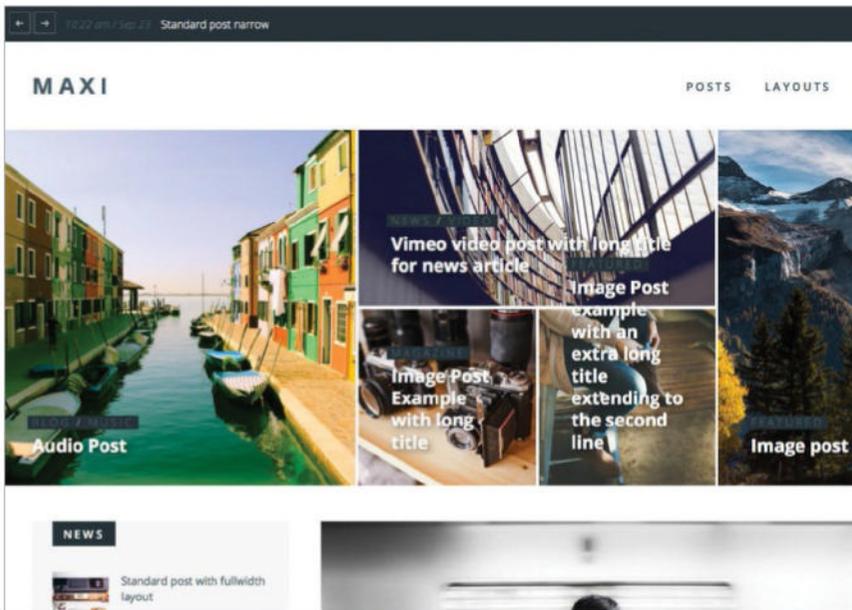
The beauty of the theme is its flexibility and functionality. The job board provides the option to browse, search, filter and refine. And there is no reliance on third-party plugins to power the functionality. The options are specifically coded for the theme. Another noteworthy feature is that it is Stripe ready. This means that it has an instant monetisation model built-in.

The functionality of the theme is equally matched by its styling. It boasts all the latest and popular UI elements which mean that it won't look out of place on today's web. Plus, the professional layout and design will give the right impression and encourage users to want to interact.

Finally, if you want to get more out of the theme it can be used as a base to create something similar. All it needs is a little imagination to take beyond its very useful core.

Maxi

Source: <http://maxi.themeo.us/>
Price: \$44
Best used for: News



NEWS THEMES ARE multi-talented creations, they can be used for almost any type of blog or site. The Maxi theme is dedicated to displaying an impressive number of stories or posts in a visually appealing manner. The centrepiece of the default layout is the image-led slider that uses different sizes to create a hierarchy and entice the user to click.

Further down the page it is white space that pulls apart posts and stories and gives them plenty of breathing space. The design continues as it heads towards the footer, ensuring that the reader is always getting plenty of content to choose from without being distracted.

Maxi is a lightweight - which means quick - theme thanks to its minified CSS and JavaScript and balanced image sizes. It is also optimised for search engines and has extra layouts if desired.

Eight Degree

Source: www.webdingo.net/eightdegree
Price: \$43
Best used for: Multi-purpose



EIGHT DEGREE COMES in a number of guises making it a very flexible theme. The popular fullscreen image background is employed here and coupled with contemporary fonts to make it very 'now'. The basic option is a simple fullscreen image background while there are parallax slider and image slider options to take control of the top of the page. These are only the icing on the cake, or topping on the theme. Each version of the theme offers a lot more that users will love.

The theme proves all the popular sections you would expect in a site: about, team, portfolio, clients, blog, contact and as an added extra, prices. It is these pages that give the theme its flexibility.

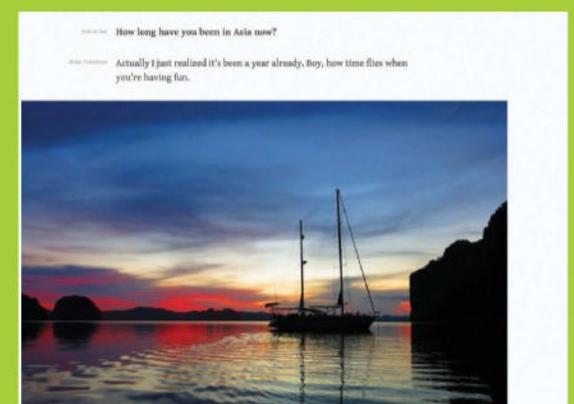
Alongside its more functional talents it boasts a modern and clean design and a layout that makes it stand out from its competitors.

Literatum

Source: kohette.com/wpthemes/literatum
Price: \$43
Best used for: Personal blog

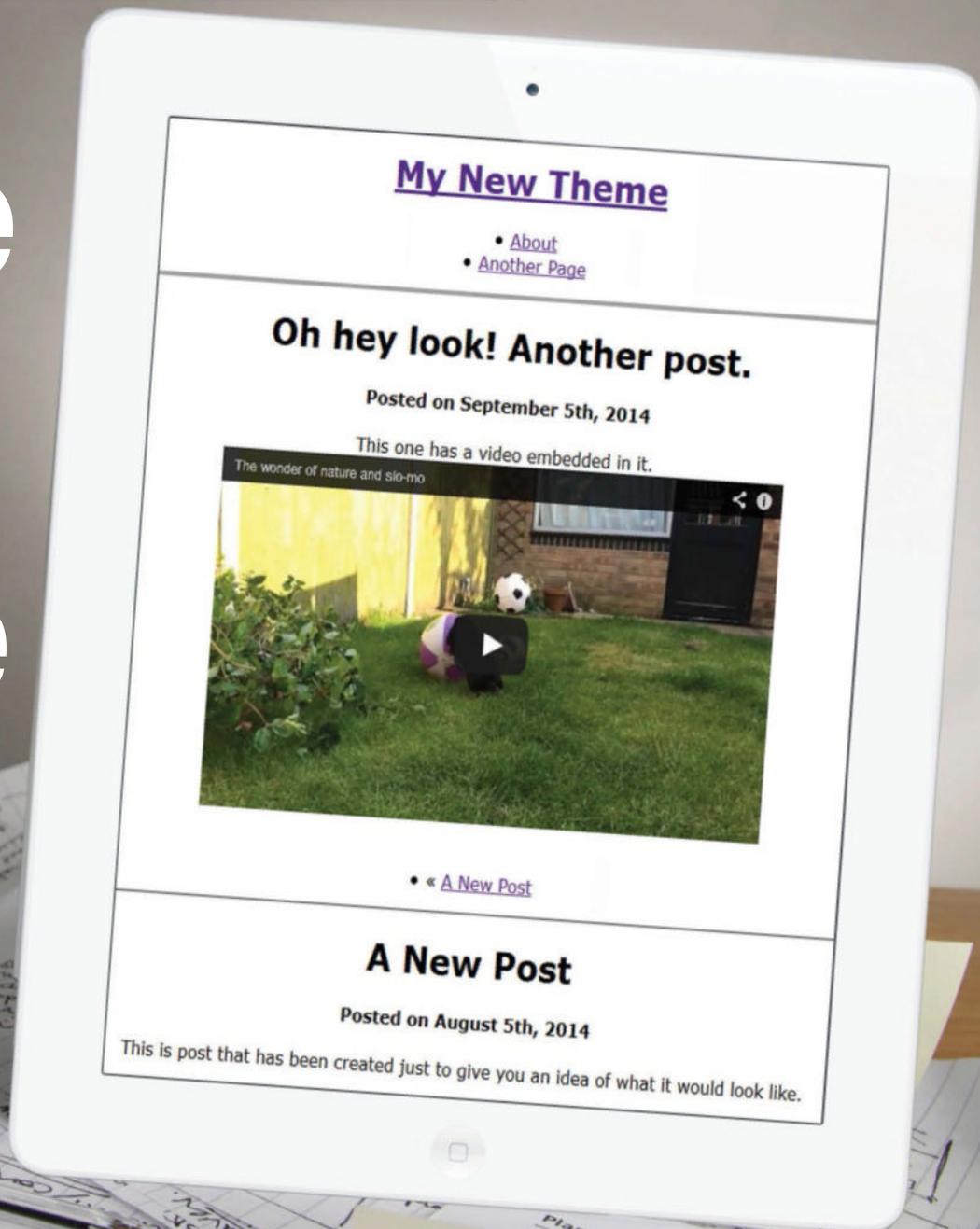
LITERATUM IS AN excellent theme for those who want to present their written work in a contemporary and clean magazine style. The layout of the theme is simple, smart and engaging thanks to its use of large photos and images. These offer instant impact and are combined with neat, well proportioned text. The home page is image overload, but delving into the individual posts reveals a more sedate and minimalist approach to the content. Each post kicks off with a fullscreen image before revealing a column of neatly stacked text interspersed with images. So, what features does the theme have?

It offers the option to replace the featured image with a video, giving fullscreen video at the top of each post. There is comment integration via Facebook and Disqus plus over 400 different icon fonts to add a little extra visual interest with ease.



 Literatum offers the option to replace the featured image with a video at the top of each post 

Create your own theme



LEARN HOW TO CREATE YOUR VERY OWN WORDPRESS THEME FRAMEWORK FROM SCRATCH



ONE OF THE most powerful things with WordPress is its versatility when it comes to themes. Despite the fact that WordPress blogs are largely built upon the same building blocks the differences between one project and the next can be staggering. This is why it can be such a rewarding process to get stuck into theme building. With just a little knowledge on HTML and CSS you can assemble a blog that is truly your own creation. Over the next few pages we will build a theme from scratch and at the end you will have a theme that you can keep handy as a starting point for any of your future projects.

Before you get started there are a couple of things that you will need. Firstly, a code editing program such as Notepad++, a working WordPress

installation with at least one theme installed and FTP access to your WordPress installation (but this is not essential).

The next step is to come up with a name for your theme. Something simple will do for now as we're only building a theme for our own blog (as opposed to sharing it with the WordPress community). Once you settled on a name you can create a folder named after your theme and save it somewhere on your hard drive. Eventually we will upload this folder to the wp-content/themes folder either via FTP or through the WordPress Dashboard.

With regards to this tutorial we will be making a simple theme consisting of a header, main area, sidebar and footer. You can find all the code and source files at www.web-designer.co.uk/tutorial-files.

Theme structure

WordPress themes are made up of template files that dictate the layout of your content. The actual content (posts, images, etc) does not form part of these templates. Instead, the content is stored elsewhere within the WordPress database. The template files reside within a specific folder for your theme within wp-content/themes. Think of them as the building blocks of your WordPress site. They all come together to create the web pages on your site. Within the folder you will also find a style sheet that will dictate the look of your theme (background colours etc.). At its most basic level the folder for your theme should include at least the first five of these templates.

header.php - This file contains the code for the header section of the theme;

index.php - This is the main file for the theme. It contains code for the Main Area and specifies where the other files will be included;

sidebar.php - This file contains the information about the sidebar;

footer.php - This file will handle the footer;

style.css - This file will handle the styling of your theme;

single.php - how a single post appears on your blog
page.php - for single pages

As you become more confident more template type can be added to the directory to cover other aspects of your blog. These include templates for viewing a single post, pages and comments.

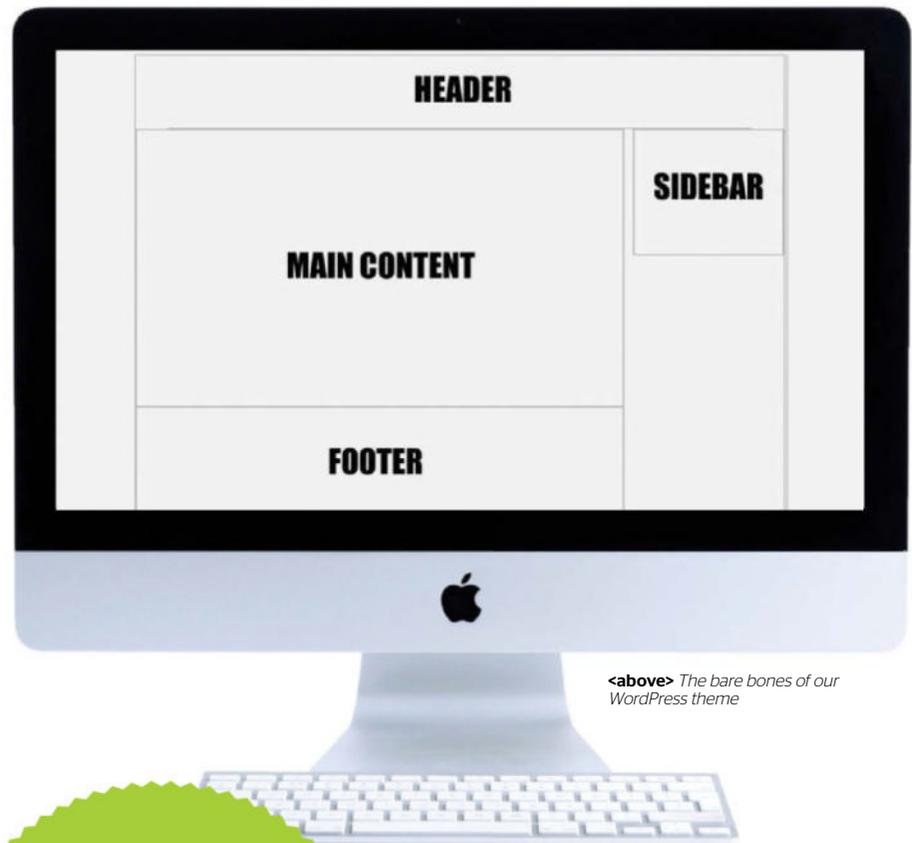
Template tags and code

A template tag is essentially an instruction that commands WordPress to 'do' or 'get' something. An example of this can be found in the header.php file where WordPress can be instructed to display the name of your blog. The code may look like this:

```
<h1<?php bloginfo('name'); ?>/h1>
```

At each end of the code we have H1 instructions to apply a Header 1 size text. Everything else between these is the template tag. Note how the actual title of the blog does not appear in the tag itself. That is because the template tag 'gets' this information from your user profile. In this example the 'name' section instructs the tag to fetch the name of the blog (this is known as a parameter). If you swapped the 'name' for another parameter another piece of information would be displayed instead. 'Description' for example would display the tagline for your blog whilst 'url' would show the website address.

This approach means that the code can be installed to any other blog and it will perform the same function without the need for it to be altered.



<above> The bare bones of our WordPress theme

Top tip
A useful way of testing your creation is to set up a free web hosting account. Sites such as hostawesome.com can supply enough resource.

Mobile adaption

It's important to bear in mind how your website will appear on a mobile device. More and more people are accessing the internet whilst on the move. Whilst you can create code that can adapt your theme to be mobile we don't have the space here to cover all of the aspects. As a quick (and somewhat effective) workaround a mobile plug-in such as WPTouch can convert your content into a mobile-friendly layout.

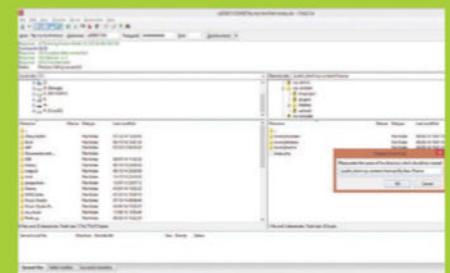
About this build

This build is a pretty basic setup. It's more designed to get you up and running and give you an idea of how the main pieces come together. To that effect it's not going to be the prettiest theme in the world. Theme building is something of a long term skill, even experienced users find new techniques and approaches from time to time.

What about child themes?

Child themes allow you to modify an existing theme without actually making any direct edits its code or templates. It works by importing the attributes of an existing theme (in this case known as the parent theme) via a command in the style.css file. Extra coding can then be added to the style.css file that takes precedent over what has been imported from the original parent theme.

You can create a child theme from any already existing theme and it will reside within a separate self-named directory within your themes folder. In your WordPress Dashboard it will also appear as a new entry. This is how the original theme stays unaltered; the child and parent themes exist as two separate entries where one (the child) is dependent on the other (the parent).



Create the header

The header is an essential component of your WordPress theme. It will most likely be the first thing that people see when they stumble upon your creation. In the header you can perform tasks such as displaying your blog name, adding a tagline or perhaps applying an image at the top of your blog. From a code perspective the header is where everything begins. It is also in the header that you link to your stylesheet, further setting up how the theme will look in a web browser.

01 Marking a start

Open your notepad program and enter the above code into a new file. The first line is a declaration of the DOCTYPE, we have gone for a HTML5 version which is recommended. This is followed by an opening `<html>` tag. We've also added an attribute for the character encoding, it's nothing major to be clued up about, just be sure to include it. We're now ready to start adding the HTML that will set up our header.

```
<!DOCTYPE html>
<html>
<head>
<meta charset="utf-8" />
```

02 Fetching the title

Next we'll get WordPress to retrieve the information about our blog. The php tag after `<title>` requests the page information from the wordpress database. We've added a `|` as a separator for the information for that and the blog name which has been requested in the `bloginfo` line. Then we close off the `<title>` tag at the end.

```
< title>
<?php wp_title('|', 'true', 'right');
bloginfo( 'name' );?>
</title>
```

03 Applying the style

We need to tell WordPress how everything needs to look. So here we are linking to the stylesheet. We've opened a link tag and used `'rel'` to define the relationship. We've gone for an approach that will tell WordPress to look for the `style.css` file that will be saved within our theme folder. Below this is another php tag that uses a hook to grab information stored in the WordPress core files. Essentially it's a tag that works with WordPress settings.

```
<link rel="stylesheet" type="text/css"
href="<?php bloginfo( 'template_url' );?>/
style.css">
<?php wp_head();?>
</head>
```

04 Display the title

Here is the command that puts our blog title at the top of the page. Firstly we've placed a command that will apply a border as per the `style.css` file (more on that later). Following this is a command to generate a URL link for the home page which is then applied to the title. You can also put normal text between the H1 markers but the idea here is to make the theme dynamic so it can be used with any blog.

```
<div id="header">
<header>
<h1><a href="<?php echo home_
url('/')?>"><?php bloginfo('name')?></a></h1>
</header>
```

05 Navigation bar

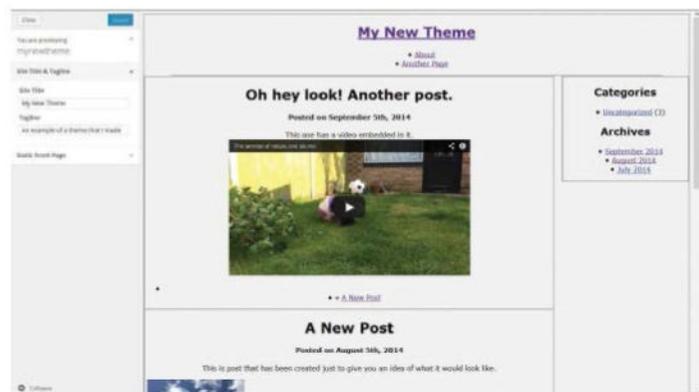
This part is now added to the code. It adds a little navigation section underneath our blog title. This can be used for navigating to the other pages that are on your blog. This is a default WordPress navigation menu where the links are displayed as bullet points.

```
<nav>
<?php wp_nav_menu();?>
</nav>
<div id="container">
</div>
```

06 Bring it together

So this is how our header.php file should look with all of our code in it. Enter it all into a notepad program and save it as `header.php`. You can either upload it as it is to your theme folder in your WordPress via FTP or wait to zip it later for upload (we'll cover this approach later on).

```
<!doctype html>
<html>
<head>
<meta charset="utf-8" />
<title><?php
wp_title('|', 'true', 'right');
bloginfo( 'name' );
?>
</title>
<link rel="stylesheet" href="<?php
bloginfo('stylesheet_url')?>" />
<?php wp_head()?>
</head>
<div id="header">
</header>
<h1><a href="<?php echo home_
url('/')?>"><?php bloginfo('name')?></a></h1>
</header>
<nav>
<?php wp_nav_menu();?>
</nav>
<body>
<div id="wrapper">
</div>
```



Code library

Exploring the header

It is essential to keep the <html>, <head>, <title> tags as these will remain important even in your new code

The id tag allows you to identify the element of the CSS coding so you can edit the style sheet without having to locate a specific part of the code

For usability it is best to keep your navigation bar at the top. By using this piece of code you can ensure that it remain near the blog header

Once you are done with the header and navigation, you'll be able to add in everything else after it. So end the <nav> tag a and it is time to start with the body

```
001 <!doctype html>
002 <html>
003 <head>
004 <meta charset="utf-8" />
005 <title><?php
006 wp_title('|', 'true', 'right');
007 bloginfo( 'name' );
008 ?>
009 </title>
010 <link rel="stylesheet" href="<?php
011 bloginfo('stylesheet_url')?>" />
012 </head>
013 <div id="header">
014 </header>
015 <h1><a href="<?php echo home_url('/')?>"><?php
016 bloginfo('name')?></a></h1>
017 </header>
018 <nav>
019 <?php wp_nav_menu();?>
020 </nav>
021 <body>
022 <div id="wrapper">
023 </div>
```

🧩 So this is how our header.php file should look with all of our code in it. Enter it all into a notepad program and save it as header.php. You can either upload it as it is to your theme folder in your WordPress via F"TP or wait to zip it later for upload (we'll cover this approach later on 🧩)

Themes

Creating sidebars

A sidebar is usually a narrow vertical column that runs down the side of the screen (although sometimes it can also be a horizontal section below the main content). Some blogs have multiple sidebars set up within a theme but for our project we will keep things simple and just stick to one.

Sidebars are a useful feature to add to a blog as they can display content that would not necessarily form part of the main articles. Beyond this they can also provide navigation to other areas of blog, list categories, your previous posts or hold widgets that can perform various functions.

Creating a sidebar is done by entering the relevant code into a blank notepad program and saving the file as sidebar.php. This will then sit in the corresponding theme folder within your installation. When a web browser loads your webpage it will then be requested by the index.php file and added to the relevant part of the display layout.

For our theme we have kept things simple. We have added a categories section and a list of archived posts. These are applied by using internal WordPress functions that generate these details. As with the header the actual details themselves are not entered directly into the code for the sidebar. Instead the information is fetched via php enquires.

```
<div id="sidebar">
<h2 ><?php _e('Categories'); ?></h2>
<ul >
<?php wp_list_cats('sort_column=name&optioncount=1&hierarchical=0'); ?>
</ul>
<h2 ><?php _e('Archives'); ?></h2>
<ul >
<?php wp_get_archives('type=monthly'); ?>
</ul>
</div>
```

Creating the footer

The footer resides at the bottom of your design. It can contain links, menus, navigation icons, pretty much anything you like. On a basic level it closes the HTML tags that have been opened in the header such as <body> and <html>. In the case of our created theme we've kept things pretty simple.

01 Add the code

Here is a basic example of what to put inside a footer. We have opened a footer tag and entered some basic text to highlight that what is at the bottom of the page is indeed the footer. Add this code to a text file and save it as footer.php

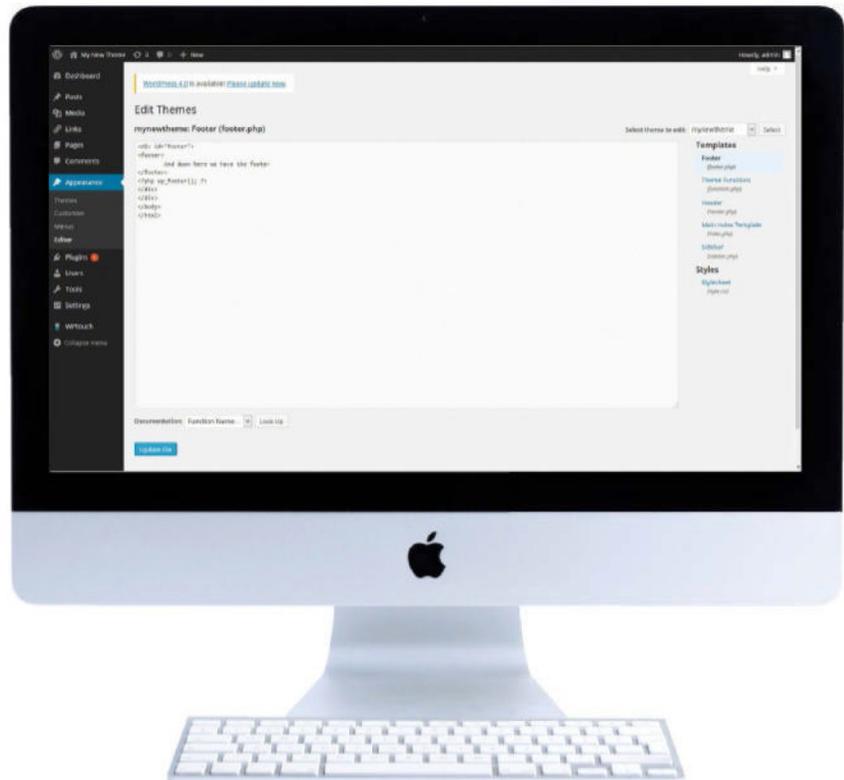
```
<div id="footer">
<footer>
    And down here we have the footer
</footer>
<?php wp_footer(); ?>
</div>
</body>
</html>
```

02 Style and content

The code in this footer is purely text only, it does nothing in regard to how the footer will actually look. The code is below is what will eventually be added to the style.css file in order to make it look a bit more pleasing to the eye. In this case it will be 90% of the post body, have a black background and white text.

```
footer {
    width: 90%;
    background: #000;
    color: #fff;
```

```
border-radius: 5px;
}
```



🌱 The footer can contain links, menus, navigation icons, pretty much anything you like 🌱

Index

One of the main files of your WordPress installation will be index.php. It's the first file that loads when someone visits your WordPress site. It controls what functions the site will display and how.

The basics

01 In its most basic form this is what our index file will do. These commands will request the templates for the header, sidebar and footer and then display them on our page. We also need to insert the content (ie our posts). This is not requested from a separate template. Instead, the layout is created within this file. This layout will be known as the WordPress loop.

```
<?php get_header(); ?>
<?php get_sidebar(); ?>
<?php get_footer(); ?>
```

Grabbing your posts

02 This code needs to be inserted after the first line of Step 1 and deals with the main content of the blog ie your posts. It initially makes WordPress check for any posts that have been created in your database. Once the posts have been found, the code then

informs WordPress what needs to be done with the information.

```
<div id="main">
<div id="content">
<?php if (have_posts()) : while (have_posts()) : the_post(); ?>
<h1><?php the_title(); ?></h1>
<h4>Posted on <?php the_time('F jS, Y') ?></h4>
<p><?php the_content(__('more...')); ?></p>
<hr> <?php endwhile; else: ?>
<p><?php _e('Sorry, no posts matched your criteria. '); ?></p><?php endif; ?>
</div>
```

Rounding things up

03 These lines finish the code for our index file. They break up the main area from the sidebar and the footer. At the very bottom is the request for the footer which will sit at the bottom of our web page.

```
</div>
<?php get_sidebar(); ?>
</div>
<div id="delimiter">
</div>
```

```
<?php get_footer(); ?>
```

The complete code

04 Here is how the full list of code will look within our index file. It's a fairly simple arrangement compared to index files from the default WordPress themes but for the purposes of our blog it will work just fine.

```
<?php get_header(); ?>
<div id="main">
<div id="content">
<?php if (have_posts()) : while (have_posts()) : the_post(); ?>
<h1><?php the_title(); ?></h1>
<h4>Posted on <?php the_time('F jS, Y') ?></h4>
<p><?php the_content(__('more...')); ?></p>
<hr> <?php endwhile; else: ?>
<p><?php _e('Sorry, no posts matched your criteria. '); ?></p>
<?php endif; ?>
</div>
<?php get_sidebar(); ?>
</div>
<div id="delimiter">
</div>
<?php get_footer(); ?>
```

Content

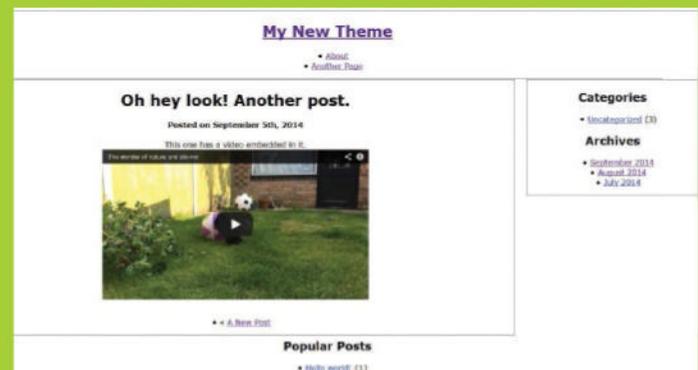
Among the files in your WordPress installation there will also be a file named functions.php. It's a powerful file that can add extra functionality to your WordPress installation. It works like a plugin within your theme so you can modify features without editing any of the core WordPress files. As per the other templates these functions are called upon when needed by the index.php file.

If you're using a child theme it's worth noting that functions do not work in the same way as the style.css. In the case of style.css the choice made there will override the parent theme. With functions.php both files from the child and parent theme will combine and complement each other. To that extent, if you don't need any new functions for your child theme then you don't even need to create a function.php file.

There are too many options to list here when it comes to adding functions so it's worth scouring the internet for the kind of functions you feel you may need. As an example this code will add section to your blog that displays the most popular posts.

```
<h2>Popular Posts</h2>
<ul>
<?php $result = $wpdb->get_results("SELECT comment_count,ID,post_title FROM $wpdb->posts ORDER BY comment_count DESC LIMIT 0 , 5");
foreach ($result as $post) {
setup_postdata($post);
```

```
$postid = $post->ID;
$title = $post->post_title;
$commentcount = $post->comment_count;
if ($commentcount != 0) { ?>
<li><a href="<?php echo get_permalink($postid); ?>"
title="<?php echo $title ?>">
<?php echo $title ?></a> {<?php echo $commentcount ?>}</li>
<?php } } ?>
</ul>
```



Content

Content from your blog is displayed within an area known as the loop. Arguably one of the most powerful sections of your blog, the loop is a special section of code that displays your posts and comments wherever you place it.

01 Locate the loop

We've actually already featured the loop within our index.php from earlier in the tutorial. Here is the section of code from the index.php file where it appears.

```
<?php if (have_posts()) : while (have_posts()) : the_post(); ?>
<h1><?php the_title(); ?></h1>
<h4>Posted on <?php the_time('F jS, Y') ?></h4>
<p><?php the_content(__('(more...)')); ?></p>
<hr> <?php endwhile; else: ?>
<p><?php _e('Sorry, no posts matched your criteria. '); ?></p>
<?php endif; ?>
```

02 Adding extra features

The example of the loop from Step 1 is a fairly simple application of the code. It's possible to add code to enhance how the posts are applied to your blog. In this case the code will add web links under every post that navigate to the previous post and the next post.

```
<?php comment_form(); ?>
```

```
<div class="prev-next-links">
```

```
<ul>
<li><?php next_post_link(); ?></li>
<li><?php previous_post_link(); ?></li>
</ul>
</div>
```

```
</article>
```

03 Other loop elements

These are other examples of the elements that can also be added to the loop and applied to the appearance of your posts. It's a good example of how much control WordPress offer with regards to building a theme. More Loop examples can be found on The WordPress Codex at http://codex.wordpress.org/The_Loop.

the_category - Displays the category or categories associated to the post or page being viewed

the_author - Displays the author of the post or page
the_content - Displays the main content for a post or page

the_excerpt - Displays the first 55 words of a post's main content then with a [...] or read more link that goes to the full post. The length of excerpts can be controlled by using this slightly advanced method or by using the Excerpt field on the post edit page.
the_shortlink - Displays a link to the page or post using the url of the site using the ID of the post or page

04 Our enhanced index

So here is how the loop will appear within the Index code. To apply this we need to add it to the index.php file. Open your browser and refresh the page to see how the new changes look on your blog.

```
<?php get_header(); ?>
<div id="main">
<div id="content">
<?php if (have_posts()) : while (have_posts()) : the_post(); ?>
<h1><?php the_title(); ?></h1>
<h4>Posted on <?php the_time('F jS, Y') ?></h4>
<p><?php the_content(__('(more...)')); ?></p>
```

```
<?php comment_form(); ?>
```

```
<div class="prev-next-links">
<ul>
<li><?php next_post_link(); ?></li>
<li><?php previous_post_link(); ?></li>
</ul>
```

```
</div>
```

```
</article>
```

```
<hr> <?php endwhile; else: ?>
<p><?php _e('Sorry, no posts matched your criteria. '); ?></p><?php endif; ?>
</div>
<?php get_sidebar(); ?>
</div>
<div id="delimiter">
</div>
<?php get_footer(); ?>
```



Top tip
While the theme we're building works as a jumping off point, it's worth planning ahead for your future projects. Sketch out your ideal blog.

Style

We've mentioned previously about how the code in your template is just that. It sets up the layout of your blog but does not instruct on how it will look. You will need to create a file called style.css and enter the code below into it. The code in this example is largely made up of two parts. The first section is what helps WordPress recognise that this file is part of a theme. The text between the /* and */ markers are used as meta data which WordPress will use as a description for your theme on the Dashboard.

The second part is the actual instruction on how each section will look. We've have applied a selection of blue colours via hexadecimal code and decided on the font that will be applied. Margins and sizes of areas have also been addressed. The benefit of this approach is that when it comes to making more themes you can keep the templates the same but really change things up in the style.css file.

```
/*
Theme Name: mynewtheme
Theme URL: http://mynewtheme.esy.es
```

```
Description: An example of a theme that I made
Version: 1.0
Author: Paul
Author URL: https://munkeyplustypewriter.wordpress.com
Tags: theme
*/
```

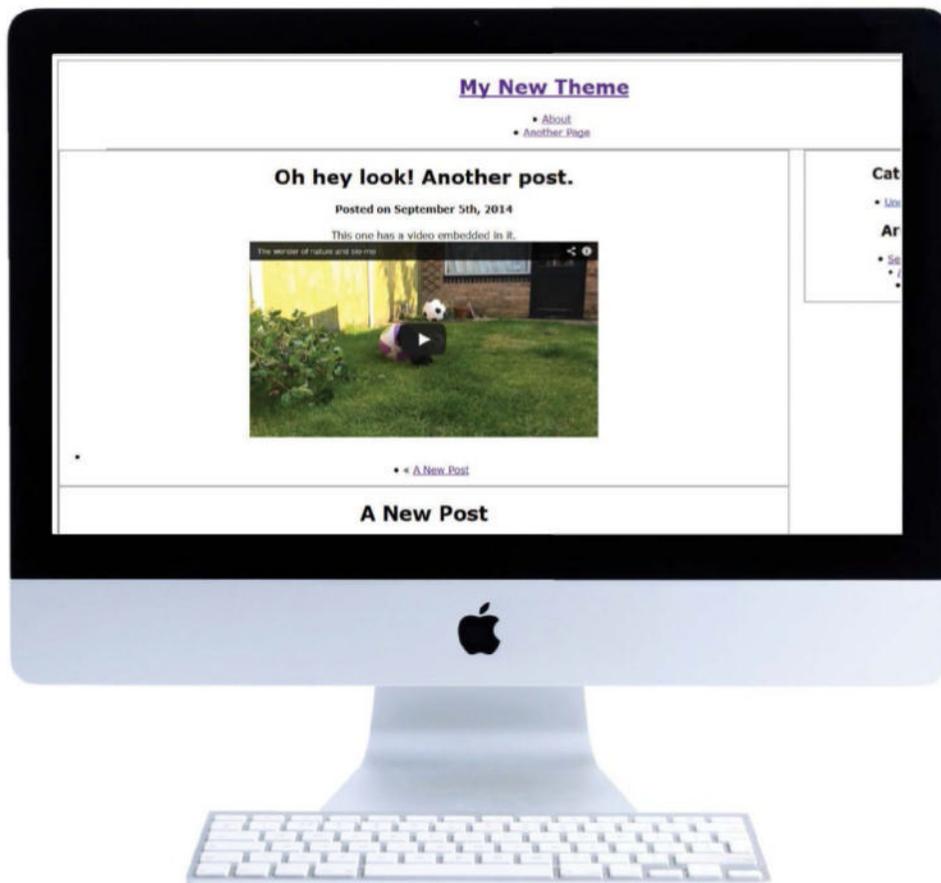
```
body { text-align: center; }
#wrapper { display: block; border: 1px #a2a2a2 solid; width:90%;
margin:0px auto; border-radius: 16px}
#header { border: 2px #a2a2a2 solid; border-radius: 16px}
#content { width: 75%; border: 2px #a2a2a2 solid; float: left;
border-radius: 16px }
#sidebar { width: 23%; border: 2px #a2a2a2 solid; float: right;
border-radius: 16px }
#delimiter { clear: both; }
#footer { background: #000; color: #fff; border-radius: 5px;}
.title { font-size: 11pt; font-family: arial; verdana; font-
weight: bold; }
```

The finished product

With your templates and style.css files coded all you need to do now is add them to your WordPress installation. You can use an FTP program to access

your installation and upload your new folder to the WordPress themes directory. Alternatively you could compress your local theme folder into a zip file. From

the WordPress Dashboard you can select Appearance>Themes>Add Theme>Upload Theme and select your newly zipped folder.



Top tip
Create a 600px by 450px image. Save as screenshot.png in the theme folder. It adds a theme screenshot to your dashboard's Theme panel.

 When it comes to making more themes you can keep the templates the same 

Build a responsive WordPress theme

AS THE MOST ADVANCED RESPONSIVE FRAMEWORK AVAILABLE, ZURB'S FOUNDATION IS IDEAL FOR YOUR LATEST WORDPRESS PROJECT

TUTORIAL OBJECTIVE

Create a theme that adapts to mobile devices

TIME REQUIRED

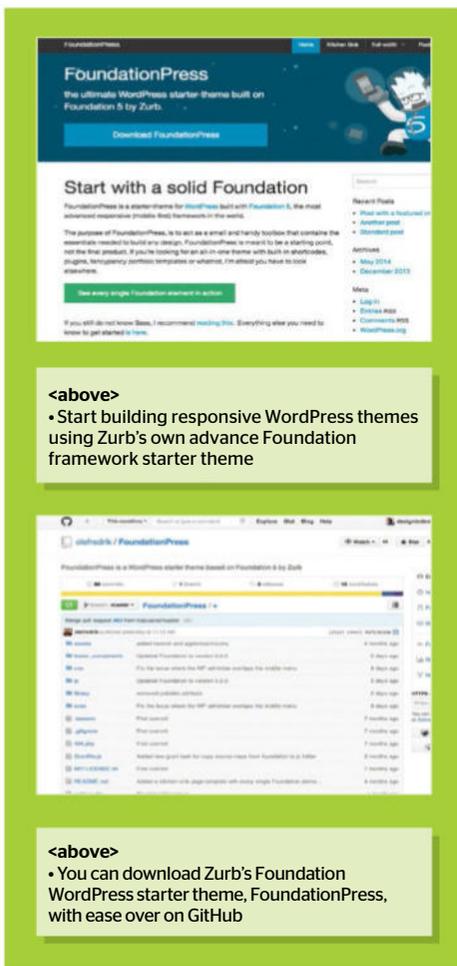
2 hours



THERE ARE MANY great themes on WordPress you can customise. We will be using Zurb's Foundation framework for the purposes of this tutorial. Previously to incorporate the theme into WordPress you had to manually link the necessary JavaScript and CSS using the WordPress functions 'wp_enqueue_script' and 'wp_enqueue_style'. But now, thanks to Zurb and the popularity of WordPress, Zurb has provided a starter theme called FoundationPress, which you can download directly from its GitHub page to start building your own WordPress theme.

The purpose of this ultimate starter theme is to act as a springboard; it comes packed with useful reusable components, a 12-column responsive grid, JavaScript functions and much more. This starter theme contains all the necessary design elements, including the JavaScript and CSS libraries.

Still, FoundationPress is not an all-in-one WordPress theme with plugins, shortcodes, custom options or custom templates - it is only to be used as a starting point. Luckily it has done most of the hard work for us including setting up widgets, navigations, displaying blog posts and general clean-up of WordPress.



<above>

- Start building responsive WordPress themes using Zurb's own advance Foundation framework starter theme

<above>

- You can download Zurb's Foundation WordPress starter theme, FoundationPress, with ease over on GitHub

01 Download FoundationPress

To begin, make sure you have the latest version of WordPress installed and set up. Head over to the FoundationPress starter theme GitHub page: github.com/olefredrik/foundationpress and download this theme. Once you've downloaded it, extract it and upload it to your theme's directory in WordPress and activate it.

02 Custom stylesheet

Start by opening up the 'header.php' file in your text editor. You'll want to add in your own custom stylesheet so that when it comes to upgrading FoundationPress it won't override any custom work. You may use Sass with Foundation, but to allow beginners to follow along this tutorial, we'll be using pure CSS.

```
001 <link rel="stylesheet" href="<?php echo get_template_directory_uri(); ?>/style.css" />
```

03 Customise the menu

WordPress already features a built-in Appearance Menus Screen, enabling users to create custom navigation. FoundationPress takes this a step further by allowing us to create multiple navigations on either side on the nav bar. When you create a new menu in WordPress, you have the option to enable your navigations for mobile devices.

04 Customise the header

FoundationPress has already pre-written a lot of the WordPress basic theming. We're going to dive in and modify it. To give this theme a visual punch we're going to add in a header with the website name,

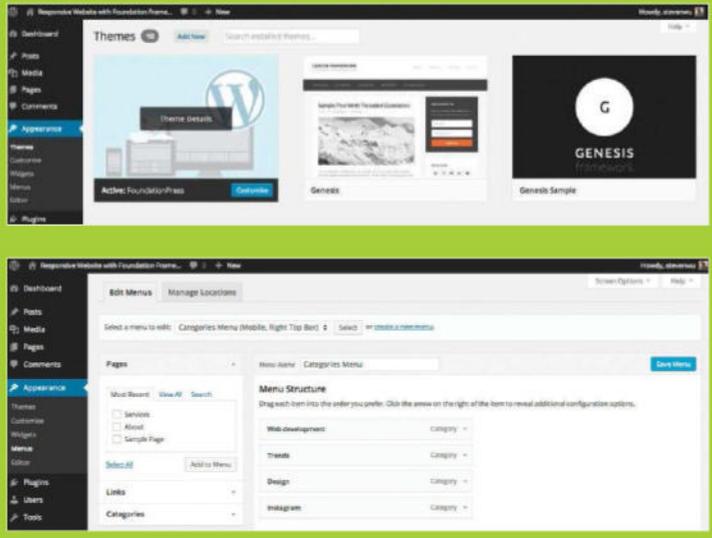
including a gradient background. Open up the 'header.php' and paste in the following HTML code.

```
001 <header class="main-head">
002   <div class="row">
003     <div class="large-12 columns">
004       <h1 class="title"><?php bloginfo
005         ( 'name' ); ?></h1>
006     </div>
007   </div>
```

05 Style the header

With our header implemented we'll now need to style it. Open up 'style.css' in the FoundationPress starter theme, start by giving the main header a gradient background, using CSS3 gradient. Position the main h1 above the header. Let's make all characters upper-case and give it a text shadow to stand out from the light backdrop.

```
001 .main-head {
002   margin-bottom: 2em;
003   padding: 1.2em;
004   background: #00b3d3;
005   background: -moz-radial-gradient(center,
006     ellipse cover, #00b3d3 0%, #007295
007     100%);
006   background: -webkit-gradient(radial,
007     center center, 0px, center center, 100%,
008     color-stop(0%,#00b3d3), color-stop
009     (100%,#007295));
007   background: -webkit-radial-gradient
010     (center, ellipse cover, #00b3d3 0%,
```



<top>

- In WordPress, activate FoundationPress starter theme. This theme includes all the Foundation framework library

<bottom>

- FoundationPress allows you to order menus to be on the left or right side of the menu and enable for mobiles

<above>

- We used Foundation's grid system on the search form, which will auto scale down for mobile and tablet devices

<left>

- Enabling navigation to appear on mobile devices can be controlled all through the Menus panel in WordPress

```

#007295 100%);
008 }
009 .main-head h1 {
010   text-align: center;
011   font-weight: 900;
012   text-transform: uppercase;
013   letter-spacing: 10px;
014   text-shadow: 1px 1px 2px rgba
(50, 50, 50, 0.59);
015   font-size: 2.5rem;
016   color: #fff;
017 }

```

06 Add a search
Currently in our widgets list, the search form is located in the sidebar. In WordPress Widgets we can disable the search widget. Now inside our 'head.php' at the very bottom, paste in the following function, which will print out the search form. We're going to place our search form just below the header of our website.

```
001 <?php get_search_form(); ?>
```

07 Customise search
With the get search form function added in our 'header.php' we can now structure this search form by editing the 'searchform.php'. Directly below the form tag we have applied a row <div> and changed the default grid layout to use the large grid system as well as setting some custom classes to be referenced in our CSS.

```

001 <div class="row">
002   <?php do_action('foundationPress_

```

```

searchform_top'); ?>
003 <div class="large-8 columns searchbox">
004   <input type="text" value="" name="s"
id="s" placeholder="<?php esc_attr_e
('Search', 'FoundationPress'); ?>">
005 </div>
006 <?php do_action('foundationPress_
searchform_before_search_button'); ?>
007 <div class="large-4 columns
searchbutton">
008   <input type="submit" id="searchsubmit"
value="<?php esc_attr_e('Search',
'FoundationPress'); ?>" class="prefix
button">
009 </div>

```

08 Modify index.php
The 'index.php' is the main template in WordPress theming hierarchy. We're going to modify it and remove some of the grid components and place them in 'content.php' instead. Remove the <div> row and grid classes just below the 'get_header' function and replace it with the code below. Finally, migrate the <?php get_sidebar(); ?> just above the 'get_footer' function.

```

001 <?php get_header(); ?>
002 <div class="row" data-equalizer>

```

09 Blog post
With the home page structure completed, we'll want to structure each blog post in a grid column of four rows, this will lay out three blog posts organised

Top tip
Make sure that you have Node.js, Grunt and Bower installed locally so you can perform an update to the Foundation framework.

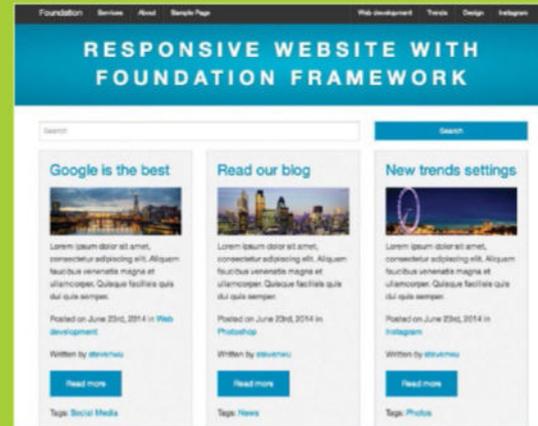
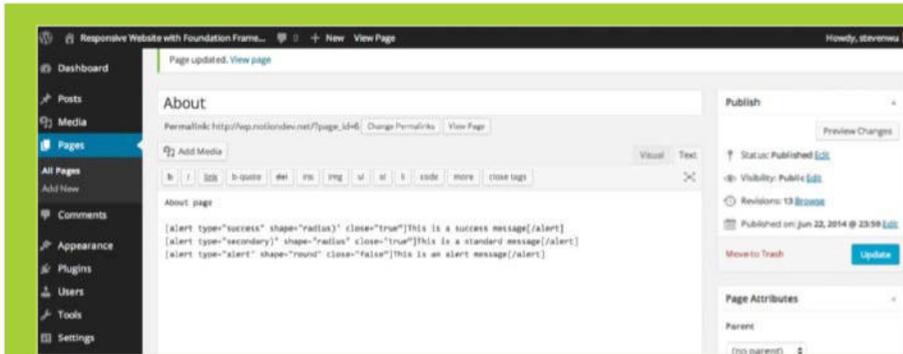
next to each other on a large monitor. Using the grid system will force our layout to be responsive. Remove the original code all the way down to the <footer> tag in 'content.php'.

```

001 <div class="large-4 columns" role="main">
002   <article id="post-<?php the_ID(); ?>"
<?php post_class('panel'); ?> data-
equalizer-watch>
003     <header>
004       <h2><a href="<?php the_permalink();
?>"><?php the_title(); ?></a></h2>
005     </header>
006     <div class="entry-content">
007       <figure><a href="<?php the_permalink
(); ?>"><?php if ( has_post_
thumbnail() ) {the_post_thumbnail
('large'); } ?></a></figure>
008       <?php the_excerpt(); ?>
009       <p>Posted on <?php the_time('F jS, Y
'); ?> in <?php the_category(' '); ?>

```

Themes



<above>

- Here we have our fully responsive WordPress site, resizing to perfectly display on all screen sizes

<top left>

- Easily set up and use shortcodes in your site to take advantage of Foundation's library of components

<bottom left>

- Using WordPress shortcodes, we were able to add Foundation's alert box components throughout the site

```
010 <p class="byline author">Written by
    <?php the_author_posts_link(); ?>
    </p>
011 <a href="<?php the_permalink(); ?>"
    class="button">Read more</a>
012 </div>
```

of three, our search field and search button are not quite aligned with the rest of the design. Let's fix this by adding some padding. With a mobile-first approach, Foundation takes care of the responsive nature - it's unnecessary to add styles for mobile or tablet devices.

```
001 .searchbox, .searchbutton {
002     padding: 0 15px;
003 }
004
```

Top tip
All Sass variables are located in `scss/config/_variables.scss` and your site structure within `scss/site/_structure`.

10 Style the blog

With our blog post structure set up in a grid column in a set of threes, we'll now implement some simple styling to this home page. Back in our 'style.css', we'll add some box shadow so the panels don't look so flat. We don't need to style the panels themselves as these styles are already set up inside Foundation.

```
001 .panel {
002     box-shadow: 0 1px 5px #D5DEE5;
003 }
004 figure {
005     margin: 0;
006 }
007 .entry-content figure img {
008     margin: 10px 0;
009 }
010 @media only screen and
    (min-width: 40.063em) {
011     h2 {
012         font-size: 1.8rem;
013     }
014 }
```

12 Move the sidebar

Rather than having our sidebar situated on the right-hand column, we will position it directly below all the blog posts and just above the footer. Inside the 'sidebar.php' we're going to use Foundation's Equalizer component, which will set equal height to all the widget panels. We simply place the data-equalizer attribute to the parent container here.

```
001 <div class="bottom-sidebar">
002     <aside id="sidebar" class="row" data-
    equalizer>
003         <?php do_action('foundationPress_
    before_sidebar'); ?>
004         <?php dynamic_sidebar("sidebar-
    widgets"); ?>
005         <?php do_action('foundationPress_
    after_sidebar'); ?>
006     </aside>
007 </div>
008
```

14 Widgets

Now to actually lay out our widgets, we will need to open up the 'widget-areas.php' located in the library directory. Inside the first array on line 8, remove what is currently there and replace it with the below, which uses the large-4 grid and a 'data-equalizer-watch' attribute that the Equalizer component requires to set equal heights to each panel.

```
001 'before_widget' => '<article id="%1$s"
    class="widget %2$s large-4 columns"><div
    class="panel" data-equalizer-watch>',
```

11 Style search form

With our blog posts neatly organised in a row

15 Style the sidebar

Within WordPress in the Widgets panel, we only require three widgets so remove any of the other existing ones. When you check the homepage you will notice our widget panels all have equal heights to the tallest panel. To finish up with our sidebar beneath our blog posts, we will give this section its own background colour and some padding.

```
001 .bottom-sidebar {
002     padding-top: 10px;
```

```
003 background-color: #cecece;
004 }
```

16 Set up shortcodes

Because there is a vast amount of components available in Foundation, we convert some of them into shortcodes so that we can reuse these components whenever we're in the editor. Creating shortcodes requires two steps: create a primary handler method and hook up the handler into WordPress. Inside the 'functions.php' we need to set up our primary function.

```
001 function foundation_add_alerts
    ( $atts, $content = null ) {
002     extract( shortcode_atts( array(
003         'type' => '',
004         'shape' => '',
005         'close' => 'true',
006         'class' => ''
007     ), $atts ) );
```

17 Shortcode array

In the previous code snippet we noted that our function receives the parameters of type, shape and close. We're going to use this to display alert boxes using one of Foundation's components. The type attribute will display success, warnings or informative information using this shortcode. Let's set up an array that will capture these attributes.

```
001 $class_array[] = ( $shape ) ? $shape : '';
002 $class_array[] = ( $type ) ? $type : '';
003 $class_array[] = ( $class ) ? $class : '';
004 $class_array = array_filter( $class_array );
005 $classes = implode( ' ', $class_array );
```

18 Shortcode markup

When this shortcode is executed we want to make sure that it's using the correct formatted markup and CSS classes. We need to use a wrapping class and CSS classes. This is very important because we want to make sure that Foundation calls the Alert JavaScript plugin for us. This particular plugin is in fact handled in the 'foundation.alert.js'.

```
001 $output = '<div class="alert-box ' . $
    classes . "'>';
002 $output .= do_shortcode( $content );
003 $output .= ( 'false' != $close ) ? '<a
    class="close" href="">&times;</a>' : '';
004 $output .= '</div>';
005 return $output;
006 }
```

19 Hook into WordPress

Before finishing off our shortcode we're going to ensure that it has all been registered correctly, otherwise WordPress won't know what to do with it. To do this we use the 'register_shortcodes' function and

the 'add_shortcode' method. The first parameter defines the shortcode in the editor while the second points to the function that we created previously.

```
001 function register_shortcodes() {
002     add_shortcode( 'alert', 'foundation_add_
    alerts' );
003 }
004 add_action( 'init', 'register_shortcodes' );
```

20 Shortcodes to use

We can now use the following shortcodes in the editor to display alert boxes, which is a native component from the Foundation framework. All we have to do is pass in which type of alert box type we want displayed by selecting the attributes: success, secondary or alert. We can even choose what type of shape to use and whether we want a close off function.

```
001 [alert type="success" shape="radius"
    close="true"]This is a success message
[/alert]
002 [alert type="secondary" shape="radius"
    close="true"]This is a standard message
[/alert]
003 [alert type="alert" shape="round" close=
    "false"]This is an alert message[/alert]
```

21 Alert boxes

Without any CSS styling or JavaScript and just using the shortcodes we have set up, we can implement alert boxes wherever we like in our WordPress site. By simply using shortcodes we can easily convert many of the rich components from Foundation to be used easily throughout our site.

22 Footer

To finish up we're just going to add in a footer navigation by using the WordPress WP list pages. Open up the 'footer.php' and just below the closing </section> tag, remove everything including the <footer> tag. Replace it with the following code, which will display a list of all pages on our site.

```
001 <footer class="main-footer">
002     <div class="row"
003         <ul>
004             <?php wp_list_pages(); ?>
005         </ul>
006         <?php do_action( 'foundationPress_
    before_footer' ); ?>
007         <?php dynamic_sidebar( "footer-
    widgets" ); ?>
008         <?php do_action( 'foundationPress_
    after_footer' ); ?>
009     </div>
010 </footer>
```

23 Style the footer

Finally, we're just adding the final touches by



Store all your shortcodes in a separate file

In this tutorial our code for the WordPress shortcodes are placed in the 'functions.php'. While this is valid, to keep our 'functions.php' clean and easy to maintain it's good practice to copy all of the shortcodes into a separate file instead. The benefit of having this separate file is that it becomes more modular and, should you have lots of shortcodes, it won't become cluttered in unnecessary code compared to being in the 'functions.php'.

To follow FoundationPress standards we can copy all our shortcodes into a new file called 'foundation-shortcodes.php'. Within the 'functions.php' we can just reference this with:

```
require_once( 'library/foundation-
shortcodes.php' );
```

You could even store all of your shortcodes within a separate plugin. That way, in the event that you switch themes, they will always be available and working.

styling up our footer. Through this tutorial we've taken the starter theme FoundationPress and quickly customised it as our own theme using a variety of Foundation's components and functionality. Using FoundationPress allowed us to focus on the front-end development and less on the actual backend efforts.

```
001 .main-footer {
002     padding: 10px 0;
003     background-color: #9c9c9c;
004 }
005 .pagenav ul {
006     margin: 10px 0 0 0;
007 }
008 .main-footer li {
009     float: left;
010     margin-right: 10px;
011     list-style: none;
012 }
```

Customise a WordPress theme

THERE ARE PLENTY OF PRE-MADE THEMES THAT YOU CAN MAKE USE OF FOR YOUR WORDPRESS BLOG. WITH A LITTLE BIT OF WORK 'UNDER-THE-HOOD' YOU CAN GIVE YOUR OWN BLOG A LOOK THAT DIFFERS FROM THE REST OF THE CROWD

🌱 The choices you make with regards to aesthetics will determine whether your users will want to delve further into your content 🌱

TUTORIAL OBJECTIVE

Learn some basic tweaks that can be applied to personalise a WordPress theme

TIME REQUIRED

20 minutes



THEMES ARE A key part of your WordPress blog, as they dictate how your website will appear to your visitors. The choices you make with

regards to aesthetics and layout will determine whether your users will want to delve further into your content or avoid making a return trip in the future. WordPress has plenty of themes for you to choose from and you can also make your own customisations to really add that personal touch. Making such customisations does involve a certain amount of coding but even with a minimal amount of knowledge you can learn a few tricks to get you up and running. If you make the correct preparations you can also make edits without putting your installation at risk. This is done by creating a child theme that inherits the traits of a pre-existing parent theme. In this tutorial we show you how to do exactly that, customising the CSS for themes to create a look that you are hoping for rather than relying on the themes that are provided by WordPress. We also take you through setting up fonts for your theme, guide you through hexadecimal colours, adding notes and borders to your work to make a cohesive theme that has that personalised touch.



01 Create child theme

Create a new folder on your local computer. Give it the same name as your current WordPress theme but add a marker after it. The theme we've used in our example is twentythirteen so we've named the folder 'twentythirteen-child'. Open a text editor and create a file titled 'style.css' within this folder, within that file add the text above. Make sure to add the name of your own theme to the relevant lines. In this example, where we have used twentythirteen you will need to use your own selected theme name.

02 Upload child folder

The next step is to upload your child folder to

your WordPress installation. This can be done by using an FTP program to connect to your web host. We've used FileZilla in our example. Use your FTP program to browse to the /wp-content/themes folder and upload your newly created child theme folder. Alternatively, zip the folder and upload it by using the WordPress theme uploader. You can find it in Appearance>Themes>Install Themes>Upload.

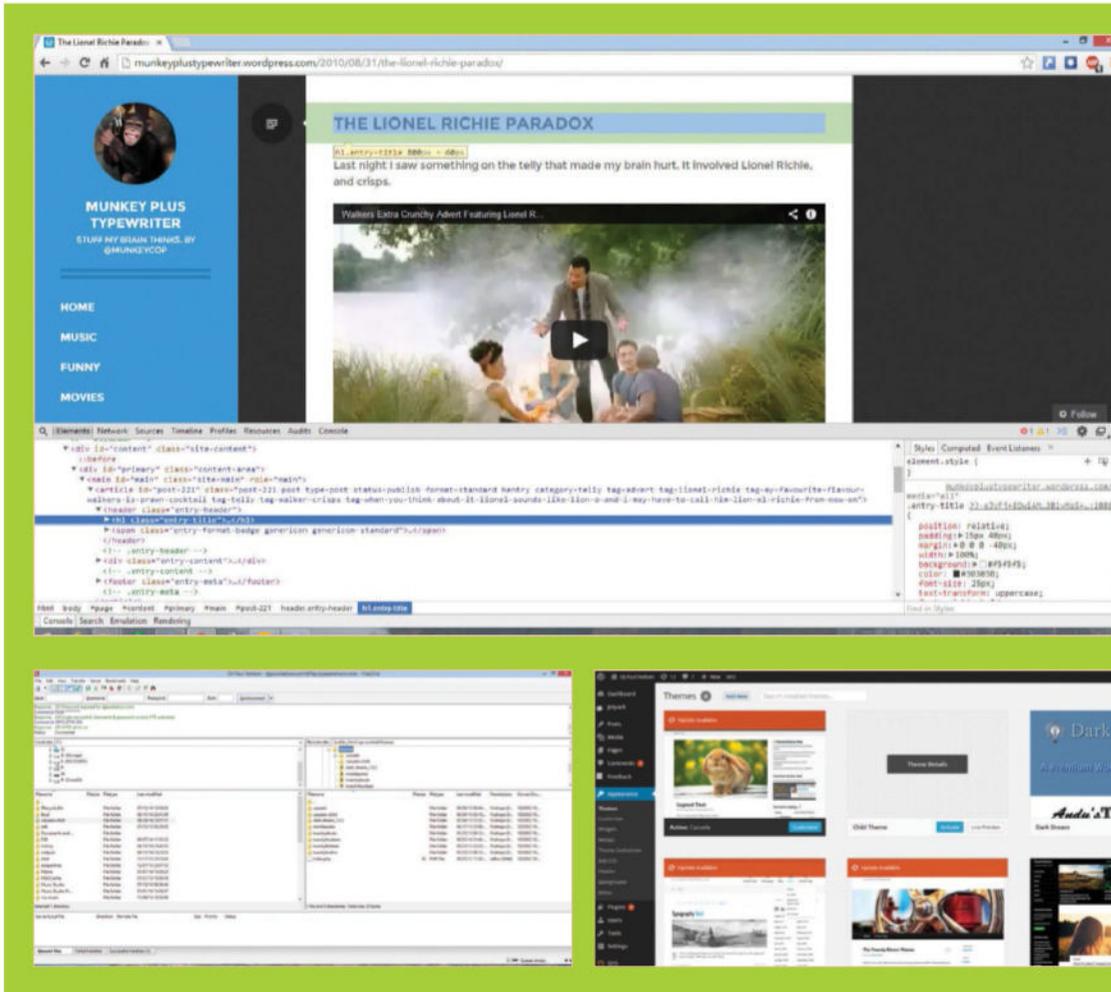
03 Open WordPress Dashboard

In your web browser, log in to your WordPress Dashboard. On the left hand side of the screen, click on Appearance followed by Themes. Your newly added child

theme should now be visible within your selection of themes. If you wish you can preview it to check that it has inherited the attributes of the parent theme. To make further edits you will need to activate the theme.

04 Dashboard based customisation

Depending on your chosen theme, you may have the option of making customisations via the WordPress Dashboard. This can control features such as the layout, the title, background images and so on. These are helpful for getting the main aspects of your site organised. What we're looking at however are more specific changes that can be made by adding code to the style.css file.



<top left>

- Use in-browser developer tools to create non-destructive edits to your blog whilst gaining a better understanding of CSS code and how it works

<bottom left>

- When it comes to uploading your child theme you can use an FTP program (as above) or the upload theme function in the WordPress Dashboard

<bottom right>

- Once your child theme has been uploaded successfully it will appear within the Dashboard. You'll need to activate it in order to keep making edits to it

05 Understanding CSS commands

Now we have a child theme installed we can customise it without disturbing the parent theme. This is done by adding extra lines of CSS code into the style.css file. On a basic level they work like the example above. The Item is the feature that you're editing. This is followed by a curly bracket and the Property which is the aspect of the item that is being changed. Value is what the new setting will be, ie a colour or font. Note the use of the colon and semi-colon, these are required as part of the coding.

```
001 Item { Property: value; }
```

06 Adding code

When it comes to adding new code it needs to be added after the @import line. If you add commands before the @import line, the alterations will not take effect. Working from the example in the previous step, the item that we are editing is Heading 1 (known as H1). The property that we're changing is the text format (text-transform) and the value that we

are applying is uppercase. When we apply this code it will force all of the text in Heading1 to appear in uppercase.

```
001 /*
002 Theme Name: TwentyThirteen Child
003 Description: my fabulous child theme
004 Author: Lisa Sabin-Wilson
005 Version: 1.0
006 Template: twentythirteen
007 */
008 @import url('../twentythirteen/style.css');
009 h1 {
010 text-transform: uppercase;
011 }
```

07 View changes

If you wish you can edit the local style.css file on your computer and upload it again via FTP to your WordPress installation (overwriting the old file). Alternatively you can edit the file within the WordPress dashboard. Click on Appearance>Editor. This will open the stylesheet within your web browser. Once your edits

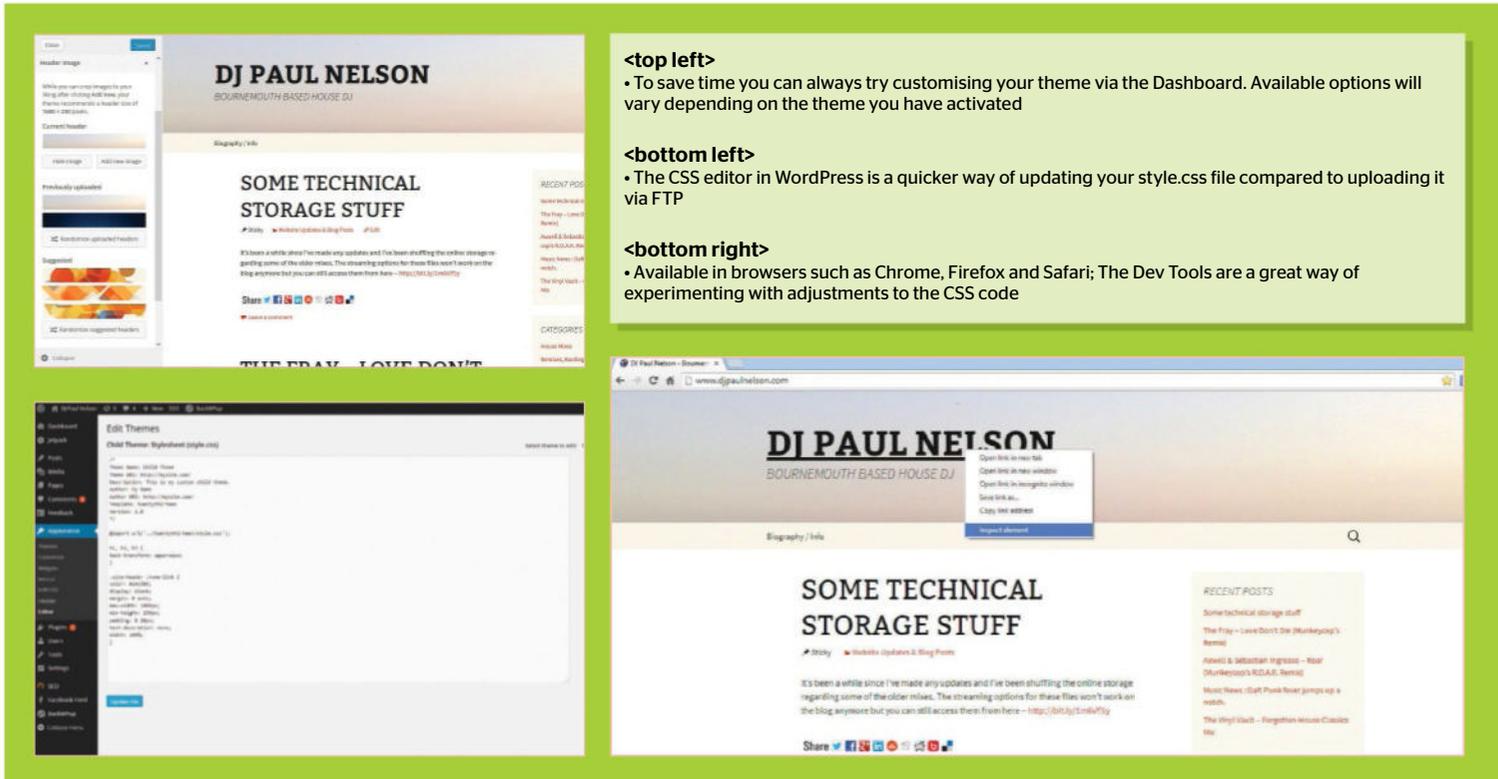
Top tip
Plugins such as Widgets on Pages make it possible for widget areas to display within the content of a page or post by means of shortcodes that the user pastes into the text.

have been made, click on Update File to finalise your changes and update your blog.

08 Set up fonts

Once you've mastered one command you can move on and start applying multiple commands. This is an example provided by WordPress that illustrates the many possibilities regarding fonts. We have set the body text to be either Arial, Helvetica or Sans Serif (depending on what fonts the end user has installed) with a size of 14 pixels. Headings one and two have been set to two times and one and a half times larger than the body text respectively. Any strong text elements, such as widget

Themes



<top left>

• To save time you can always try customising your theme via the Dashboard. Available options will vary depending on the theme you have activated

<bottom left>

• The CSS editor in WordPress is a quicker way of updating your style.css file compared to uploading it via FTP

<bottom right>

• Available in browsers such as Chrome, Firefox and Safari; The Dev Tools are a great way of experimenting with adjustments to the CSS code

titles, will appear in italic and uppercase to draw extra attention to them.

```
001 body {
002 font-family: arial, helvetica, sans-serif;
003 font-size: 14px;
004 }
005 h1 {
006 font-size: 2em;
007 }
008 h2 {
009 font-size: 1.5em;
010 }
011 strong {
012 font-style: italic;
013 text-transform: uppercase;
014 }
```

09 Add borders

You can also add borders to particular elements of your page. Here we have added a dashed border to Heading Size 1. It will be 3 pixels wide at the top and bottom plus 10 pixels wide at either side. The border will also be black. It's a good example of how you set up the item first then follow with curly brackets containing the specifics of what you want to edit.

```
001 h1 {
002 border-style: dashed;
003 border-width: 3px;
```

```
004 border-left-width: 10px;
005 border-right-width: 10px;
006 border-color: black;
007 }
```

10 Add notes

Once you've got a few tweaks up and running you're going to find that it can be a bit easy to get lost in all that code. It's worthwhile getting into the habits of leaving notes for yourself. This is done by using `/*` and `*/` like in the example above. The idea is that if you come back to your code at a later you can quickly find the elements that you wish to work on.

```
001 /* This is how you add notes*/
```

11 Developer Tools

Web browsers such as Firefox and Chrome can do more than just search the web. They also now feature developer tools that allow you to inspect various elements of a web page. We'll focus on Chrome in our example. Open your webpage, right-click on an element you wish to change and select Inspect Element.

12 Viewing the code

The bottom of the screen will now display two panels. On the left is the HTML elements with our selected item highlighted. On the right is the CSS code

that is being used for this item. Scroll down this window to view the code that has been applied. Here we have located the code from earlier that has forced our header text to be all uppercase.

13 Toggling edits

Depending on whether a particular piece of code is active you may be able to toggle the code on or off. This is shown by a box that appears to the left of the particular line of code. As you click the toggle box the changes will appear in real-time. It's a great tool for quickly seeing how small design changes can play out on your blog. More importantly whilst you're working in the Dev Tool your actual website will not be altered. Only you can see the changes.

14 Manual edits

You can also manually change code by selecting a value and typing in a new entry. Here we are altering the colour of the website title. When it comes to colour you can enter a colour, RGB value or hexadecimal code. It's more preferable to use a hexadecimal value as there is far more variety available. Here we have clicked the value and used the arrow keys to scroll through the code values until we have found a value that fits.

15 Apply your edit

Once you've found the correct setting you can then copy the code straight from the dev tool. Select the code beginning with the Item (in this case .site header

Hexadecimal colour codes

We've briefly touched up hexadecimal colour codes in the main tutorial. In basic terms this is a six digit code where each colour relates to a different code. Using hexadecimal codes means that up to 16,777,216 colours are available for you to use. There is a logic to the codes but thankfully there are also some great online tools to save you the hard work of figuring out the codes for yourself. Of particular note is <http://colourco.de/>. It's website that not only provides you with codes for colours but also suggest other colours that will compliment your initial colour selection. This is invaluable for creating a good look on your site. Simply drag your mouse pointer around the screen and colourco.de will display the codes for each corresponding colour.

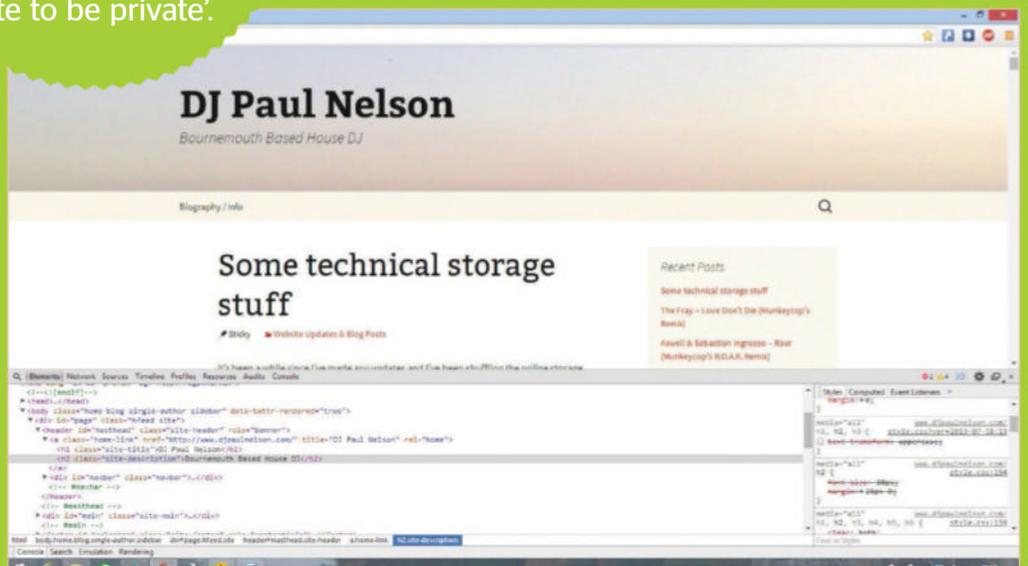
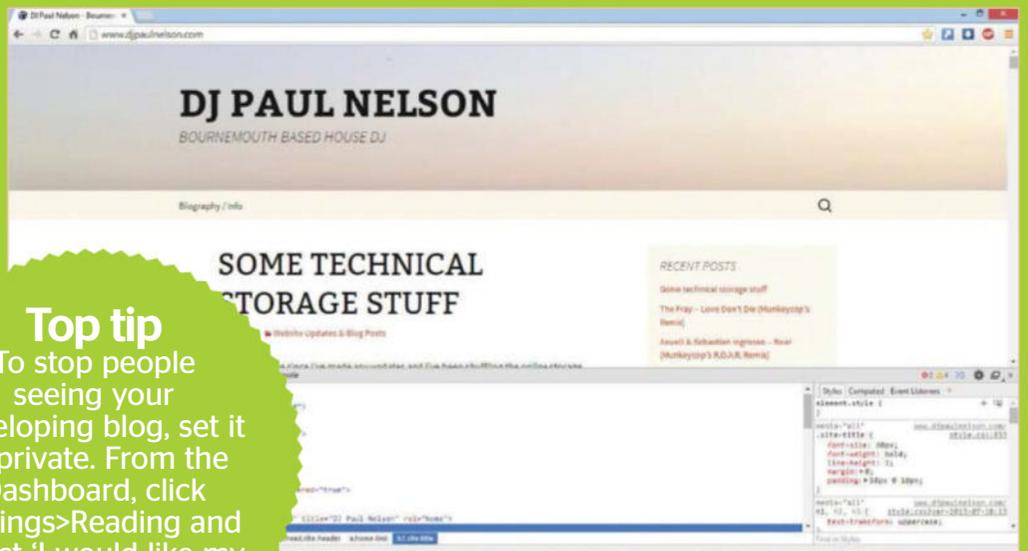
.home link) and ending with the closing curly bracket and copy it. You can then paste this into your style.css file and save it. The applied tweak will then be visible to your website visitors.

16 Taking it further

So far you've gained a basic idea of how CSS works and how to apply it. There is a lot more to cover, much more than what we can fit in here. WordPress has links to some great online material to help you out. Such an example is www.html5dog.com/guides/css/ which covers various aspects of HTML, Javascript and CSS.

Top tip
If you're creating and tweaking a blog you can also do so in an offline environment before you publish changes online. Try www.wampserver.com/en/

Top tip
To stop people seeing your developing blog, set it to private. From the Dashboard, click Settings>Reading and select 'I would like my site to be private'.



<top>

- By selecting an element on the page the Dev Tool can take you straight to the CSS code that relates to it. From here the tweaking can begin

<middle>

- Here we have un-ticked the 'uppercase' command on the headings. Notice that the text on the webpage has also updated at the same time

<bottom>

- You can also click directly on a value and manually enter your chosen measurement. Again, the page will update in realtime

Convert a static site to WordPress with a child theme

TRANSFORM A HTML SITE USING A CHILD OF THE NATIVE WORDPRESS TWENTY TWELVE THEME

TUTORIAL OBJECTIVE

Convert your HTML theme into a WordPress theme

TIME REQUIRED

2 hours



THE POPULARITY OF WordPress has refused to abate over the last few years, with over 60 million websites worldwide – and around 25 per cent of new sites –

choosing the free content management system as their foundation. Running your website with a CMS has obvious benefits, from ease of changes for site owners, to the wealth of extra functions available. But what can you do if you have an existing non-CMS site that you would like to use in the WordPress format – without changing the look of the site? Well, thankfully it's not as difficult as you may think to take an existing theme and replicate your site with it.

WordPress comes with a selection of own out-of-the-box themes pre-installed, including Twenty Fifteen, which is the most recent. They offer a basic responsive framework and are solid, secure, and dependable themes which stand up to heavy editing.

This exercise uses an older iteration of the theme, Twenty Twelve. Themes are updated by WordPress regularly, so to avoid all the changes being lost with each update, we'll be creating a child theme. Using child themes allows you to draw your files and styling from an existing theme while creating changes and making amendments in a separate sub-folder, giving you complete control.

01 Back up your site

Before doing anything else, take a backup of your existing site. In this case the site is called Cat Stuff, via FTP or control panel. This is good advice at any time, but you will also need to migrate many of the files, not least the images, to your new WordPress installation.



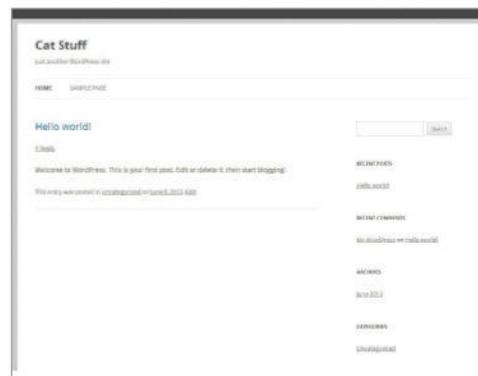
02 Install WordPress

Install WordPress where the site was and enter the details into the fields. Log in to your Dashboard and view the site by clicking on the site title in the top-left of the window. You'll see it as it looks in the unedited Twenty Twelve theme. Now we need to set up our child theme.

03 Make the child folder

Grab all your WordPress files and navigate through them to the themes folder at wp-content>themes.

You can see the folder for Twenty Twelve here. Create a new folder and name it after your website – in this instance we'll call it Catstuff. This folder will contain all our child files and styles.



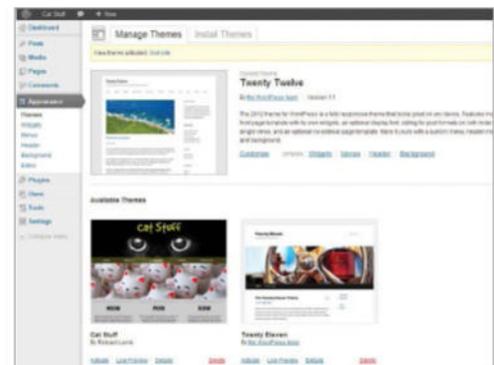
04 Create new stylesheet

Open a new CSS stylesheet and name it style.css. It's important that you stick to this naming structure as this is what WordPress will look for. Save it to the child folder. Add the following, or equivalent, declaration to the top of the sheet. The template name must match exactly the folder name of the parent theme.

```
001 Theme Name: Cat Stuff
002 Description: Child theme for Twenty Twelve
003 Author: Richard Lamb
004 Template: twentytwelve
```

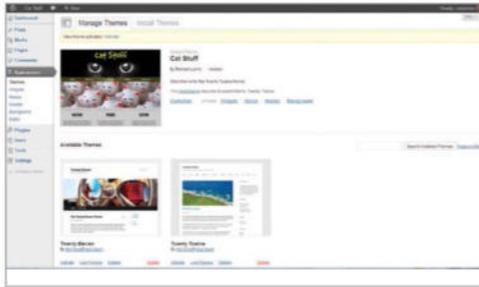
05 Create a screenshot

You can also create a screenshot of your old site, or whatever you want to use, to display in the Themes section of the Dashboard. Take your image (it should be around 600px x 450px) and save it as screenshot.png. Place it in the child folder and upload the whole thing to your live themes folder. Go to Appearance>Themes in the left-hand menu of your dashboard.



06 Activate your theme

Activate the new theme by clicking the Activate link, which you'll be able to locate below the screenshot. You'll see the screenshot move to the top. If you look at the site again, you'll notice that nothing has changed, but we now have the ability to edit and change whatever we like and make the site identical to the original with the help of our child stylesheet.



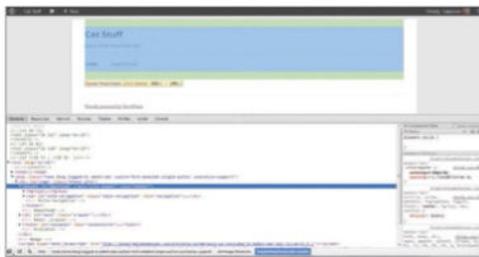
07 Custom home page

Copy 'page.php' from the original twentytwelve folder and paste it into the new child folder. Rename it 'home.php'. WordPress will automatically load this as your front page. Copy and paste 'header.php' but leave it with the same name. Remove the following code from 'home.php' - normally used to call the blog posts and sidebar - and replace with the code that follows.

```
001 <?php while ( have_posts() ) : the_post();
?>
002 <?php get_template_part( 'content', 'page'
); ?>
003 <?php comments_template( '', true ); ?>
004 <?php endwhile; // end of the loop. ?>
005
006 <?php get_sidebar(); ?>
```

08 Start adding custom CSS

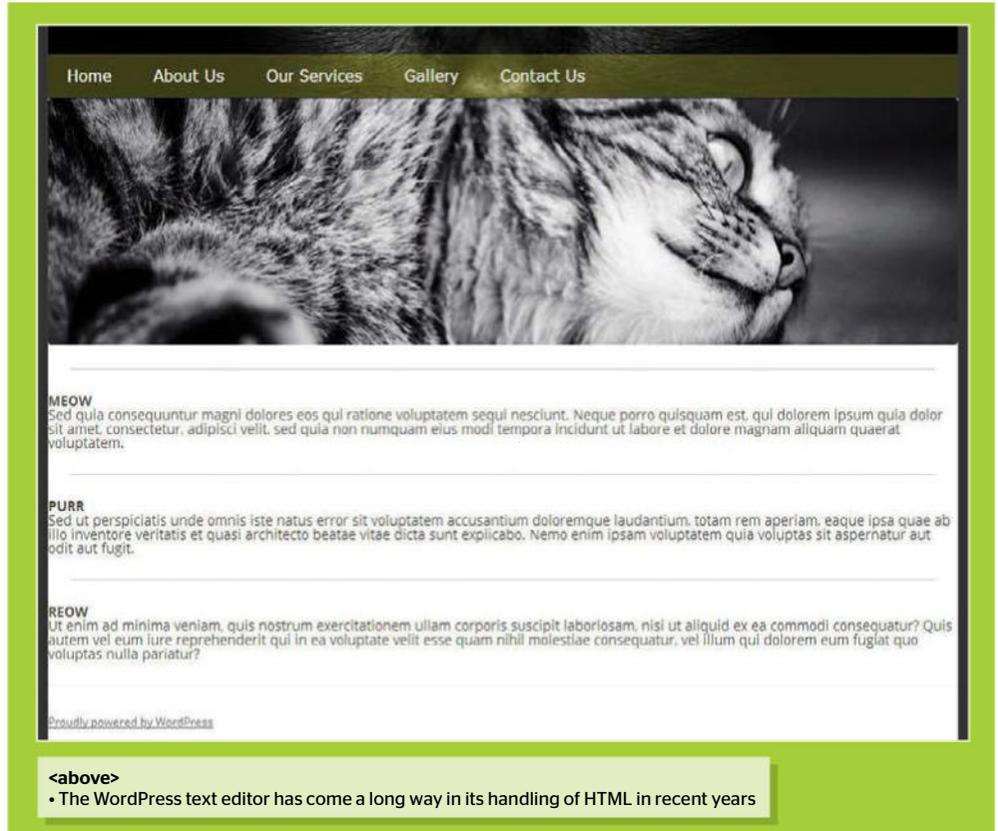
Although there are a few admin options for customisation in the Twenty Twelve theme, using CSS gives us far greater control. Now we are writing new versions of CSS declarations, rather than changing the originals. This is where referring to both the original theme CSS and using browser developer tools to identify which CSS classes we need to amend is invaluable.



09 Main body changes

Twenty Twelve comes with chunky margins and padding which will need changing to replicate our site's edge-to-edge design. Removing the body padding will leave us having to add content padding here and there to compensate, but it's not too much trouble. You can change the body colour (#333) in the CSS or in the customisation options for the theme.

```
001 body .site {
002 margin:0 auto;
003 padding:0px;
004 }
005
```



10 Image

To put our original cat header in place we need to take the header image from the original site (head.jpg) and place it in a new images folder, in our child theme. Place the following styles into the CSS sheet, overriding those of the original and calling our image as a background. Add the img value for responsive purposes.

```
001 img {
002 max-width:100%;
003 }
004 .site-header {
005 background: url(images/head.jpg);
006 background-repeat:no-repeat;
007 background-position:center;
008 height:300px;
009 padding:0;
010 }
```

11 The logo

There are two ways to remove the title and description, either by deleting the H1 and H2 tags from the <hgroup> in 'header.php', or deleting the content in the admin and overriding the CSS. The former is easier. Delete the tags and add the logo image to the images folder, then place a logo div between the <hgroup> tags which calls the image, and add some CSS.

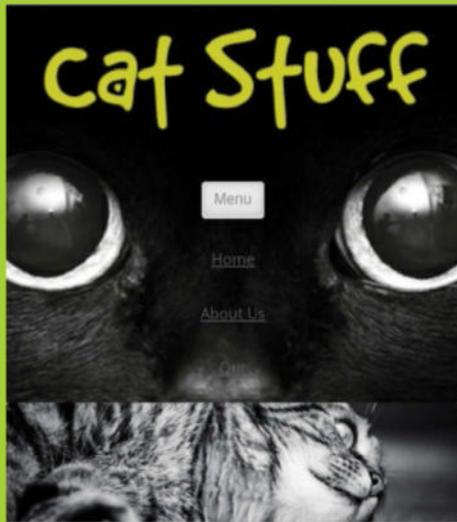
```
001 <hgroup>
002 <div id="logo"></div>
003 </hgroup>
004 #logo {
005 text-align: center;
006 }
```

12 Navigation

The navigation currently sits halfway up the header image. We can fix that, but first we need to create some pages and assign a WordPress menu so we can see the elements we need to style (see In Detail). Once you have the menu assigned, you can apply the following styles wrapped in a media query so the mobile navigation can be addressed separately.

```
001 @media screen and (min-width: 600px) {
002 .main-navigation ul.nav-menu {
003 border:none;
004 background:rgba(203,205,15,0.3);
005 margin-top: 124px;
006 }
007 .main-navigation li {
008 margin:0 20px;
009 }
010 .main-navigation li a {
011 font-family:Verdana, Geneva, sans-serif;
012 color:#fff;
013 font-size:16px;
014 text-transform:none;
```

Themes



<above>

- The menu still needs work at mobile size. Place some changes in the max-width: 600px media query



<above>

- Give '.menu-toggle' a black background with white text and give '.main-navigation' a margin-top of Opx



<above>

- Reduce '#logo' by giving it a width of around 80%, with a 10% margin left and right, in order to allow for more room



<above>

- Give '.main-navigation a' '#cbcd0f' and no text-decoration, and '.main-navigation li' a 16pt font with 10px line-height

Changing '.site-content' to '.front-content' maintains the CSS for '.site-content'

```
015 line-height: 2.692308;  
016 }  
017 }
```

13 Customise the content

Our page is set up to accommodate a sidebar, despite the fact that we have removed the code that calls it. The best way around this - allowing for the introduction of the sidebar to other pages - is to make a slight change to the class name of our home page's main content. By changing '.site-content' to '.front-content' we maintain the CSS for '.site-content'.

```
001 <div id="primary" class="front-content">  
002 <div id="content" role="main">  
003 </div><!-- #content -->  
004 </div><!-- #primary -->
```

14 The slider

Download the plugin Meteor Slides through the admin, and install it. Activate it and upload your slide images from the original site by clicking Slides>Add New. Go to Slides>Settings and set the base slide width and height. Then, create a slider div on your child 'home.php' and place the following inside it to call the slider.

```
001 <div id="primary" class="front-content">  
002 <div id="content" role="main">  
003 <div id="slider"><?php if ( function_  
exists( 'meteor_slideshow' ) ) { meteor_  
slideshow(); } ?></div>  
004 </div><!-- #content -->  
005 </div><!-- #primary -->  
006
```

15 Home page content

The easiest thing to do would be to hard code the content into the 'home.php' file, replicating the original. However, that would leave it uneditable through the admin area, which is the main point of having a content management system. The ideal solution is to use an admin page for the content and have the 'home.php' load it.

16 Create the page

Click on Pages>Add New in the left-hand menu and call your new page 'Home Page Content'. The content for the three columns on the original home page were divided into three sections. Copy the HTML for those sections into the text editor, making sure

Top tip

There is a difference in calling images for parent themes and child themes: `<?php echo get_template_directory_uri(); ?>` for parents and `<?php bloginfo('stylesheet_directory'); ?>` for child.

that it is set to Text rather than Visual. The Text tab allows HTML input.

```
001 <div class="section">
002 <hr />
003 <h1>MEOW</h1>
004 Sed quia consequuntur magni dolores eos
qui ratione voluptatem sequi nesciunt. Neque
porro quisquam est, qui dolorem ipsum quia
dolor sit amet, consectetur, adipisci velit,
sed quia non numquam eius modi tempora incidunt
ut labore et dolore magnam aliquam quaerat
voluptatem.
005 </div>
006 <div class="section">
007 <hr />
008 <h1>PURR</h1>
009 Sed ut perspiciatis unde omnis iste natus
error sit voluptatem accusantium doloremque
laudantium, totam rem aperiam, eaque ipsa quae
ab illo inventore veritatis et quasi architecto
beatae vitae dicta sunt explicabo. Nemo enim
ipsam voluptatem quia voluptas sit aspernatur
aut odit aut fugit.
010 </div>
011 <div class="section">
012 <hr />
013 <h1>REOW</h1>
014 Ut enim ad minima veniam, quis nostrum
exercitationem ullam corporis suscipit
laboriosam, nisi ut aliquid ex ea commodi
consequatur? Quis autem vel eum iure
reprehenderit qui in ea voluptate velit esse
quam nihil molestiae consequatur, vel illum qui
dolorem eum fugiat quo voluptas nulla pariatur?
015 </div>
```

17 Call the content

Now you'll need a little PHP snippet to call the content for that particular page into the home page. Include the loop below, placed below the slider div, which will call the page by ID. So make sure you replace the "page_id=26" with the ID number of your particular page. This can be found in the url or on the page listing.

18 Home content CSS

If you click Publish, you'll see that the sections are now stacked one above the other - they're missing the CSS from the original site. Those were fixed widths and this site is now responsive so you'll want to consider the necessary changes when importing the old styles. Some percentages in place of pixels and a media query will help that.

```
001 section {
002 float:left;
003 width:30%;
004 padding:10px 1.666666%;
005 text-align:center;
006 font-size:12px;
007 margin-bottom:30px;
008 }
009 hr {
010 display: block;
011 height: 1px;
012 border: 0;
013 border-top: 1px solid #222;
014 margin: 1em 0;
015 padding: 0;
016 }
017 @media screen and (max-width: 600px) {
018 .section {
019 float:left;
020 width:90%;
021 padding:10px 5%;
022 text-align:center;
023 font-size:12px;
024 margin-bottom:30px;
025 }
026 }
027
```

19 H1 Tag

The three H1 section titles used a Google font, so you can bring that in now. Place the href in the 'header.php', in the <head> tag as you normally would. Don't forget to include the styling from the original site, too. Also, you need to add some styling to 'front-content' to match the background colour of the original.

```
<link href='http://fonts.googleapis.com/css?family=Denk+One' rel='stylesheet' type='text/css'>
```

```
001 .section h1 {
002 font-family: 'Denk One', sans-serif;
003 text-align:center;
004 font-size:35px;
005 margin:20px 0;
006 }
007 .front-content {
008 float:left;
009 background:#ccc;
010 width:100%;
011 }
```

20 The Footer

Copy 'footer.php' from the Twenty Twelve folder

and paste it into the child folder. Open it and remove the PHP snippet containing the Twenty Twelve credits, replacing it with the copyright notice of the original site. We can preserve the WordPress footer functionality if required at a later date. Now add the new styles. Replace the code below with the code that follows immediately after.

```
001 <div class="site-info">
002 <?php do_action( 'twentytwelve_credits' );
?><a href="<?php echo esc_url( __( 'http://
wordpress.org/', 'twentytwelve' ) ); ?>"
title="<?php esc_attr_e( 'Semantic Personal
Publishing Platform', 'twentytwelve' );
?>">?php printf( __( 'Proudly powered by %s',
003 'twentytwelve' ), 'WordPress' ); ?></a>
004 </div><!-- .site-info -->
```

```
001 <div class="site-info">
002 <h2>Copyright&copy; 2013 Cat Stuff</h2>
003 </div><!-- .site-info -->
004 CSS
005 footer[role="contentinfo"] {
006 background: #000;
007 border:none;
008 margin-top:0;
009 padding:10px 0;
010 }
011 footer h2 {
012 font-family:Verdana, Geneva, sans-serif;
013 text-align:center;
014 color:#cbcd0f;
015 font-size:13px;
016 font-weight:normal;
```

21 Inner pages

Copy 'page.php' and the folder 'page-templates' into your child. All inner pages can now be created using the internal pages made earlier, either with HTML in the Text tab or through the Visual tab, and use these templates. If you want to keep the sidebar removed, select 'full-width page' under Templates in the page editor.

22 Removing comments

If you want to remove the comments functionality from your pages, leaving them matching the originals, you need to either delete or comment out the relevant PHP snippet in both 'page.php' and 'full-width.php'. There is also a little CSS snippet you can place at the top of each page in the editor to hide the page title.

```
001 Hide the Page Title <style>
002 .entry-title{display:none;}
003 </style>
004 Hide Comment Functions
```

Change the below with the following:

```
001 <?php comments_template( '', true ); ?>
```

```
001 <?php //comments_template( '', true ); ?>
```

Create a mobile-friendly site

WITH MORE AND MORE USERS ACCESSING THE INTERNET ON MOBILE DEVICES IT IS MORE IMPORTANT THAN EVER TO ENSURE THAT YOUR SITE CAN STILL WORK PROPERLY WHEN VIEWED ON A SMALLER SCREEN

🌱 Taking the time to optimise your website will not only improve the experience of your audience but also help ensure they keep returning 🌱

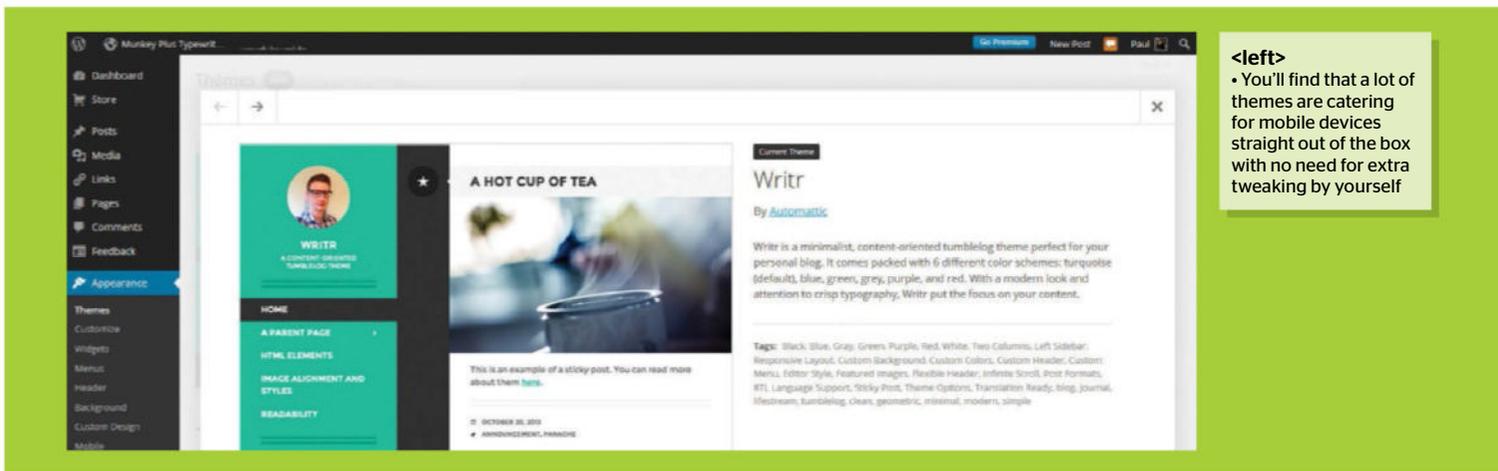
TUTORIAL OBJECTIVE

Make adjustments to your theme so it can adapt to the screen sizes web browsers on mobile devices

TIME REQUIRED
30 minutes



THE WAY WE access the internet has changed dramatically over the last few years. Previously, your WordPress blog would have most likely been accessed by desktop browsers. These days you are more likely to find that an increasing number of your viewers are accessing your blog via a mobile device or tablet. To that extent it is important to make sure that your website is optimised to work on such platforms. Taking the time to do so will not only improve the experience of your audience but also help ensure that they return to your blog in the future. Some themes (known as responsive themes) can adapt the content accordingly when a mobile browser is detected. Alternatively there are plugins and code modifications that can be applied to adjust your theme accordingly.



01 Use responsive themes

One of the easiest ways to make your site mobile friendly is to install a responsive WordPress theme. Some of these are free while others come at a cost. These can make your website mobile friendly without the need for getting under the hood and messing around with code. In the Writr theme that we're using we can go into the customisation screen and toggle previews between desktop, tablet and mobile devices.

02 Install a plugin

If your theme does not include a mobile

version there are always plugins that can be installed to configure your website. Popular examples include the WordPress Mobile Pack and WPTouch. Open the plugins menu from Dashboard, click on Add New and try the search term 'Mobile'. Extra plugins such as these are only available on self-WordPress hosted blogs.

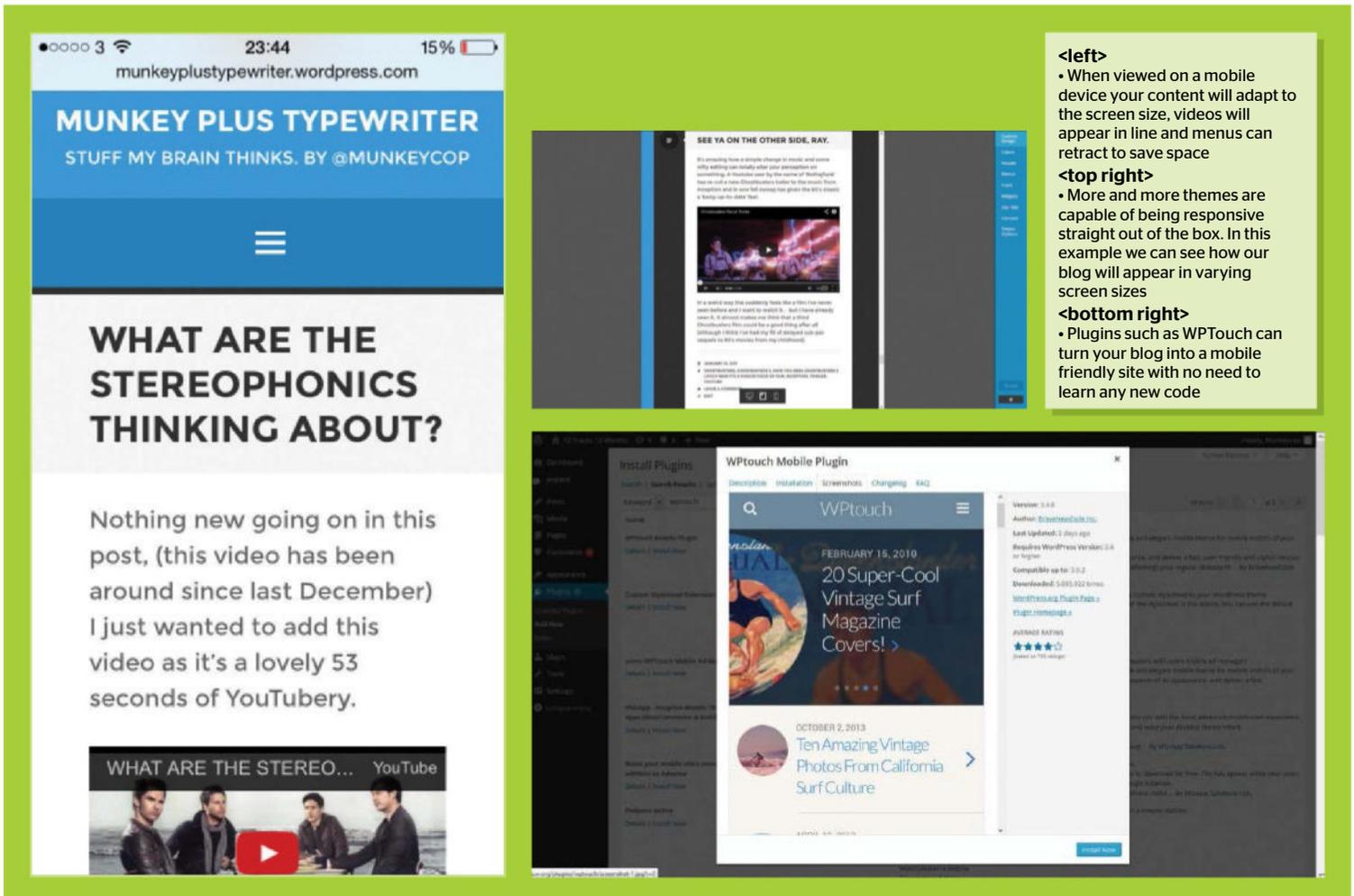
03 Using WPTouch

With WPTouch installed you can create a mobile friendly theme within minutes with no need to know how to use CSS code. The settings for WPTouch allow you to apply colours, select how your

posts look and add social networking links. There is also a Pro version that opens up more themes and extensions.

04 Install a theme

Many themes are now equipped with a responsive design which saves you the hassle of setting things up yourself. If you've already made your own theme however you can still apply some CSS to make your theme more responsive. To demonstrate this we will use the older Twenty Ten theme which is non-responsive. Most likely you will need to install it first. Click on Appearance



<left>

- When viewed on a mobile device your content will adapt to the screen size, videos will appear in line and menus can retract to save space

<top right>

- More and more themes are capable of being responsive straight out of the box. In this example we can see how our blog will appear in varying screen sizes

<bottom right>

- Plugins such as WPTouch can turn your blog into a mobile friendly site with no need to learn any new code

followed by Add New. Type Twenty Ten into the search box and click install from the relevant search result.

05 Create child theme
If this is going to be theme that you wish to keep it might be worth considering installing a child theme. That way if your current theme receives an update it won't overwrite the changes we are making over the next few steps. Steps for this can be found in the previous tutorial for customising a theme.

06 Screen width limit
Add this code to the very bottom of your style.CSS file. This is a conditional styling code which will instruct the browser to alter the display the website if the screen size or less than or equal to 640px. We're using 640px as an arbitrary example, in truth there are varying sizes for all kinds of smartphones these days. Within the curly brackets we will insert the instructions for the browser to follow for screen sizes below 640px.

```
001 @media only screen and (max-width: 640px)
002 {}
```

07 Adjusting the layout
These lines of code need to be placed within the curly brackets at the end of the code from the previous step. Here we are setting the main frame size to 400px and the container layer to match the main frame size. These settings only take effect once the screen size drops below 640px. To check if the code is working you can try resizing your desktop browser window.

```
001 #access .menu-
002 header, dimenu, #colophon, #branding, #main
#wrapper, #site-title {width:400px}
#container {width:100%;}
```

08 Remove header image
If your theme has a header image you may wish to remove it altogether on smaller web browsers. Add this line to the code in your style.css file (again, somewhere between those two curly brackets from Step

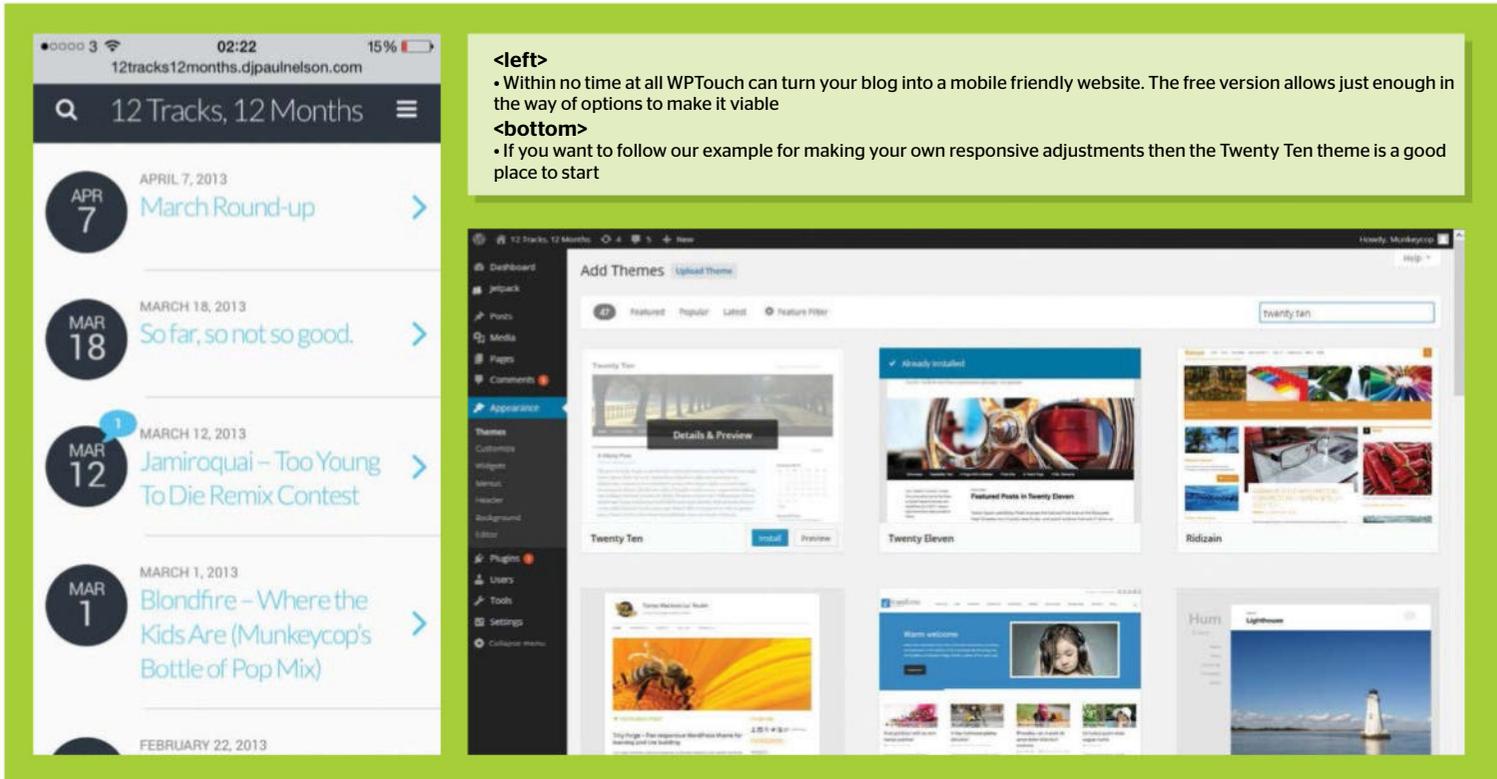
Top tip
If you're unfamiliar with coding, there are plugins that exist to make your theme mobile adaptable. Including WPTouch.

5) and the image will be hidden on devices using a smaller screen.

```
001 #branding img {
002 display:none;
003 }
```

09 Resize header image
If you don't want to hide the header image on your blog you can choose to resize it instead. Add the code above instead of the code from Step 7. In this example the code has set the image size to 100% of the main frame (as in Step 6).

Themes



```
001 #branding img {  
002 width:100%  
003 }
```

10 Manage blog description

Your blog description may take up screen space that you'd rather use for actual content. Add this code and the description will be removed on smaller screen sizes. Alternatively you can also reposition the description into a more optimal position. To do this you will need to replace the `display:none;` line from the example above with another command. For example, to position it to the left add `float:left;`

```
001 #site-description{  
002 display:none;  
003 }
```

11 Setting more aspects

The code above refers to the navigation bar size and the width of the content container. As per the previous steps we're not setting a specific size for these two items. Instead we are instructing it to be the same size as the main frame (as per Step 8).

```
001 #access{  
002 width:100%;  
003 }  
004 #content{
```

```
005 width:100%;  
006 }
```

12 Adjust text placement

You can make adjustments to how your blog content is positioned on the display. In the example above we have moved the margin of the post content layer 13px to the left. It may not sound like much but when it comes to working on a smaller screen every little bit of space helps.

```
001 .hentry{  
002 margin-left:13px;  
003 }
```

13 Tidying up

With the previous piece of code we have found that our content and sidebar have clashed over the top of each other. This is when deciding what to keep and what to rearrange comes into play. The first section from the code above removes the sidebar completely. The lower section resizes the footer section of your blog.

```
001 #primary{  
002 display:none;}  
003 <blockquote>  
004 #footer{  
005 width:100%;  
006 }
```

14 Powered by Wordpress

The Twenty Ten theme also features a 'powered by Wordpress' tagline that appears along the bottom of the display. The code above moves it to the left of the screen. If you want you can swap everything in the brackets with `display:none;` this will remove the banner line altogether.

```
001 #site-generator {  
002 float:left;  
003 margin-top:5px;  
004 }
```

15 Resize lower border

The Twenty Ten theme has a black border line that runs across the bottom of the page. We will need to make sure that it does not overrun the edge of the screen. The code above will take care of this problem by resizing it to the same 100% value as used before.

```
001 #colophon {  
002 width:100%;  
003 }
```

16 Job done

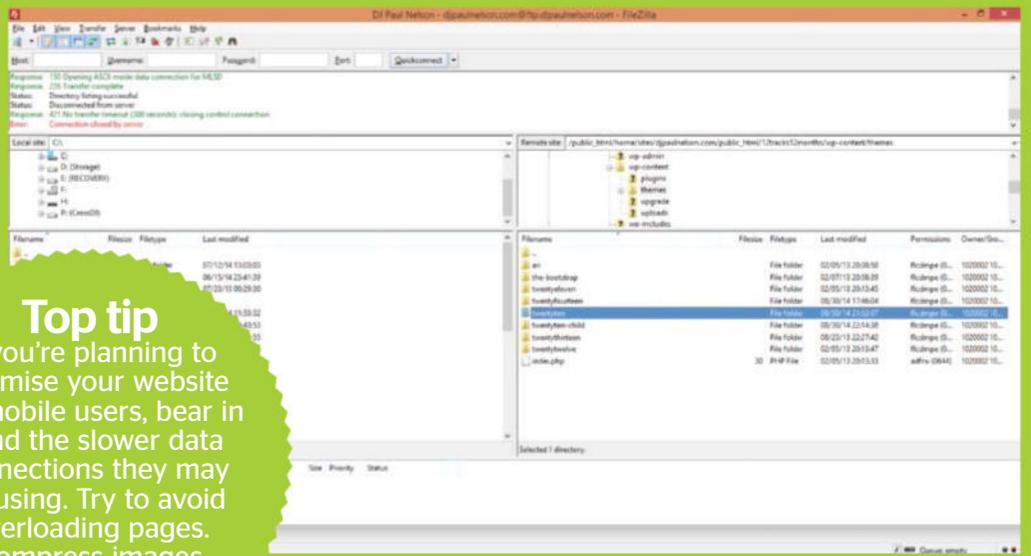
If you've made it this far well done! Your theme can now adapt to a smaller screen size. It may not be as comprehensive as a fully responsive theme but at least you now have a backup plan for browsers running on smaller screen sizes.



Testing your theme

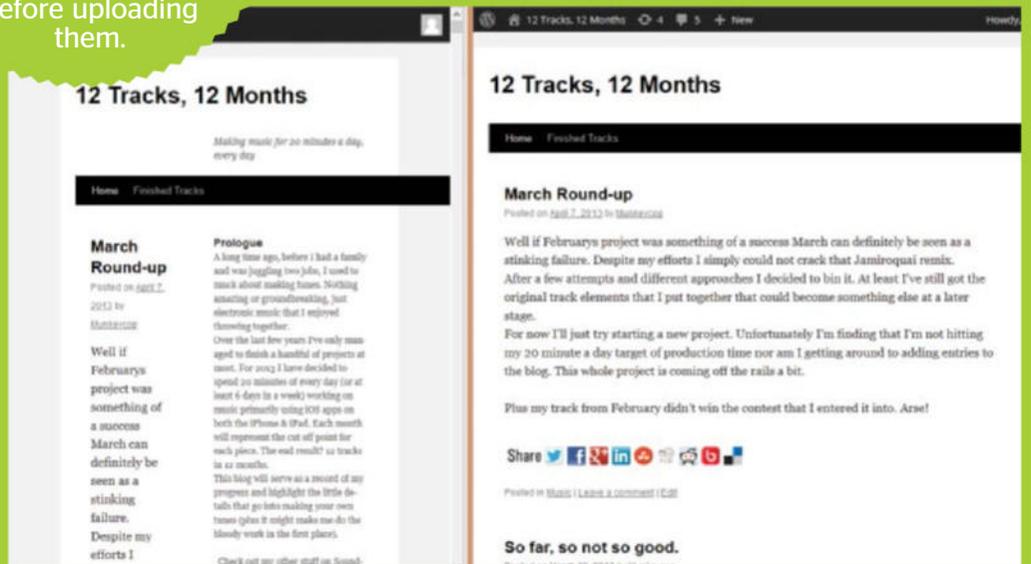
Part of getting your mobile based theme right is seeing what it will look like on other platforms. This can be tricky if you don't have access to devices such as tablets. Fortunately there are online tools that can simulate the experience. Such examples include [mobiletest.me](#) or [responsinator.com](#). With these tools you simply enter your WordPress URL into the website and select a device. You can also browse within the simulators to see how your links and embedded content will work. There are also similar tools embedded into Firefox and Chrome which can simulate smaller screen devices. With Firefox hold down CTRL, SHIFT and M to activate the feature. With Chrome press F12 and select Emulation from the dev tool menu (availability will depend on whether it has been activated in dev tool settings).

Top tip
If you're planning to optimise your website for mobile users, bear in mind the slower data connections they may be using. Try to avoid overloading pages. Compress images before uploading them.

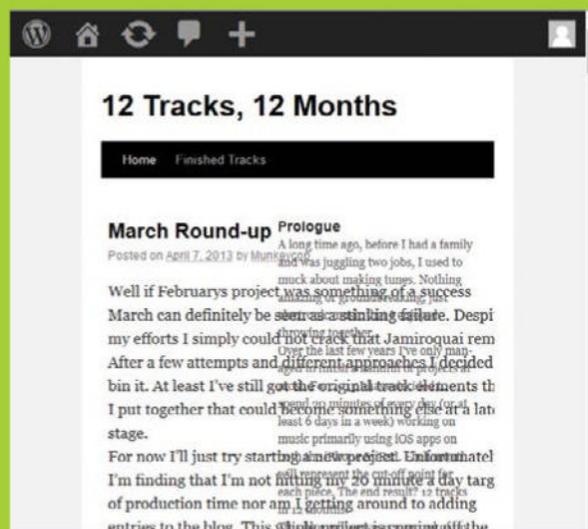


 Bear in mind the slower data connections of mobile users 

Top tip
Part of optimising your site for mobile is streamlining the content itself. Users viewing on a mobile screen may be inclined to skip through long posts. Try using bold headers and paragraph breaks.



- <top>**
 - You will need to upload your child theme to your WordPress installation as per the steps in our previous tutorial
- <middle>**
 - You can check to see if your theme is becoming responsive by reducing your browser window. On the left we can see our theme resizing, on the right it is not
- <bottom>**
 - The sidebar is crashing into our main content. We either need to move it to the bottom of the screen or hide it altogether



Themes





TRANSFORM **HTML** TO **WORDPRESS**

We show you how to avoid the potential pitfalls when transforming a HTML mockup into a custom WordPress theme



THERE ARE MANY ways to go about designing a website in general, and a WordPress theme in particular. A design idea can spark from something you've seen, or perhaps come together in your mind based on your client's specifications. Either way, you'll get an idea, you'll draw it out - in your mind or using some sort of tool - you'll probably do a mockup or three, and then start developing. Of course it usually isn't that simple. All those pesky clients have their own ideas and want input, even though you know that you know best.

Some people think you should design in the browser, and while perhaps that might not be a universal truth to subscribe to, it can be useful to employ it at times - perhaps completely avoiding Photoshop all together. Even among all the technology we have these days, it can be incredibly useful to do sketches on paper before moving on to doing elements in something like Sketch. After that you can start cranking out the markup to see how well it works in a web browser.

That's what this is all about. You've got an idea, a sketch, possibly a mockup, and then you write the HTML and CSS to test everything out. Perhaps you'll even use your HTML version as the client mockup, making sure that the client actually sees what they'll get, or you do it as a part of your process. No matter what the methods used are, should you employ the HTML mockup technique rather than just jumping directly into coding a theme based on any PSD files, you'll find that there is a lot of time to be saved - and several wins to be gained as well.

Considering this, this feature will show how to create a WordPress theme. There's an idea, there are sketches, there are thoughts and suggestions regarding mockups, traditional as well as HTML based. Then there's taking an HTML mockup and creating a WordPress theme out of it. Perhaps you've never done this before or you're a seasoned veteran who used to and sell themes based on your PSD mockups. Either way, there might be something in this methodology to help you improve your process.

Failing to plan is planning to fail

To kick off a project, get a design idea, some sketches, and then a quick mockup. This will have all the first phase bases covered

Get some ideas

Today's publishing landscape looks very different to how it did before blogs entered the market. Blogs are more than personal diaries, and the concept is used on just about every modern publication. With this, the possibility of doing a professional publication powered by the best of the blogs has opened a lot of doors, and has given us great sites such as The Loop (www.loopinsight.com) and SplatF (www.splatf.com). These are modern publications using the best of the blogs, in a modern way.

This project will borrow heavily from this approach, but not forget about the publishing landscape's past. In other words, the WordPress theme that you'll end up with will rely on typography and content first, but it won't be limited to personal nor professional blogging as such. Not that any theme truly is of course, but themes can surely be more or less suitable for one or the other.

Start sketching

This project started with some freehand sketches on paper, as it can be more suited to small and straightforward projects as this one. The absence of eraser tools and layers can be a nuisance, but it can also be an asset since everything you do is committed to paper. That fact might help you focus, but as always your mileage will vary.

The design is simple. There will be a strong yet thin frame that connects to the various headings by underlining them. The typography is the visual element that carries this design, but since WordPress supports custom backgrounds, and there is the outer frame to part the content area with whatever background is chosen, we'll take that into account as well. This means that we're being limited to near black border

Benefits of planning ahead

● Clear for the client

Sometimes the client has a hard time visualising how a design will turn out. HTML mockups put this to rest by inviting the client to click around in the web browser.

● Get a head start

When the client approves the mockup, you'll have a head start on the development since a considerable bulk of markup and the stylesheet is ready. That is, if you write the code yourself and don't rely on exports from mockup software.

● Mobile makes sense

Looking at a traditional mockup and trying to understand how the design will work on a mobile device is hard for most clients. Mobile design is driven by actual interaction, so that's what you'll want to show off. With a HTML mockup, you can.

● HTML conveys visual effects

If your design employs any kind of effect, transition, or something flashy that makes it pop just like the client wanted, there's no way to convey that in an image.

● It's honest

Your client might love your Photoshop mockup, but when they look at it on their Windows XP laptop, everything just looks dirty and jagged. If you show them a HTML mockup, they'll see the real deal instead.

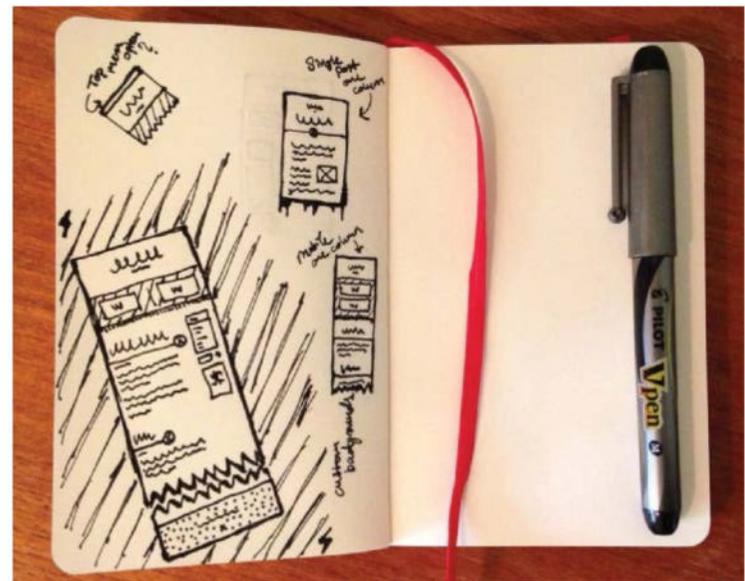
colours, since we won't know what sort of background image that'll be used, but that's a fair compromise. It does limit the use of colours on the site, especially concerning links, but the idea is to keep it muted and classy anyway. Besides, changing colours with CSS in a child theme is simple enough, so it's almost a moot point.

Design mockups

For a client project it would be prudent to not only show off (and clear) sketches like these, but also design mockups. The beauty of doing an HTML version first is that it can be your mockup, and as a result, a lot more true than any Photoshop image you might be presenting to your clients. With HTML, you can get the correct font rendering, transitional effects work as intended, the mockup will be viewed in a web browser, and viewing it on mobile is a breeze.

Larger projects with a lot of different templates and design elements might benefit from having a mixture of traditional mockups, as well as ones done in HTML. You could benefit from using software that supports exporting to HTML, which might mean you'll get a near-finished HTML mockup to work with. Do remember however, that exported HTML from software can feature some truly awful markup, so don't always count on using that code. It is often best to simply write the HTML mockup code yourself, making sure that, should the design be cleared, you'll have proper markup that you can use for when the real development gets going.

Top tip
Be sure to clear the type of mockups you'll deliver to your client beforehand. Some clients expect a certain type of delivery, and you don't want to get off on the wrong foot.



<above> These simple sketches show the design in both a desktop and mobile state. This will be the first phase in the process. Remember to make some notes.

**STAGE 1: THE PLANNING**

Mobile first

Begin developing the bare bones of the project by exploring the mobile platform first

Clear content

The content templates on mobile will actually share a lot of their desktop counterparts, which is one of the advantages of the cleaner, more content-focused design seen around the web today. The site title will be positioned up top, small but clear enough, and then we'll give the page title more room with large clear type, and centred. There'll be a line connecting to the sides, but we'll cut the avatar to save in http requests and space. The actual content is one column on the desktop site as well, and the only things that differ between these two are the size of the font and the various scaling of images. Floating an image on the right-hand side won't look particularly good on mobile if the image covers almost all the screen, so we'll size it down accordingly. Other than that, it's pretty straightforward.

The right-hand column is cut out altogether on the mobile version so we won't have to worry about that.

However, there might be a menu that needs to be handled, so add a specific mobile-only menu to the mobile version, right at the very top.

White space

Archive pages (pages listing several pieces of content), have less in common with the desktop. Centre the titles, cut the avatar, and rely on a simple line across the page. Providing ample white space between the posts will help avoid any confusion.

The front page's top widget area needs dealing with. We'll keep the background but the widgets will be stacked rather than side by side. This is something that needs considering for a lot of designs, and especially for the devices between smartphones and tablets/desktop – to stack or to scale down? For our purposes, we'll stack them as it mingles well with the content.



Why go mobile first?

By designing the mobile version first, you'll get to the heart of things, and then you can add to the design as you scale up in screen size. This is also a good exercise to get to the gist of your project, as only the most important things will make sense on mobile.

Top tip
Horizontal menus tend to scale poorly, so many sites rely on the hamburger menu. Having multiple menus is the easiest way, hiding them with media queries.

On the desktop

Scaling up content

Scaling up from the mobile version is easy when you've decided to go with a single-column design. Creating a site where the content is easy to read and with ample room for images is more important than adding clutter with a right-hand column that won't add anything important on single pages. The side-column is of more use when you're searching for something, which is why it sticks around on archive pages.

The content page on desktop and tablet borrows all the features from the mobile version, but with some additional carefully chosen elements. There's an avatar, for example, which adds a bit of personality to the site, and we're connecting with the 'line under title' concept by mingling the avatar with the line that connects to the outer frame. Aside from this, everything should be relatively straightforward.

The logo and site title are smaller on archives, which gives more room to the large strong page title. We'll use a desktop-only top menu here, should the site owner have such needs.

Archive

The archive pages on desktop and tablets have an additional column on the right-hand side. This column is only present on archive pages, which hopefully means that the end user will employ it accordingly, by adding features that help the visitor find whatever it is that they are looking for. Search fields, latest posts, menus and whatnot are appropriate, Twitter and Facebook boxes might be okay, but the general rule still applies: Do not add clutter.

The post listings differ a bit as well. The titles are underlined and connected to the outer frame, and we'll implement the author avatar in listings too. For this site we'll let the site owner decide where the posts should be cut, by inserting a 'Read More' link using WordPress's built-in feature for this – but depending on your needs, an excerpt might just be a bit more prudent.

Finally, the front page has got a dedicated widget area position at the top, made with two widgets in mind.

Finder File Edit View Go Window Help



Key WordPress components

A WordPress theme is made up of individual parts that all have a place

The menu

WordPress has a handy built-in menu interface that we'll make good use of. As always, you should use the default features whenever possible because it makes the theme a lot more futureproof. Since horizontal menus are a nuisance on mobile, we'll have two menus: one for desktop and one for mobile, showing the appropriate one via CSS. In this case we won't do a hamburger or dropdown menu for mobile, but a site with a lot of sections would likely need something like that.

The site title

Some sites will find it perfectly reasonable to have a text-only title (and a tagline), but most will probably want to have a logo of some kind. To please both camps, do a check for a header image (a standard WordPress feature that can be activated in the theme) and if there is one it can be outputted with that, and no text title or tagline. If no header image is uploaded, then just display the site title and tagline as entered in the WordPress settings.

The post flow

While the HTML mockup depicts the front page, the method of displaying the river of posts will be the same in all archive pages, including categories, tags and search results. It's a pretty basic flow, chronological with the newest addition up top, which we'll output using a standard loop. For this design there is no support for post formats (such as asides, dedicated video posts, and so on), but it would be a small feat to add them and make them stand out, thanks to the strong titles for the standard posts.



Front page widgets

The front page features a widget area below the header, which of course can feature both text and a logo. This area is meant to host two widgets, but it can display more should the user require it. When viewing the site on the desktop, the widgets sit side by side, but on lower resolutions they'll stack up instead, taking up the full width. This is the only important thing worth remembering when populating this area with widgets. In the HTML mockup there are only two text blocks here, but the widgets could be used for anything – perhaps a cover and blurb pointing to your latest book?

Use the default features when possible to make themes futureproof

The side column

The side column on the right-hand side will only be present on archive pages. Much like the front-page widget area, this consists of widgets only. Unlike the front page widgets, the side column won't be visible on smaller devices, meaning that you shouldn't rely on it for important things. To keep things interesting, and possibly problematic due to floating issues, the sidebar is actually floating to the right, with the posts wrapping around it. You can fetch it using the standard `get_sidebar()` template tag.



STAGE 2: THE TRANSFORMATION

Essential elements

The stylesheet, functions file, header and footer are key inclusions

Adding style

The stylesheet, or style.css, is one of the mandatory files in a WordPress theme. It's not so different from regular stylesheets but for the heading, which consists of every detail needed for WordPress to understand that this is in fact a theme, and not just some random collection of files. If you want, it is possible to have several stylesheets and load them as needed, but as always this should be carefully considered since it means additional requests and potentially longer loading times.

This theme is called Words Of Importance, because hopefully that's what it'll be used for when released

to the public. This means we've gotten started, with a folder called woi, and a copy of our style.css file, with the necessary theme declaration added up top.

```
001 /*
002  Theme Name: Words Of Importance
003  Theme URI: http://tdh.me/wordpress/
004  Description: A clean theme meant for
online publishing, what else?
005  Version: 1.0
006  Author: Thord Daniel Hedengren
007  Author URI: http://tdh.me
008 */
```

Get functional

The functions.php file is the place where you add support for various things in your theme, as well as add any other theme-related functions you might want. Common things that functions.php should be used for include activating support for custom header images and backgrounds, registering menus, and of course declaring the widget areas. We need to do all that, and other than the widget areas we'll do it by adding the necessary code to a theme setup function.

```
001 function woi_setup() {
002 // Add RSS feed links to <head>
003 add_theme_support( 'automatic-feed-links'
004 );
005 // Add custom background support
006 add_custom_background();
007 add_theme_support( 'custom-header',
```

```
    $args );
008 // Register menus
009 register_nav_menu( 'desktop-menu', __(
'Desktop Menu', 'woi' ) );
010 register_nav_menu( 'mobile-menu', __(
'Mobile Menu', 'woi' ) );
011 }
012 add_action( 'after_setup_theme', 'woi_
setup' );
```

Theme setup is added to the after_setup_theme action, whereas the same for our two widget areas (the front-page widgets and the side-column widgets) will be added to the widgets_init action. Get the full code from the website.

```
001 function woi_widgets_init() {
002 // Front page widgets
003 register_sidebar( array(
```

Side column

The sidebar.php file

There is a great template tag called get_sidebar(), which also includes sidebar.php for you. This template tag will go into the archive templates (including search), which are the only ones displaying the side column.

The sidebar.php file consists only of the minimal markup needed for outputting the widgets in the side-column widget area, which was registered in functions.php. You can do that with dynamic_sidebar(), and by passing the ID of the widget area wanted, which is side-column, again as registered in functions.php. This means that the sidebar.php is pretty straightforward to say the least. Note the ID for the section tag, which is hidden on smaller resolutions, and not displaying any sidebar no matter what.

```
001 <section id="sidebar">
002 <ul>
003 <?php dynamic_sidebar( 'side
-column' ); ?>
004 </ul>
005 </section><!-- #sidebar ends -->
```

Top tip
Make sure that whatever feature you add using functions.php isn't crucial when switching themes. If your feature should carry across themes, then it should be in a plugin instead.

Header and footer

Including header.php and footer.php

Breaking out the header and footer from the HTML mockup is mostly a matter of simply copying and pasting it over. The only thing you absolutely must remember to have if you want your theme to function properly in all instances, is the wp_head() template tag just before the closing head tag. There are some things that usually need to be swapped out, such as every place where the title of the page appears (be it the site title or just the page title) should be dynamic for example. Another aspect that is usually involved is the menu, including the one created in functions.php, as well as custom headers.

While there are a number of things you'll have to change (and should add) when creating the header.php file from the HTML mockup, two things stand out more than others. First, there's the title, as in the title tag title, which should change depending on where on the site you are.

Next, there's the site title/header image feature. A header image needs uploading, which means having to add it to the woi_setup() function created in functions.php. The code will add the support for custom header images, allow them to be just about any size, and remove the site title output when used.

This only adds the support for custom headers, you'll need to actually output it in your header.php file as well. Since the site should work and look good without a header image as well, a check to see whether there is one or not needs to be done, and then act upon that.

Compared to all this, the footer.php template is almost ridiculously simple. The only thing you truly need, except your already present markup, is the wp_footer() tag, that wraps up WordPress, much as wp_head() kicked it off. Put the wp_footer() template tag just before the closing body tag and you're done.

Posts and pages

Displaying the actual content is a key element for most sites. With WordPress, this generally involves working across the various posts and pages

Posts and pages have a lot in common, and although most themes will have separate templates for these, they rarely differ all that much. First of all, as with every template that deals with the things between the header and footer, you need to include said header and footer. This is done with the `get_header()` and `get_footer()` template tags. Second, you need the loop to output the appropriate content. This would be different posts or pages – just one, depending on the situation. Here the templates for posts and pages are almost identical, consisting of the loop, and then an inclusion of another template using `get_template_part()`, and calling for `content-single.php` (for posts) and `content-page.php` (for pages). These templates consist the actual output of the content, but the loop is what's telling WordPress to go look for content.

The `page.php` template is used for pages, and `single.php` for posts. The former is reprinted here. Remember that there is no side column in single posts and pages in this design, so the `get_sidebar()` template tag is absent, and not including the sidebar.

The loop is used whenever content should be outputted, which means that you'll see this again when you get to the archives.

The actual output is in the `content-X.php` files. This is much like the HTML markup you wrote for your mockup, but with the dynamic parts swapped out for various template tags. This includes the post/page title, categories and tags if such are to be used and displayed, the author, and so on – as well as the actual content of course. Most important will be `the_title()` and `the_content()`, for title and content, but adding `post_class()` to your wrapping element (an article tag in our case) is also important if you want some default CSS classes added. For reference, see the `content-single.php` code, which is an adaptation of the HTML mockup created.



<above> A simple post consisting of the ever-important lorem ipsum copy – note how easily the text is lifted through imagery

```
001 <article id="post-<?php the_ID(); ?>" <?php post_class(); ?>>
002 <header class="entry-header">
003 <p class="postmeta postmeta-single">
004 <span class="postmeta-date"><?php the_date(); ?></span> &bull;
<span class="postmeta-section"><?php the_category( ' ' ); ?></span>
005 </p>
```

What's the difference between posts and pages?

Posts and pages aren't so different from each other. They are both post types, and you can add more of those yourself using code or a plug-in. The standard posts and pages differ from each other by the way that they can be used. Posts are meant to hold continued updates, sometimes sorted into categories

and/or tags (which in turn are taxonomies, and yes, you can add your own). Pages on the other hand, are meant as more static things that won't show up in any category archive. In short, posts are the updates and news on your site, while pages are the About Us and Contact information parts.

```
006 <h1 class="entry-title-single">
007 <?php the_title(); ?>
008 </h1>
009 <div class="avatar-single"><?php echo get_avatar( get_the_author_
meta( 'user_email' ), $size = '96' ); ?></div>
010 </header>
011 <section class="entry-content">
012 <?php the_content(); ?>
013 <?php wp_link_pages( array( 'before' => '<div class="page-
link">' . __( 'Pages:', 'woi' ), 'after' => '</div>' ) ); ?>
014 </section>
015 </article>
```

All of these tags that are used to output titles, dates and whatnot are integral to the site and at the heart of WordPress, because these are the ones that manage to actually deliver the all-important content to your site visitors. There's a template tag for just about anything you'll want to output, so if you're a bit uncertain, just have a quick search for it in the WordPress Codex (codex.wordpress.org).

Make a comment

Comments are worthy of a specific mention. There used to be a time when every site should have a comment form, but today with the widespread popularity of social media, it's obviously not that clear. A lot of popular publications, mostly niche ones, are cutting the comment area all together in favour of communication solely through social media. However, there's nothing that says that you can't do both.

If that's not enough, fewer sites rely on the built-in comment functionality in WordPress, instead relying on external services such as Disqus and Facebook comments that provide great functionality and are easy to use. These are all easy to implement as well, especially if you include the `comments_template()` tag in your theme, because plug-ins can add something like Disqus through that.

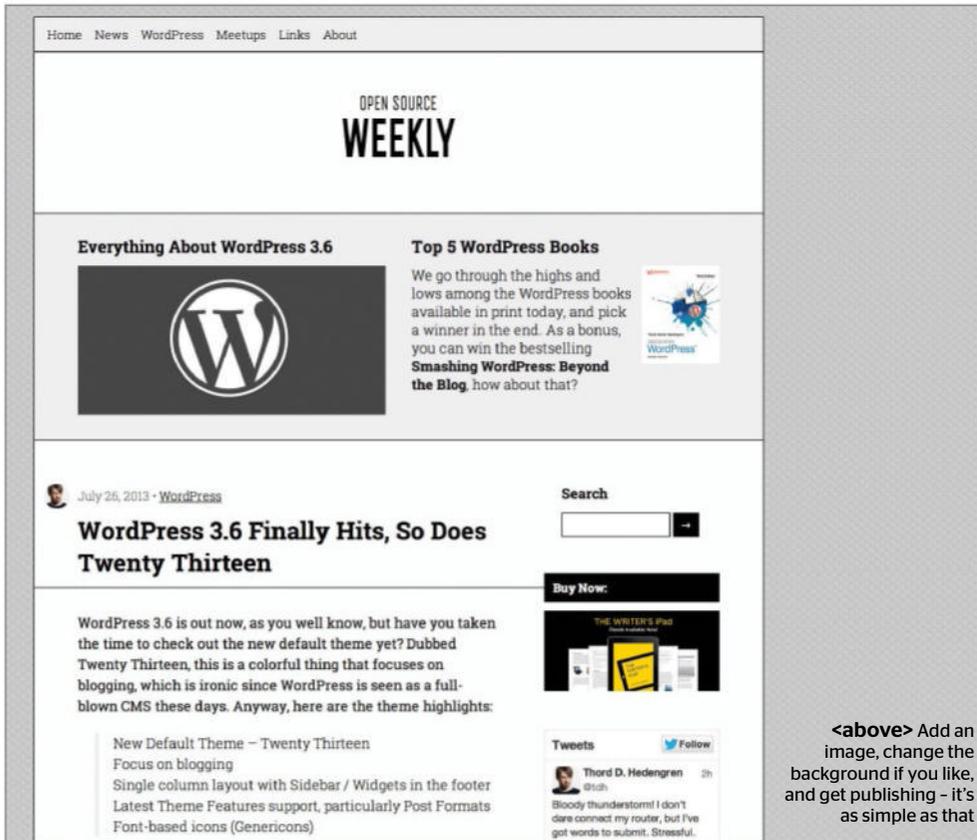
Besides adding the `comments_template()` tag to your templates for single posts and possibly pages, you can either create a `comments.php` template file with the necessary markup for your comments, or just use a function in `functions.php`. For your copy-paste needs, and since you most likely will end up using Disqus anyway, the function for doing so can be found in the full code. Naturally, you'll need to add the appropriate stylings to your stylesheet to make this look any good, and you may want to consider queueing the stock comment JavaScript as well. You can find more information on the queueing scripts in the WordPress codex: bit.ly/9seNB2.



STAGE 3: THE FINISHED ARTICLE

Front Page

Welcome to the site, with front page-only widgets, controlled by the home.php template file



<above> Add an image, change the background if you like, and get publishing - it's as simple as that

Here the front page is basically the archive template, with an added widget area positioned at the top. Through CSS, the site title, assuming you stick with just the text version, is larger on the front page. This is thanks to that the `body_class()` tag, which gives body proper CSS classes - for example, the front page is conveniently named 'home'.

The final step for this theme would be to find out where all the kinks are and adjust them, add all the necessary classes for image alignment and such, as well as run it through the Theme Check plug-in (wordpress.org/plugins/theme-check). There are some things to

tweak and to take care of, but those are a bit outside the scope of taking a simple HTML mockup and converting it into a WordPress theme. One thing you should notice is that there are a lot of little details to take care of to make your WordPress theme complete, something that is easy to forget about. Remember to make sure you leave time to address these little touches as well, before leaving a quote to your client.

If after reading this feature you are interested in following the development for the Words Of Importance theme, then be sure to check in on tdh.me/wordpress for links to the most recently updated version.

Where next?

The HTML mockup is now a WordPress theme, ready to use on just about any self-hosted WordPress install. Now what?

Like most themes, there are things to do. This particular theme would do well to receive a favicon and an Apple touch icon, and before you launch anything you should obviously have web analytics software in place. Then there's the obvious development points, such as featured images for the posts, individual styling for

plug-ins you use, some page templates for your specific needs, and so on. Maybe you just don't like some minor things, which could be sorted out with a child theme, or maybe you just want to fork the theme.

There's always things to do, change and develop with WordPress themes, for some mysterious reason. Enjoy.

Archives

Taking control of post listings pertaining to specific categories or tags

Archives in WordPress usually means category, tag, or even date-based archives. There are dedicated template files for all of these, should you want precise control over tag archives (`tag.php`) or category archives (`category.php`), but chances are you think all these should look and feel the same. Then you can use `archive.php` instead, which is the fallback for all kinds of archives.

Basically, the `archive.php` template file consists of a heading (the visitor needs to know where they are on the site after all), what kind of archive it is that they are viewing, and a loop that outputs the archive contents as defined in the read settings in WordPress.

Search

The `search.php` template is pretty handy if you want to have a little more control of the search result. It's basically an archive when the search returns true, but when it's not, you need to tell the visitor something. The easiest way to do this is to add an 'if' clause to your loop, and then being able to complement it with an 'else' that's only true when there's nothing to output. Also, note the `echo get_search_query()` part, that will tell the visitor what they searched for.

404

The 404 template is one of the simplest, and hardest, ones to create. It's a template called `404.php`, and it's usually almost identical to a `page.php` template. The difference is, the message delivered when someone gets to a 404 Page Not Found page on the site is a static one, that (usually) resides in the `404.php` template file.

In the case of this theme, this file was created by merging `page.php` and `content-page.php` swapping out all the dynamic titles to a hard-coded message.

Fallback

A required template file in WordPress themes is `index.php`. The idea is that this is the theme's last line of defence, the template file that'll be used if no other file fits. In other words, if the theme doesn't have a `category.php` file, and WordPress wants to render a category archive, then the system will look for others. First it'll check for `archive.php`, the fallback for archives, then it'll go back to `index.php`, the final fallback. Treat `index.php` that way, and make sure it returns something.

Plugins

Extend your blog's functions

100 Pro guide to Plugins

Get the inside scoop on using plugins from industry experts

106 Edit widgets and plugins

Change the plugins and widgets you are using on your site

110 Protect your blog from spam

Stop spam comments from making their way onto your blog with Akismet

114 Increase your site visits with SEO

Use Search Engine Optimisation to get more hits for your site

118 Add a social author box

Give your site authors a friendly face with a social author box

120 Build a WordPress slideshow

Showcase your pictures in style with a slideshow

124 Schedule your blog posts

Set a timer for your blog posts with the Editorial Calendar to view your flow

🌸 There are thousands of plugins available to be installed onto your theme and implemented within your site 🌸



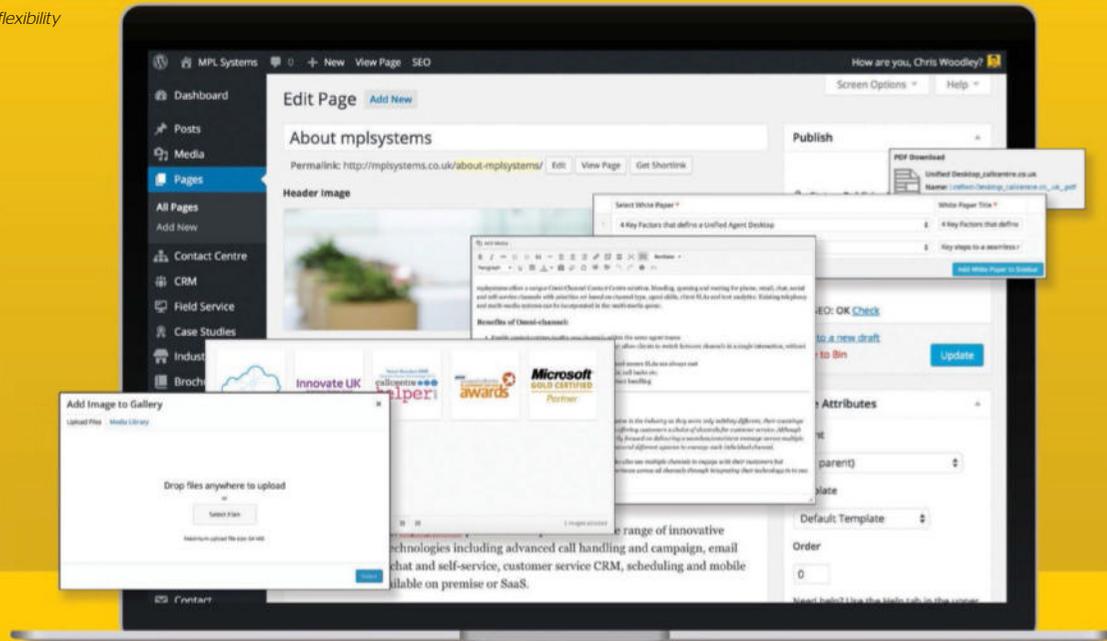




Pro guide to WordPress plugins

DISCOVER SOME OF THE BEST
ADD-ONS, AS SELECTED BY
INDUSTRY EXPERTS

<inset> Beef up your edit screens with bespoke components for more flexibility



Take content management to the next level

Advanced Custom Fields by Elliot Condon

advancedcustomfields.com

The Advanced Custom Fields plugin seriously beefs up your WordPress edit screens. With fields ranging from simple text and image inputs, a support network of users and a documentation site that makes even the most advanced task effortless, like the go-to Swiss Army knife of WordPress page management.

Once installed, how to utilise the power of Advanced Custom Fields becomes apparent after setting up your first field group. Telling the field group which page template you want it to appear on, or which custom post type you would like it to appear within, is easy. And although Advanced Custom Fields is built specifically for developers to create next-level WordPress websites for their clients, the usability of the fields in WordPress CMS feel as familiar as the existing WordPress user interface. This will ensure webmasters have an easy time using the newly added content boxes.

Including Advanced Custom Fields functions in your template files couldn't be simpler. Create a group, add some fields, then add functions such as `<?php the_field('second_wysiwyg'); ?>` to your template files wherever you want the new content to appear. Style the resulting functions by wrapping them in the same CSS classes that you have created within your website's stylesheet - it really is mind-blowingly easy.

A great example for using the Advanced Custom Fields plugin would be to create a manually manageable 'Related Articles' or 'Related Content' area within one of your template files. You'd create this using the Post Object field, which displays a selectable list of posts from all, or specific post types that your site has in place. This gives webmasters additional options when creating pages in order to cross-promote articles, products or just about any type of content. When called upon, WordPress' default functions can be introduced into the code of the Post Object, such as `get_the_post_thumbnail` or `the_title` to make the list of posts more visually appealing to site visitors. You can also include any of the Advanced Custom Fields field data that has been added to the edit screen of a post type template.

Advanced Custom Fields will open up a whole new corridor of opportunity for your WordPress builds, one that your clients and development team will want to explore again and again.

ALTERNATIVE PLUGIN

Simple Fields simple-fields.com

Simple Fields is a slightly less in-depth solution to custom fields. The plugin offers an array of options to extend the WordPress edit screens functionality with a simple, easy-to-use interface.

How to choose the right plugin

01 Do your research

Unfortunately, WordPress plugins don't always play nice with each other. When selecting a plugin, you should always check the WordPress plugin directory for information such as compatibility issues, last updated, number of active installs and user ratings.

02 Set up a testing environment

If you are using a particularly high number of plugins on your site, or are simply concerned by the lack of support for a particular plugin, it makes perfect sense to set up a duplicate of your site and then just test the hell out of it. This is particularly useful when you are adding plugins to a live client site because it can save you from any potential banana skins.

03 Send a support ticket

Well, why not? Sending a support ticket to the plugin developer could give you an idea of just how long the developer takes to respond to any potential future issues. If you don't get a response, or if the response you do get seems a little lax, it might be better to leave it alone because it could indicate that support isn't there.

Back up now

SOMETIMES THE WORST happens, and you just won't have time to fix it. Adding too many plugins can turn your WordPress build into a potential game of Jenga, and sometimes the white screen of death will rear its ugly head.

Adding a plugin? Back it up first. Updating the theme? Back it up first. Updating WordPress to the latest version? Back it up first. Always, always, always back up your WordPress site before changing anything to do with your site's functionality, database, theme or base files.

The Duplicator plugin, found at wordpress.org/plugins/duplicator, is a rapid-fire way to generate a quick launching backup of all WordPress files and your database, in a downloadable, neatly compressed ZIP file. The plugin's very own easy-to-use interface and download facility allow you to create a zipped up 'Archive' copy of your entire site and database as well as an installer.php file that is uploaded to your hosting account's root folder, along with the zipped-up back-up copy, that installs your website to its previous location without any fuss or hassle.

The Duplicator plugin is also great for migrating your site to a new hosting account or even to a new domain. When using the installer.php file to run the installation, you can specify a new URL for your site. Now, once you've deployed the backup to the new hosting account, all URLs found within the site will be automatically updated to the new URL, meaning all of the database data has been edited without having to go anywhere near phpMyAdmin. What's more, it then gives you a handy list of things to check once the installation is successfully complete.

If you take nothing else from this article, this plugin should become your go-to tool for backing up your WordPress site.



Add multi-language support

WordPress Multi Language wpmli.org

WordPress Multi Language is an easy-to-use translation management plugin built by a translation company. The plugin boasts some incredible features that doesn't just include easy management of languages, it's an all-in collection of language management tools built to work within a single WordPress install. Everything from menus to footer credits can be translated into the language that you want with ease with built-in support for custom themes and even other plugins.

The plugin comes with a great set-up wizard that takes you through the whole initial setup. Once you have selected your base language, adding new languages can be done at the click of a button, select

from over 40 initial languages with the added ability to add your own custom language variants. An out-of-the-box language picker can be added to your header or sidebar via the plugins settings area, or you can choose to create your own and add it to your theme's template files where you want the picker to appear.

You also have the choice of how to display your multilingual content, such as using a different domain per language, for example myblog.co.uk, myblog.de or myblog.fr and so on, by using subdomains, like en.myblog.com, de.myblog.com or fr.myblog.com, or by using the default of keeping the multiple languages within the same domain.

Once you've selected your chosen languages, you can then simply navigate to your page's edit screen

Updating
WordPress to the latest
version? Always back
it up first



Elliot Condon
[@elliotcondon](https://twitter.com/elliotcondon)

The developer behind the Advanced Custom Fields set of plugins, Elliot Condon is also a user interface specialist. Follow Elliot's social media and never stray far from the latest ACF features sneak-peeks, updates, news, server downtimes and fixes.



Chris Spooner
[@chris Spooner](https://twitter.com/chris Spooner)

A self-proclaimed "maker of pretty pictures", Chris Spooner offers a great insight into the life of a freelancer and gives away many time-saving tips for the world of graphic and web design. Perfect for seasoned designers and developers alike.



Speckyboy
[@speckyboy](https://twitter.com/speckyboy)

Speckyboy is an online magazine run by Paul Andrew, who is based in Scotland. Speckyboy is a superb resource for web design and development tips, tricks and general inspiration, from CSS to fonts and everything else that's in-between.



Responsive Design
[@RWD](https://twitter.com/RWD)

RWD has everything you need to know about responsive web development. Great for polishing up your techniques or looking for new ways to customise a plugin to ensure it fits in with the mobile world.



LabZip
[@WPLabZip](https://twitter.com/WPLabZip)

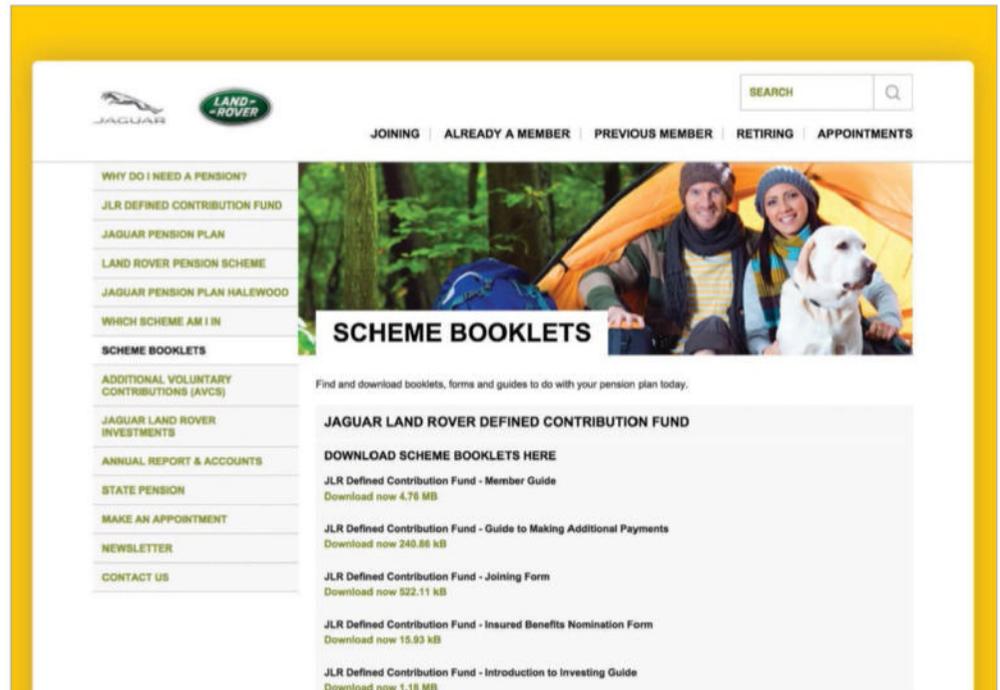
The perfect WordPress Twitter account. It's an Aladdin's cave of all kinds of web goodies. From resources to tutorials, plugins and themes to... well, just about anything. All of this is of course all in one place too. Make sure you give them a follow.

where you will find WPML has added some extra settings to your list of pages. As well as displaying published pages and drafts, you will also be able to see how many pages you have amongst your selected languages, which is a great way to see a quick overview of how many of your master languages pages have already been converted into your desired language. WPML also adds a great visual helper in the form of country flag images when you click into the posts or pages menu within the backend, and from there you can add content for each of your chosen languages as you probably would do for any other page or post.

WPML offers a unique way for you to manage your translation team, with the ability to turn WordPress users into 'translators'. These translators can then be assigned specific pages and posts to translate and a handy overview of all translations and translators can be easily viewed. Here you can see the status of each translation assigned to a specific translator - the whole management process is as streamlined as it gets.

WPML also offers a vast amount of support for commerce sites using WooCommerce and this includes adding translation options for your products, related products, sales, promotions, cart, checkout and even confirmation emails.

If you're having some trouble generating your translations, WPML has the perfect answer in the form of an optional connection to a paid-for translation service that is built right into the plugin. From the translation dashboard, you can send content for translation to your chosen languages and, when complete, it'll appear right back in your edit pages ready to be published straight onto your site.



Create custom post types inside WordPress quickly

Custom Post Type UI

bit.ly/1eCYM8P

Custom Post Type UI offers a great way to create custom post types and taxonomies from inside the WordPress CMS admin area. Say you need a custom post type called 'Movies', and you need to add some taxonomies for actors, year, rating and genre - well this can all be done in seconds with CPT UI. Lots of options are offered up for customisation of post types, including: custom slug, hierarchical (true/false) and customisation of the display labels within the WordPress backend. The CPT UI plugin can also be used to import and export existing custom post types, making backing

up post types fail-safe. Code created by CPT UI can also be copied into your functions.php file for sound and stable creation of custom post types when releasing a theme to market.

ALTERNATIVE PLUGIN

qTranslate
qianqin.de/qtranslate

QTranslate is another multilanguage WordPress plugin. With translations all kept in the same edit page it can create more clunky-looking edit screens, but it has many features of a paid-for plugin.

ALTERNATIVE PLUGIN

Types
wordpress.org/plugins/types

Types is a great way to manage custom post types and taxonomies with the benefit of handling basic custom fields too. Types lets you add extra image fields and text areas within your custom post types.



Chris Woodley
Lead developer
Forme Creative
formecreative.co.uk

HERE ARE FIVE plugins I simply could not do without. These plugins have become as important to my daily workflow as Illustrator, Photoshop and Dreamweaver and are an integral part of my Wordpress backend landscape.

01 Essential Grids essential.themepunch.com

Highly customisable grid builder for displaying posts with uber modern templates. Great for creating portfolios, product sliders, galleries and more.

02 MemberPress memberpress.com

Need to create a membership site with paid-for content and integrated payment gateways? Then MemberPress is the plugin that you need. It is ideal for services selling digital downloads.

03 TablePress tablepress.org

Creating tables in WordPress is not simple. It involves adding custom code and is time-consuming. Who wants to do that? This is a free plugin that enables users to create and manage tables easily and quickly. A table can include different types of data and there is even the option to add formulae.

04 WordPress SEO yoast.com/wordpress/plugins

The only SEO tools you will need that comes with a traffic light scoring system. This plugin has a host of extremely useful features including content analysis functionality, assistance in writing better content, the option to automatically generate XML sitemaps and remove code bloat.

05 Contact Form 7 contactform7.com

This is the hassle-free option for creating simple contact forms for file upload. It's a flexible and powerful plugin that is easy to use. Create a form, pick options and copy the shortcode to a post.

<inset> The new MPLSystems website uses the Slider Revolution plugin for its home page slider, with a second fullscreen slider optimised for mobile view



Get responsive-ready sliders

Slider Revolution

revolution.themepunch.com

The Slider Revolution plugin gives you an ocean of customisation options for website sliders. With options like fullscreen display, responsive-ready (out-of-the-box) transition effects and custom animations, you'll never see the same transition twice.

A unique feature of the Slider Revolution plugin is its 'Slide Template' option. The slides can then be easily created on the fly by using information found within posts or custom post types and presented in a prebuilt or custom-made template.

Slider Revolution supports YouTube and Vimeo video content and image-based content within the same slide. JQuery transitions, multiple layers, Google Fonts, custom CSS and many more great features have helped make Slider Revolution the most popular slider plugin on Envato as well as being extremely popular among theme developers.

With its application-like interface it does take some getting used to - you wouldn't want to hand this plugin over to a less-than tech savvy client. However, things like the plugin's drag-and-drop caption placement functionality and the slide duplication feature mean that once you have finally settled on a layout, creating new slides is a breeze.

ALTERNATIVE PLUGIN

WooSlider

bit.ly/1ItYDAV

WooSlider is a simple and straightforward alternative to Slider Revolution. WooSlider offers a slimmed-down set of functionality with the added benefit of Instagram slides and a carousel slideshow option.

Explore these must-know plugins & resources



PLUGIN

BuddyPress
buddypress.org

BuddyPress is the ultimate social network plugin for WordPress. With groups, private messaging, activity streams and notifications – to mention just some of the great features this plugin offers – you really don't need any other social network plugin in order to get up and running, for any type of subject, for any number of members.



PLUGIN

W3 Total Cache
bit.ly/1K16aUr

Everybody wants a faster and more efficient WordPress install. Why? Because it engages more visitors and of course Google likes it as well. A faster site equals a better ranking. Ever since Google's recent algorithm upgrade speed has become a very important factor in getting a good ranking. The W3 Total Cache is one of the most widely used speed and performance WordPress plugins. W3 Total Cache is a complete framework that improves site performance by up to ten times by combining a series of minifying tasks and caching processes that dramatically improve the overall user experience. In addition it also offers transparent content delivery network (CDN) integration.



RESOURCE

Template Tag Reference Guide
bit.ly/1OQFFW9

This site, produced by DBS Interactive, a US-based digital agency, is a comprehensive reference guide for WordPress template tags listed in an easy-to-follow format. What's included in its guide? Author tags, bookmark tags, category tags, comment tags, date & time tags, Include tags, post tags and much more. The beauty of the site is that each tag is displayed inside a collapsible panel. All you need to do is click the desired tag and a host of information appears. This will give you a brief overview of the tag, the code in action and what each element of the code means. If you need to, simply copy and paste the code and modify accordingly.



PLUGIN

WP Maintenance Mode
bit.ly/1zFgcHT

This is a simple, yet amazingly effective WordPress plugin. WP Maintenance Mode is perfect for new sites not yet launched with its timer count-down feature and coming-soon splash page. It's also perfect for instances when you are working on a live site if you don't want your visitors to see your half-finished masterpiece.



PLUGIN

Max Mega Menu
maxmegamenu.com

Max Mega Menu is a ready-made mega menu replacement for your WordPress theme. Just drop it in and you're good to go. It uses a simple column system in order to help create user-friendly and easy-to-navigate mega menus. With easy CSS editing you can use this plugin and customise it to complement or match any brand or colour scheme.



PLUGIN

WooCommerce
bit.ly/1rUkc7M

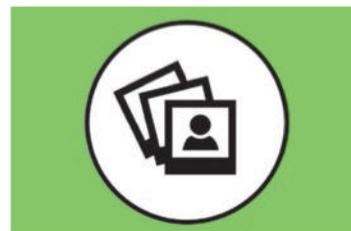
Possibly the best-known WordPress plugin, its power matches that of WordPress itself. It's ecommerce out of the box, giving developers and store owners total control over their online store. With over 29 per cent of market share, WooCommerce is now the most popular ecommerce platform.



RESOURCE

Lynda.com
lynda.com

From Adobe Certified Experts to world-renowned coding gurus, lynda.com is the type of online video tutorial resource where the knowledge of and teachings from the contributors is second to none. The information found within it can be trusted to be accurate, up to date and reliable.



PLUGIN

WP Smush
bit.ly/1DcZmpB

WP Smush is a superpower image optimising tool for your site. Scan and reduce your image file sizes upon upload, reduce load times, keep those high-quality visuals and make search engines love your site even more. WP Smush is a worthy inclusion for each and every WordPress website that you end up building.



RESOURCE

WordPress.org
wordpress.org

Perhaps a little obvious, but constantly overlooked, WordPress.org is where the developers responsible for bringing us WordPress go to 'hang out'. You can learn about every function, find out about the most popular themes and get involved yourself by contributing towards the WP core or by joining the support team.

Edit your widgets & plugins

WIDGETS AND PLUGINS ARE GREAT EXTRA FEATURES TO ADD TO YOUR SITE. UNFORTUNATELY, THEY MAY NOT ALWAYS FIT THE AESTHETICS OF YOUR DESIGN. THAT'S WHERE A LITTLE TWEAKING CAN HELP

🔧 Widgets play a useful role within your website. They can be used to add a search function, list recent posts and display your categories 🎯

TUTORIAL OBJECTIVE

Make edits to widgets and plugins that feature on your WordPress blog

TIME REQUIRED

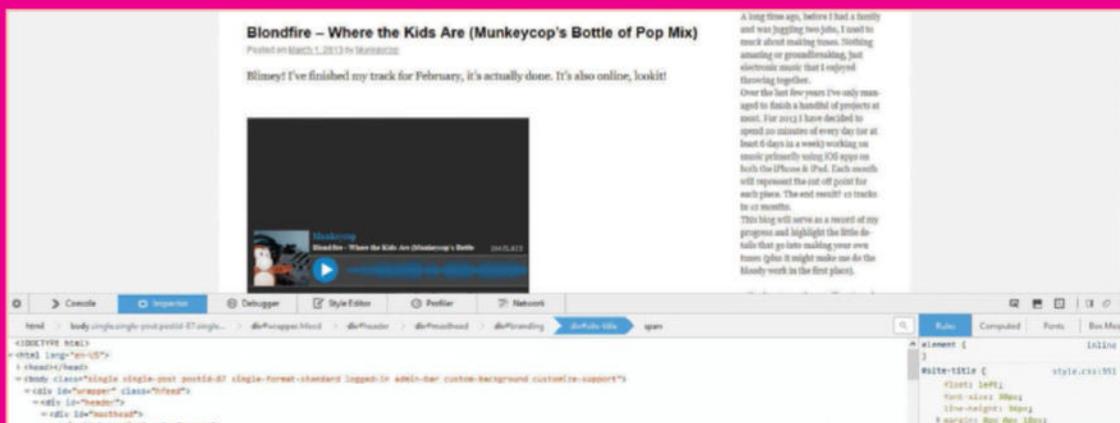
40 minutes



WIDGETS CAN PLAY a useful role within your website and they can be easily applied to your blog via the WordPress Dashboard. They can be

used to add a search function, list recent posts and display your categories. Many themes tend to use the same styling rules for the widgets within a given section. If you have a specific look to your website you may wish to make the widgets a bit more customised. To achieve this you can edit the style.css file within your WordPress installation and have it change the appearance of your widgets.

It's also possible to edit the plugins that you have installed. Depending on the edits you are making, this is a process that should not be taken lightly. If you are not careful you could destabilise the security of the installed plugin.



<left>

• Development tools built into browsers such as Chrome, Firefox and Safari are a useful way of locating the code required for working on widgets

01 Select a widget

In order to edit a widget we will need to decide upon a widget to edit. Aside from selecting the widget, we will also need to find out the name of the widget within the CSS code so we know how to refer to it in our own lines of code. An easy way to do this is by opening a browser such as Firefox, Chrome or Safari and using the develop tools to track down the name that we require on the internet. This is done by right clicking on the location you want to inspect and selecting the relevant Developer option.

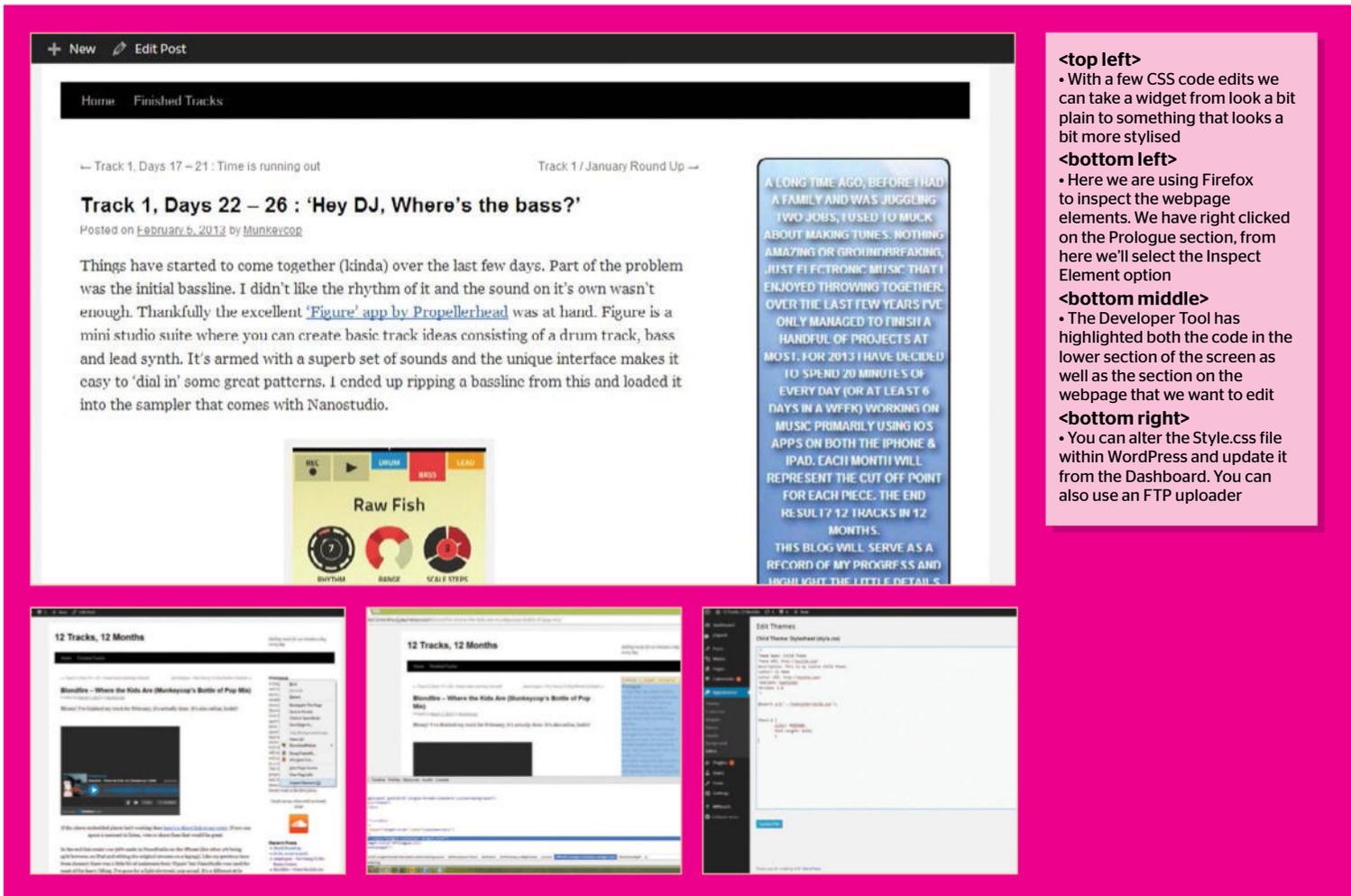
02 Locate information

Here we are looking to modify the text within the prologue section of our website. We need to find the specific parts of the webpage code that relates to this section. In this case, the text that resides within widgets are given a specific ID (usually 'text-' followed by a number). In our case it is #text-2 so we need to apply that reference number within our code. When it comes to the examples in the following steps you will need to substitute text:2 with your own reference number, or else the edits that you make won't apply to your desired widget.

03 Create the code

Above is the code that will make the adjustments to the text in the prologue box. We've set our target, in this case it is #text-2 and the changes are within the curly brackets. In this case it will change the colour of the text to green and display all of the text in bold.

```
001 #text-2 {
002   color: #58D948;
003   font-weight: bold;
004 }
```



<top left>
 • With a few CSS code edits we can take a widget from look a bit plain to something that looks a bit more stylised

<bottom left>
 • Here we are using Firefox to inspect the webpage elements. We have right clicked on the Prologue section, from here we'll select the Inspect Element option

<bottom middle>
 • The Developer Tool has highlighted both the code in the lower section of the screen as well as the section on the webpage that we want to edit

<bottom right>
 • You can alter the Style.css file within WordPress and update it from the Dashboard. You can also use an FTP uploader

04 Add the code

Now we know what changes we are making we need to add them to the Style.css file of our child theme. Above is how the entire section of text should look within the file (although the upper section relating to the theme will contain your own specific theme details). Note that the changes to the text have been added below the @import line. Either we can edit the file locally and upload it via FTP or open Appearance > Editor from the WordPress Dashboard and add the code below the @import line.

```
001 /*
002 Theme Name: Child Theme
003 Theme URI: http://mysite.com/
004 Description: This is my custom child
005 theme.
006 Author: My Name
007 'Author URI: http://mysite.com/
008 Template: twentyten
009 'Version: 1.0
010 */
011 @import url('../twentyten/style.css');
```

```
011 #text-2 {
012 color: #58D948;
013 font-weight: bold;
014 }
```

05 Check the difference

By opening our blog in another web browser we can see that the font has indeed changed colour and style. Everything else about the widgets stays the same as per the theme. So now we know how to make an edit to the widget. From here it's simply a matter of deciding on what else we would like to do.

06 Add a border

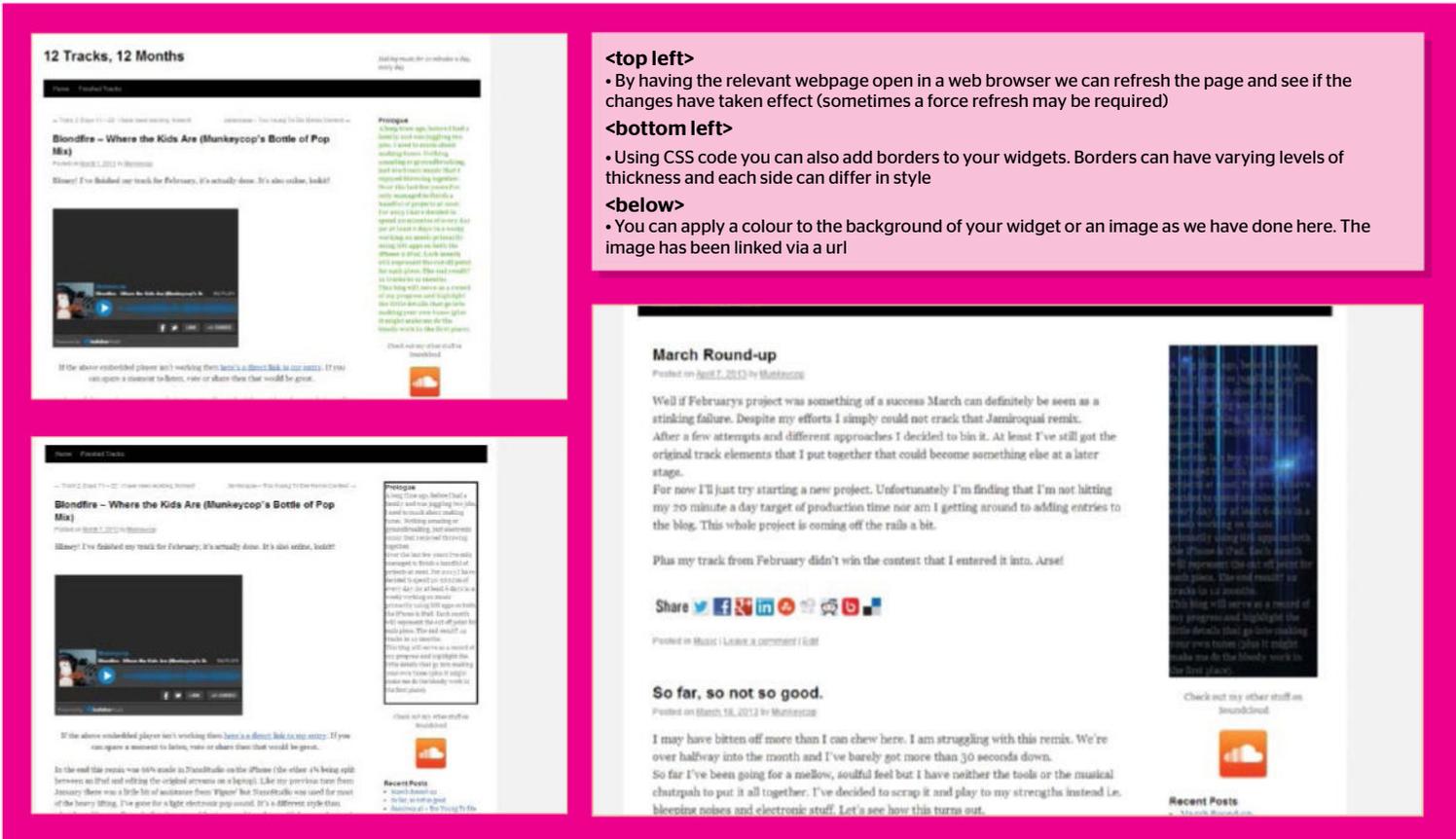
In the code above we have removed the green font and bold characteristics. In its place we have inserted a border command. This will generate a border around the widget that is 3px in thickness. The solid command will create a border consisting of a solid line (alternatives include dotted, dashed, groove, ridge and more). The final part, the #000000, refers to the colour. In this case, black.

Top tip
 This almost goes without saying but it's always worth bringing up. Seeing as we're tinkering with code it's always worth keeping a back up of what you've changed or edited. You'll never know when you may need to take a step back.

```
001 #text-2 {
002 border: 3px solid #000000;
003 }
```

07 Change background colour

Here we have used the background colour command to change the widget background. In this example it now a light purple colour. It's a good example of how you can apply a widget but still make it blend with the design of your blog. You can also use normal colour terms such as purple rather than hexadecimal values.



<top left>

- By having the relevant webpage open in a web browser we can refresh the page and see if the changes have taken effect (sometimes a force refresh may be required)

<bottom left>

- Using CSS code you can also add borders to your widgets. Borders can have varying levels of thickness and each side can differ in style

<below>

- You can apply a colour to the background of your widget or an image as we have done here. The image has been linked via a url

```
001 #text-2 {
002 background-color: #b0c4de;
003 }
```

08 Add background image

Rather than just using a colour you can also choose to insert a background image via a url. Bear in mind that larger images may have an adverse effect on your website load times. You'll also want to make sure that your text is still easy to read when imposed over your chosen image. Images can also be repeated if they are being spread over a larger area. In the example above the background-repeat function is repeating the image in a horizontal fashion.

```
001 #text-2 {
002 background-image: url("insert weblink here");
003 background-repeat: repeat-x;
004 }
```

09 Alter image positioning

With adding an image into a widget you may find that the wrong part of the image has been applied. With the example above we have added an extra line of code. Here we have instructed the image to be displayed inside the widget from the bottom right corner. We can see the changes once we save the code within the editor and refresh our view of the original webpage.

```
001 #text-2 {
002 background-image: url("https://d1.dropboxusercontent.com/u/6726157/DEMO.jpg");
003 background-position: bottom right;
004 }
```

10 Formatting text

Using the code above we have made some basic amendments to the text within the widget. We've changed the colour to teal, and the text is now also centred. We have all transformed all of the text so it appears in uppercase. These are very basic changes but it's minor customisations such as these that can add to the whole layout of a blog. Also available but not shown here is a text-indent tweak that can specify the indentation on a first line of text (ie text-indent: 60px).

```
001 #text-2 {
002 color: teal;
003 text-align: center;
004 text-transform: uppercase;
005 }
```

11 Add text shadowing

An extra line has been added to the code from Step 9. It has added an extra layer of shadowing to the text. It contains four values regarding positioning, shadow thickness and colour. The first value is horizontal placement: positive values place it

more to the left and negative values more to the right. The second value is vertical placement: positive values place the shadow lower down whilst negative numbers move it higher up. The third value is the blur distance: the higher the number the stronger the blur effect. The final value is the colour of the shadow.

```
001 #text-2 {
002 color: teal;
003 text-align: center;
004 text-transform: uppercase;
005 text-shadow: 2px 2px 5px teal;
006 }
```

12 Adding extra touches

At this point our widget just needs some final touches. The first lines are to do with padding. These will insert 5px worth of space on each side of the text column. This will stop the text from making contact with the border on each side. The final line border-radius is a CSS3 command. It's a quick and easy way of adding rounded edges to your border. The higher the number the more pronounced the curved corners will be.

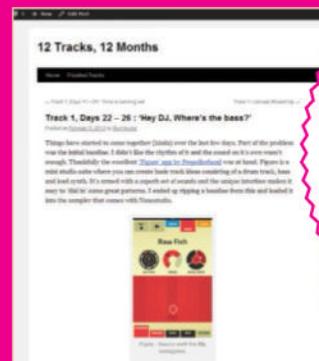
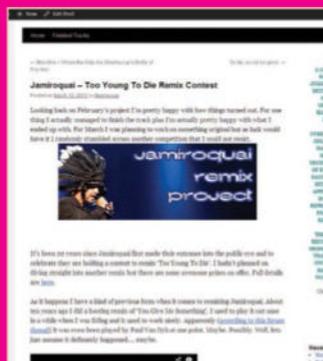
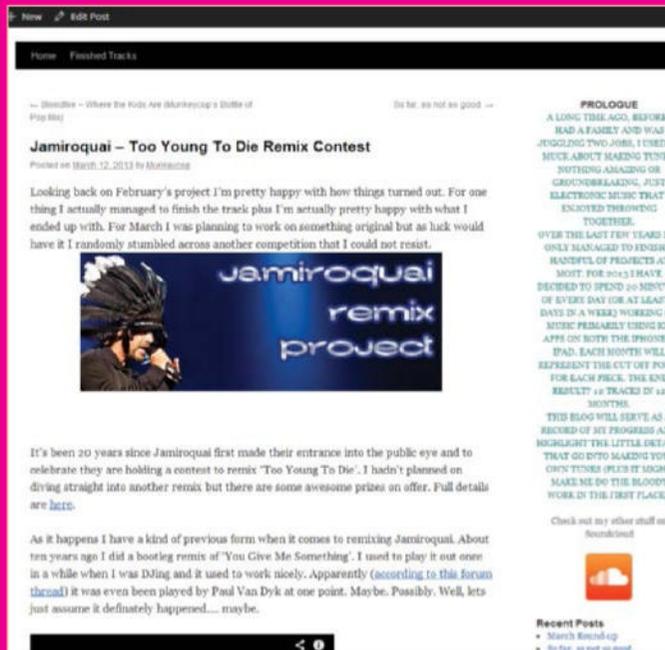
```
001 padding-right: 5px;
002 padding-left: 5px;
003 border-radius: 10px;
```



CSS3 codes

The shadow command and rounded border used in Steps 10 and 11 respectively is actually a CSS3 command (as opposed to a CSS command). CSS3 is the latest standard for CSS, it's backwards compatible with earlier versions of CSS and can be applied within your code. It includes some great new functionality which would have previously taken a lot more work to implement. Beyond the commands we've applied here there are also commands for animating content, adding gradient backgrounds (instead of using images) and transforming elements.

Whilst these new tools are great to use, the CSS3 specification is still in development by W3C (The World Wide Web Consortium). Although many of the CSS3 properties have been implemented in modern browsers, users of anything older may find that their browsers are not capable of applying the code. For more information on CSS3 see www.w3schools.com/css/css3_intro.asp



<top left>

- With just a few edits to the text formatting your widget can start to become something with your own mark on it

<bottom left>

- Newer CSS3 coding tools such as text shadowing make it easier to further enhance a widget and really help make it pop

<bottom right>

- At this stage we're nearly there. We have some shadowing, a border and a nice background image. There's just a little refining required

Top tip

When it comes to editing the code in the Style.css file, keeping a backup is as simple as having a notepad file open on your desktop. Copy and paste code into this to keep it handy as a spare backup.

13 Bringing it together

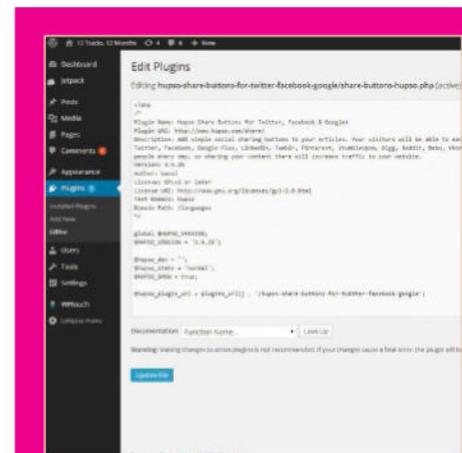
Here is our final result where we have combined the last few steps. We've added an extra instruction at the top regarding what preferred fonts to use. Just below this are instructions to add a little space (ie padding) to each side of the column of text. This will stop the text from touching the border on either side. There's also a little padding at the top to centre the text vertically. We've also chosen to add a background colour as a backup to the background image, just in case it fails to load. Lastly, we have also removed the prologue title through the WordPress Dashboard.

```
001 #text-2 {
002 font-family: Arial, Helvetica, sans-serif;
003 color: white;
004 padding-right: 5px;
005 padding-left: 5px;
006 padding-top: 15px;
007 text-align: center;
008 font-weight: bold;
```

```
009 text-transform: uppercase;
010 text-shadow: 4px 4px 10px black;
011 border: 2px solid #000000;
012 border-radius: 10px;
013 background-color: #b0c4de;
014 background-image: url("https://d1.dropboxusercontent.com/u/6726157/14328387394_950b6ef36b_b.jpg");
015 background-position: top left;
016 }
```

14 Editing plugins

The WordPress Dashboard has a plugin editor which is located within Plugins>Editor, and works as a simple text editor. The top right of the display has a drop down menu where you can select the plugin to edit. The resulting code will appear in the main window. Bear in mind that any edits to this section are lost whenever the plugin is updated. To that extent it's not always an advised option to directly alter the core files due to the security implications involved.



<above>

- There are tools in place for editing widgets, although these days it's not overly recommended. If you need to do a specific tweak to a plugin try asking the developer

Protect your blog from spam

SET UP AKISMET TO HELP PREVENT UNWELCOME SPAM COMMENTS FROM TAKING UP RESIDENCE ON YOUR BLOG

Spam comments are engineered to generate mouse clicks not only to locations away from your blog but to potential online hazards

TUTORIAL OBJECTIVE

Prevent spam comments from making their presence

TIME REQUIRED

15 minutes



GETTING YOUR NEW blog out into the big wide world is exciting.

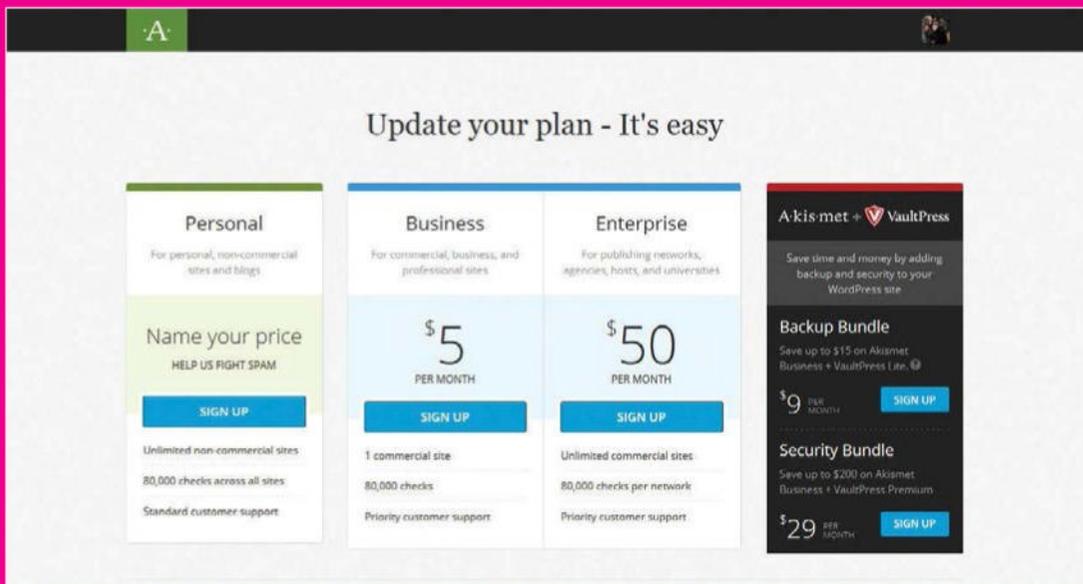
Unfortunately you'll need to protect yourself from the more unscrupulous elements of the internet, namely spam.

If your blog is equipped with a comments section you may find that it will start to swell in size thanks to spam bots sending replies to your blog posts. Of course, these aren't the type of comments you are looking for, and they don't particularly add to the content of your blog. These replies are engineered to generate mouse clicks to not only to locations away from your blog but also to potential online hazards. This can be as much a problem for little known blogs as well as the more commonly known online locations. Even the biggest websites, such as news and entertainment websites, have to deal with spambots.

To keep these pesky spam pirates off your site, an essential add-on to your blog is Akismet. This tool will block spam comments before they even become visible. It works by checking your incoming comments against the Akismet Web Service. Depending on what it finds it will either pass the comment or contain it in a spam folder for you to review. This way, almost no spam will be able to come through without being spotted.

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• A few captured spam comments. Typical signs of spam include dialogue unrelated to the content, questionable email sources, nonsensical user names and general poor grammar and spelling



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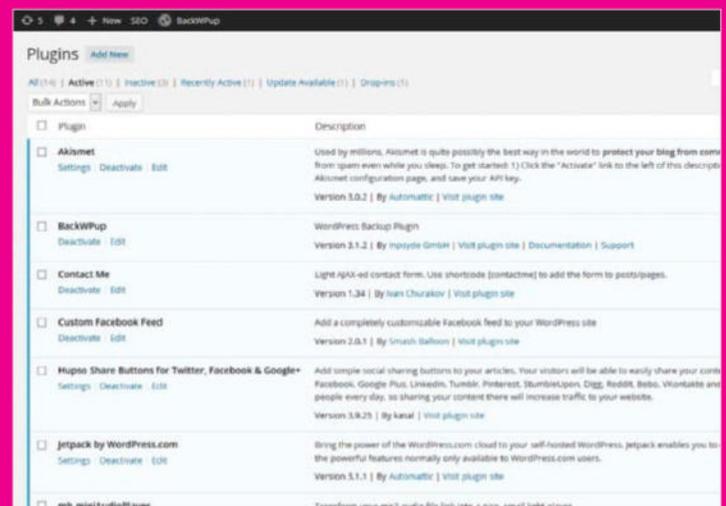
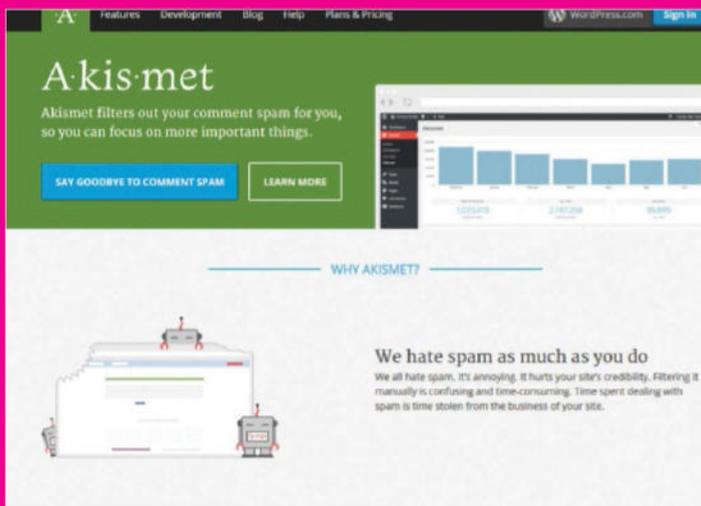
- Whether you're just starting out or a fully established outfit, Akismet can cater to your size and requirements with a variety of packages and services

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- Wordpress hosted blogs come with Akismet as standard. If your WordPress blog is self-hosted you will need to install the plugin manually

<bottom right>

- The process of obtaining your Akismet API key starts from your WordPress Dashboard. Go to Akismet entry in the plugin menu and continue from there



01 Download the plugin
First off you will need to install the Akismet plugin if it is not already displayed within your list of plugins. Click on the Plugins tab on the Dashboard followed by Add New. Enter Akismet into the search box and select Search Plugins. The Akismet plugin should appear at the top of your search results. Select Install now to add it to your plugin collection.

02 Activating the plugin
Activating the plugin is as simple as select the Activate link underneath the title for the plugin. In order for the plugin to work properly you will need to obtain an Akismet API key. Click on the link in the plugin description titled Sign Up For An Akismet API Key.

03 Your API key
You will be taken to the Akismet website from which you can obtain your API key. Select the service

that is most applicable to you (most likely the Personal option). You'll be asked to complete some minimal contact information and also set a donation level to donate money to the developers. Note that for personal accounts donations are not mandatory.

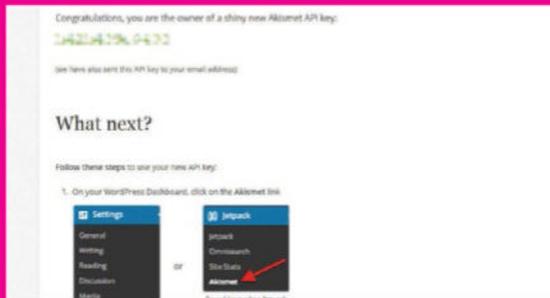
04 API key delivered
Your API key should now be emailed to the email address you supplied in the previous step. Copy this and go back to your WordPress Dashboard. Open the Plugin tab and select Installed Plugins. Paste your API Key into the corresponding box on this page. You can also tag extra options relating to how incoming spam is handled.

05 Blocking hyperlinks in comments
You can also add additional controls on any incoming comments to your blog. From the WordPress

Top tip
You can always avoid spam by removing the comment section via Settings>Discussion and un-tick 'Allow people to post comments on new articles'.

Dashboard click Settings followed by Discussion. You can dictate whether credentials (such as an email address) are required in order to leave a comment. There is also an option to hold back any comments that contain more than one hyperlink. A common approach of spam is to feature a notable number of links in order to drive traffic away from your site.

Plugins



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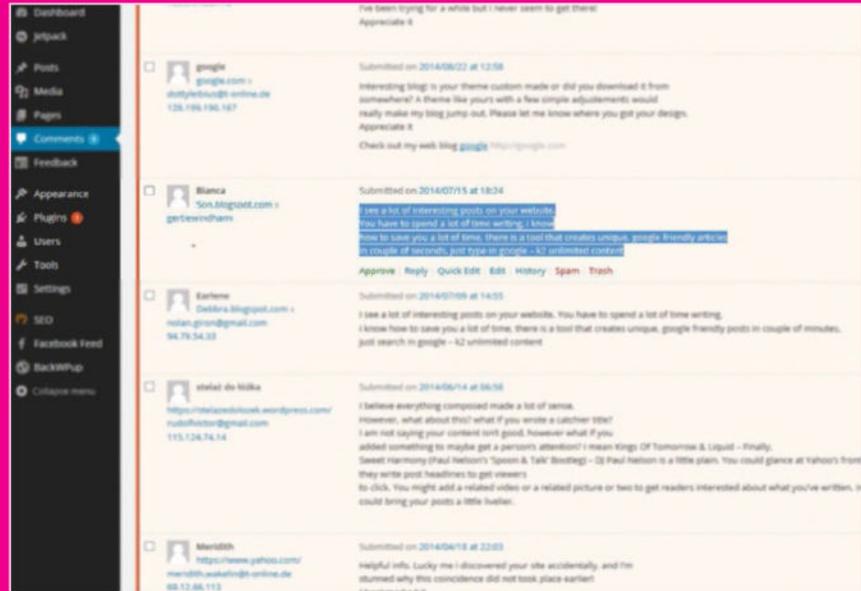
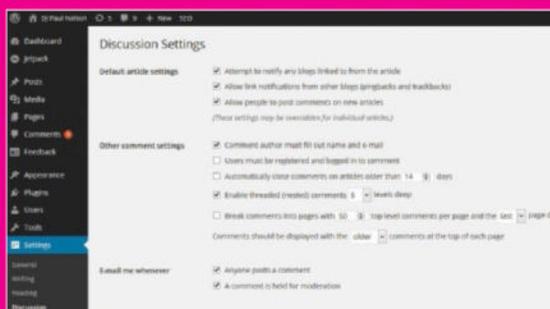
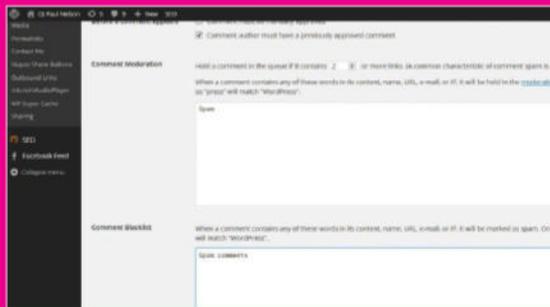
• Once you have your API code you will need to enter it into the Akismet plugin screen within your WordPress Dashboard

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• You can set up filters that will screen out comments that contain particular words or hyperlinks. It can be a powerful tool so go easy

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• Use the Discussion section within the Settings tab on the Dashboard to close comments on older posts and block ping/trackbacks to your site



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• Check the spam potential of a received comment by Googling key phrases from it. If you get multiple exact matches chances are that it's automated spam

Spam commenters are getting smarter; as a result the comment you receive could fool you into thinking you have an inquisitive reader

06 Adding filter words

Within the discussion section you can also add your own keywords that you feel should be scanned for within any incoming comments. Any posts contain these words can be either added to the moderation queue before publication or immediately marked as spam. Bear in mind that any partial matches are also removed so blacklisting the word 'bum' will block comments including words such as album, bumper and so on.

07 Close comments

Within the Discussion settings section is an option to close comments on older posts. You can determine how long this period by setting a timeframe in the respective menu. This can help prevent

spammers from attacking older articles that may have more established web traffic.

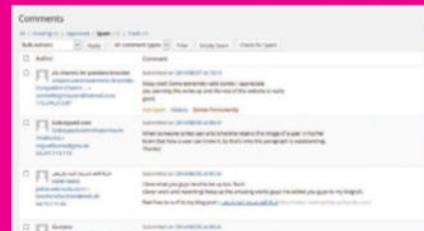
08 Moderating incoming comments

When a comment passes through the Akismet filter don't just assume that it is safe to publish it. Spam commenters are getting smarter; as a result the comments you receive could fool you into thinking that you have an inquisitive reader. If in doubt try Googling a line from the comment. If you see the exact same comment in the search result then chances are that you have a spam comment on your hands.

09 Checking your spam

Once Akismet has captured a spam

comment it will hold it for a number of days before deleting it from your database. Some users argue that it's worthwhile checking your spam page roughly once a week to ensure the plugin hasn't pounced on anything legitimate. Click on Comments followed by the Spam link. You can hover over a comment and select the Not Spam link to remove it from the spam queue.



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• Hover your mouse over a comment header in your spam queue to view the available options. Posts can be deleted or marked as not spam

Trackbacks and Pingbacks

Trackbacks and Pingbacks are designed to operate as a way for bloggers to share traffic around related online content. A trackback is akin to a blogger referencing your post in their own blog (via a link) and sending a trackback. This will appear in your comments queue as a trackback. If manually approved, it will appear in your blog as a title, an excerpt and the link to your blog. Pingbacks largely work in a similar way but the process is more automated. Unfortunately it can be used as a way for spammers to infiltrate your site with the vague promise of extra exposure for your content. In most cases the trackbacks and pingbacks you may receive may most likely be spam. You can disable these in the discussion section of the settings tab.

Top tip

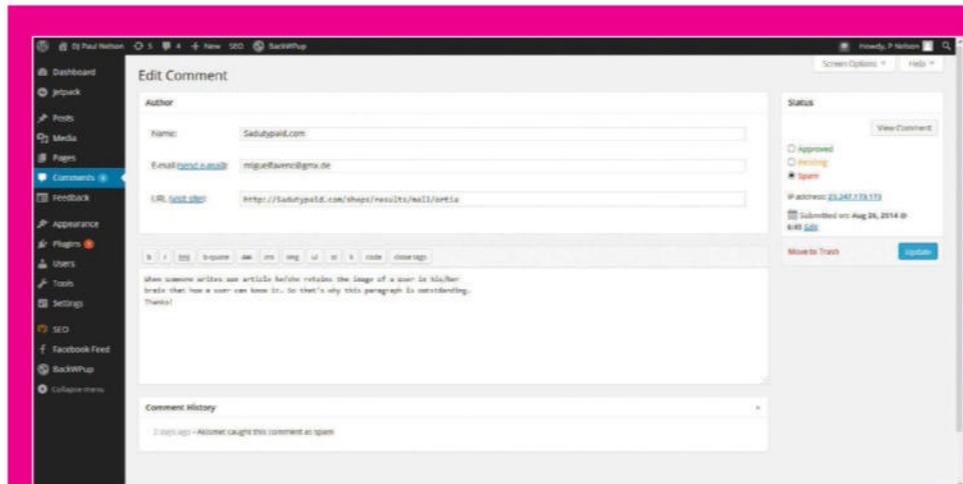
The Akismet widget displays the number of caught spam comments. Add this to your blog by clicking Appearance > Widgets and dragging the Akismet Widget box to the relevant widget area.

10 Adjusting Akismet's strictness

Akismet has two simple ways of operating. It can either instantly remove the most blatant examples of spam, or hold all spam for 15 days in the spam folder before removing it automatically, depending on your preferences. To change this setting, click on plugins followed by the Settings link in the Akismet section. The option is available just below your stats summary.

11 Add Captcha

Captcha has been a useful tool in reducing spam comments. It uses random images which the user must enter manually in order to post a comment. Whilst it can reduce spam it may also annoy regular site users



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• There is also an option to view the history of a comment. This will provide insight into when it was caught by Akismet

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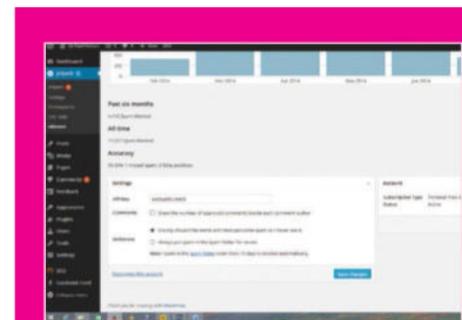
• Captcha can also be a useful tool in preventing spam comments. Try searching the plugins directory for suitable Captcha tools

who comment frequently. Search the Wordpress plugins directory for Captcha to see what's on offer.

```
001 <blockquote>
002 Your comment is currently in the
003 moderation queue. Please do not submit
004 your comment twice it will appear
005 shortly.
006 </blockquote>
007 <input name="submit" type="submit"
008 tabindex="5" value="<?php _e("Say it!"); ?>" />
009 </p>
```

12 Prevent repeat comments

Your users may not be aware that you have comments awaiting moderation. As a result they may impatiently post the same comment again in the belief that their first comment was not received. It's not necessarily spam but it can still be a frustrating knock-on effect of spam management. Open your comments.php file and replace the code <input



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• Click Plugins > Akismet Settings to access the front page of the plugin. Just below the stats are the two different options for toggling Akismet's reactivity

name="submit" type="submit" tabindex="5" value="<?php _e("Say it!"); ?>" /> with the code above. This will help manage expectations and reassure your visitors.

Increase your site visits with SEO

SEARCH ENGINE OPTIMISATION COVERS A MULTITUDE OF DIFFERENT TOOLS AND TECHNIQUES TO HELP TO INCREASE YOUR SITE'S PROMINENCE ON SEARCH ENGINES

🌸 The WordPress SEO plugin by Yoast is a comprehensive SEO tool with lots of advanced features 🌸

TUTORIAL OBJECTIVE

Understand how different SEO tools and techniques can be used to increase your sites viewership

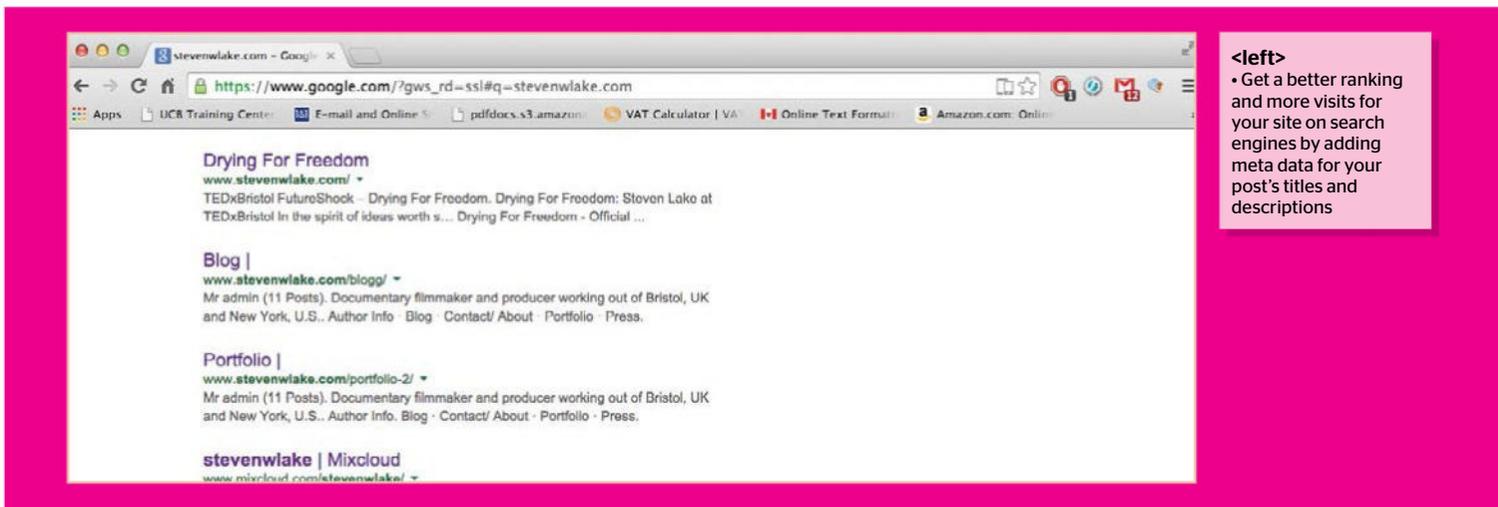
TIME REQUIRED

1 hour



SEO MANAGEMENT IS one of the most overlooked parts of promoting your blog or website. It's important to market your site to potential visitors

via social networks and through the creation of new content, but if you want to increase your viewership and bring in new viewers who you might otherwise not be able to access through social networks then it's time to get into SEO. There are plenty of SEO plugins available for Wordpress. Some are very simple to use but offer limited tools, others are highly advanced. The WordPress SEO plugin by Yoast is a comprehensive SEO tool that includes a lot of advanced features. The developer also offers a lot of tutorials, posts and support to users making it the perfect plugin for wrapping your head around SEO.



<left>
• Get a better ranking and more visits for your site on search engines by adding meta data for your post's titles and descriptions

01 SEO Plugins

If you have a working knowledge of WordPress but are new to SEO then consider checking out some simple SEO plugins. The WordPress SEO plugin by Yoast offers users more advanced options and preferences when working with SEO on your site. In these steps the WordPress SEO plugin will be explored and explained. Install the plugin via the WordPress plugin tool then activate it. The plugin will appear under the title SEO on your WordPress toolbar.

02 Dashboard

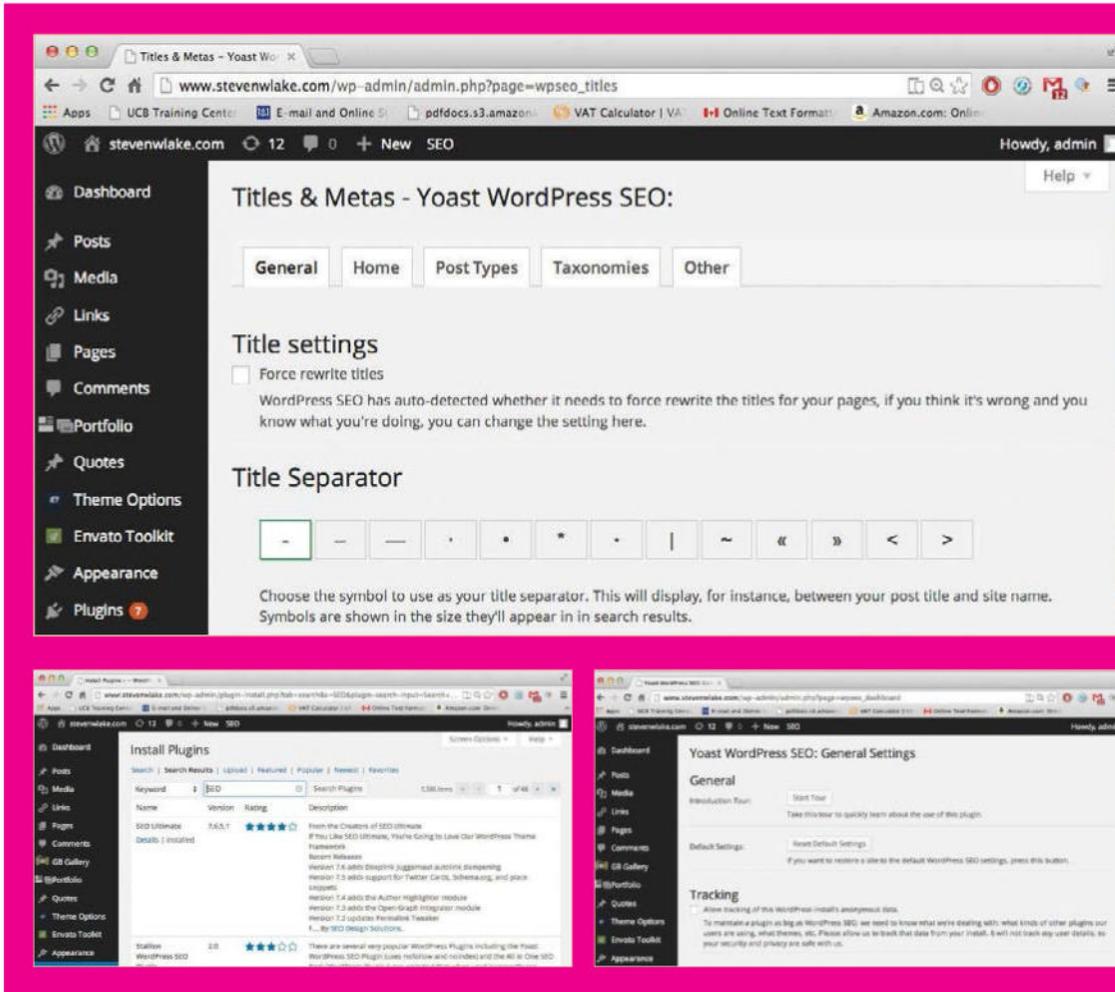
The Yoast plugin dashboard provides you with general settings for SEO management of your WordPress site. If you are new to SEO management then under the General subheading click Start Tour for a detailed walk through of all the tools available in the Yoast SEO Plugin. You can also reset all of your plugin settings from here. At the bottom of the Dashboard is the webmaster tools. Here Yoast has setup a selection of links that can be followed to verify your site with various webmasters.

03 Verify your site

Click on a webmaster link below the Webmaster Tools subheading, such as Google Webmaster Tools. You will be prompted to sign in with a Google account. To Verify via Google you will need to download a HTML verification file from Google. You will then need to upload the file to your site then click Verify.

04 Titles & Metas

From the Yoast SEO plugin click on the Titles &



<top left>
• With dozens of different SEO tools available the WordPress SEO Plugin lets you manage every aspect of your site's search engine presence

<bottom left>
• Check out the descriptions and screenshots for SEO plugins to get an idea for how basic or advanced each of them are

<bottom right>
• The WordPress SEO plugin from Yoast provides you with an introduction tour of the plugin if you are not familiar with SEO management

Metas tool. On this page you can adjust how titles and meta data from your website are going to be presented to those viewing it from a search engine. To begin, under the General tab you can adjust your meta data settings. A lot of the general settings are for tidying your site's meta data and the way that site links are presented. For Example, checking the noindex subpages of archives option will tidy a URL to hide /page/2/ in the URL of your site.

05 Home page Titles & Metas

In the Titles & Metas page click on the Home tab. By default Yoast presents your site's title information with the Site name, the page name and the site description. Edit the Title Template text box to change this. Add a meta description in the Meta description template. Click Post types to work with your title and meta information for all of your website's posts.

06 Importance of titles

The proper use of titles in your posts is one of the simplest ways of increasing your rank ship on a search engine. Having posts titled by their name rather

than date or through a sequence of numbers will help make your posts easier to find on search engines. Under the Post Types subheading you can add Meta Descriptions to posts, pages, quotes, portfolio pages and any other types of publishable content. This information will appear below your post title in search engines, again helping to increase the your ranking and show potential visitors more information about your site.

07 SEO Social tools

Click on the Social tool in the SEO sub-menu. The Yoast plugin is compatible with Facebook insights, Twitter and Google+. With Yoast's social tools you can enhance the SEO of your site's social networks. To work with Facebook SEO click Add Facebook Admin in the Facebook subheading. You will be linked to Facebook and Yoast will ask for permission to access your profile. Once a Facebook admin has been assigned add a Facebook page URL, then add the Front Page settings including an Image URL, title and description. For Twitter and Google+ add your details in each of the social networks subheadings.

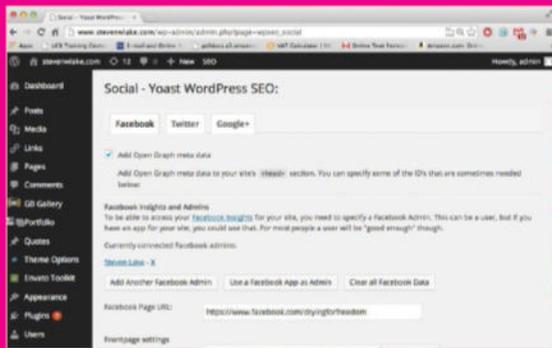
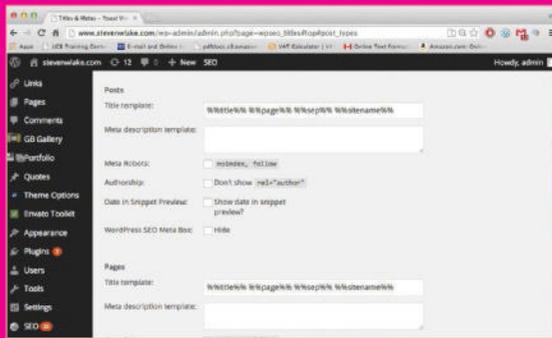
08 XML Sitemaps

The XML Sitemap of your site is what allows search engines to see that your site has been updated. This is a key aspect of SEO and by making sure that sites such as Google know that you're site is being updated as often as possible, you will see an improvement in your sites presence in search engines. The Yoast XML Sitemap also includes image posts, helping your site appear higher on image results for search engines.

09 Enabling Sitemaps

In the XML Sitemaps window check the box to enable XML sitemap functionality. From now on any

Top tip
It's very important that you tag your post correctly. Tags not only allow viewers to navigate your posts easily but they help make your posts easier to find online via search engines.



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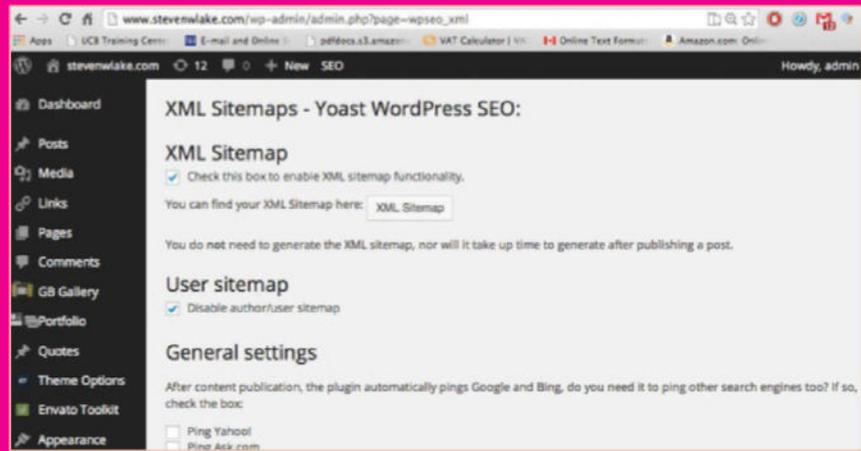
• The more information you provide in the Titles & Metas window the more details will appear on search engine results for your site and posts

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• SEO isn't just about promoting your site, it's important that people find the social networks where you are posting your latest updates to

<below>

• Keep your website up to date to help it achieve a better rank in search engines. The XML sitemap ensures that updates are always registered by search engines



updates made to your site will be sent to Google and Bing. You can also include Yahoo and Ask.com to receive updates to your site. With XML Sitemaps you can exclude certain site content that you don't want to be pushed to search engines whenever an update is completed, this can also be applied to site taxonomies.

10 Tidying permalinks

Under the SEO Permalinks subheading you can activate or deactivate a selection of permalink settings that can help to tidy your site's permanent URLs for posts and pages. Before changing permalink settings within the Yoast Plugin open your WordPress settings and click Permalinks. Here it's advised by Yoast that you select either Post name or Custom Structure for your post URLs. This approach makes your posts more timeless, as the URL title refers to the post title rather than the date it was published. Return to the Yoast SEO Permalinks window to then select your preferred permalink settings.

11 Breadcrumbs settings

Breadcrumbs refer to the displayed path in which a visitor has taken to get to a post. This path is normally visible at the top of a site. A typical Breadcrumb would be Home>Blog>Blog title. The Breadcrumb settings can be found under the Internal Links window in the SEO sub-menu. Under Breadcrumbs settings you can enable breadcrumbs and adjust the layout of your site's breadcrumbs. The taxonomy to be displayed for your posts, quotes and portfolio pages can be changed in the Internal Links window.

One of the newest features of Yoast's SEO plugin is the Bulk Editor. From here you can access and edit all of your site's posts

12 Inserting breadcrumbs

A PHP code is provided at the bottom of the page for you to insert into your theme, so that breadcrumbs will appear at the top of your posts. A plugin from Yoast called Yoast Breadcrumbs is also available for you to install breadcrumbs into your site if you are not code savvy. For more details on how breadcrumbs work in WordPress and with the Yoast SEO plugin visit yoast.com/wordpress/plugins/breadcrumbs/ for a tutorial on inserting breadcrumbs into your site's theme.

13 Importing SEO data

If you have dabbled in SEO plugins previous to using Yoast's SEO plugin then you may have a collection of SEO data that you want to import into the WordPress SEO plugin. Open the Import & Export window in the plugin's sub-menu. Check the box next to the name of one of the compatible plugins that you want to import data from, then click Import.

14 Export SEO data

In the Import & Export window you can also export all of your SEO settings from the WordPress SEO plugin. The reason to do this is if you want to import your exported data into another WordPress site. Once you've

setup the plugin how you want it for your site, its settings can be easily applied to other sites, with only a few minor tweaks needing to be made to suit each individual site.

15 Re-importing data

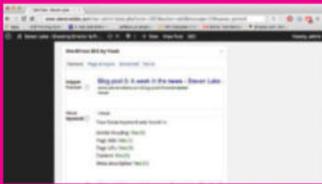
Under the export subheading click Import Settings. A zip file titled settings.zip will be downloaded. Upload the zip file to your FTP. Install the WordPress SEO plugin on another WordPress site then re-visit the Import & Export window. At the bottom of the page click Import settings. The settings.zip file will be imported and its data will be applied to the plugin.

16 Bulk Editor

One of the newest features of the plugin is the Bulk Editor. From here you can access and edit all of your site's posts. You can also quickly create Yoast SEO titles for all of your posts using the text box provided next to each post URL. Bulk editing can be performed with titles and descriptions of posts. Switch between titles and descriptions at the top of the Bulk Editor window.

17 More tools

Open the Edit Files window to edit the .htaccess and robots.txt files. Don't change any of these files if you

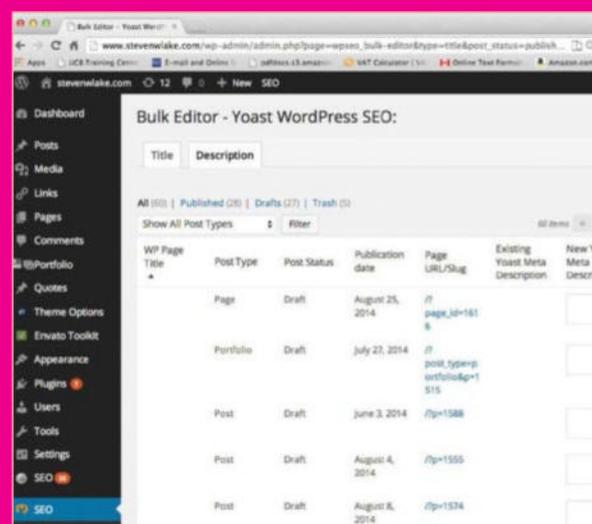
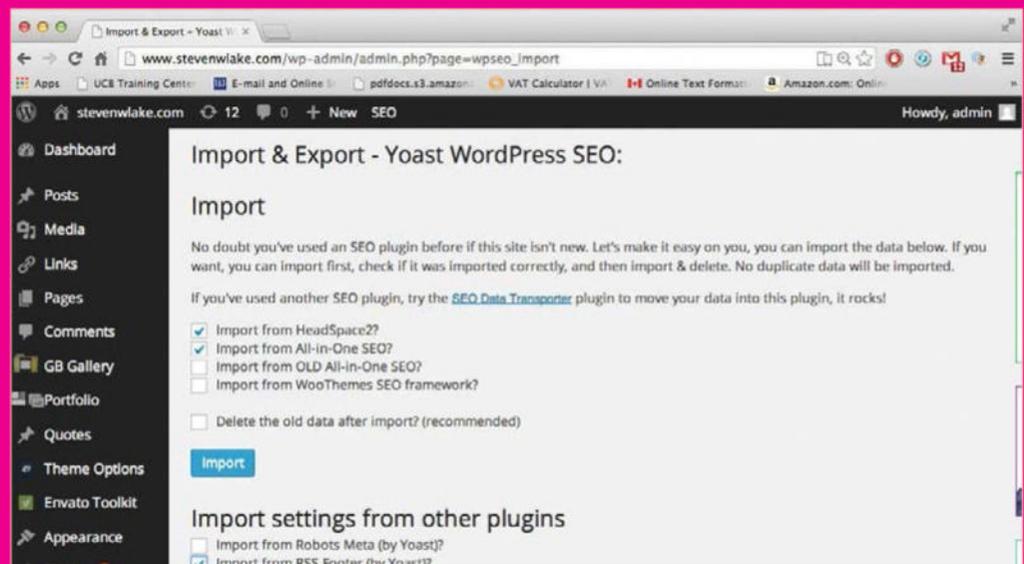
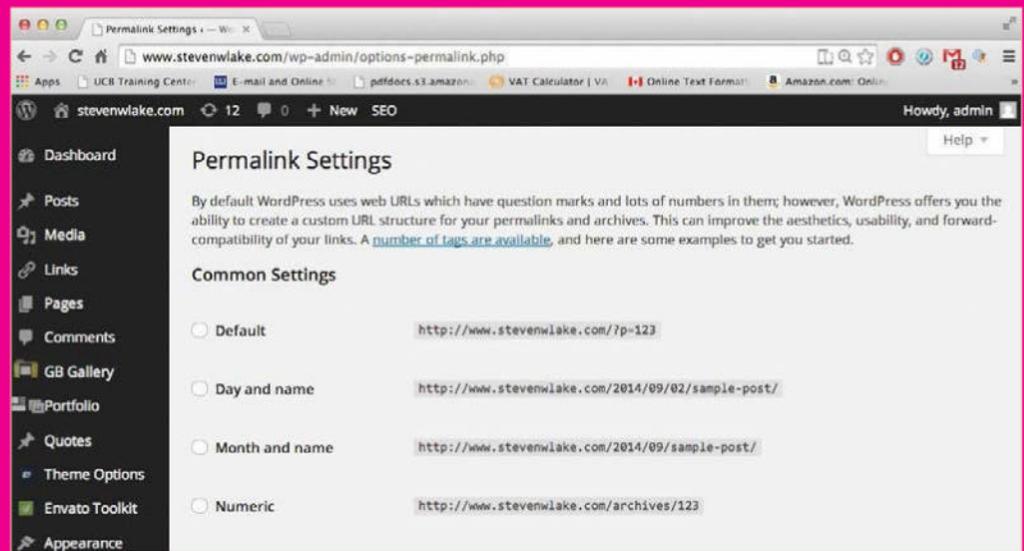


The basics of SEO

Once the WordPress SEO plugin has been installed you will find a panel for it at the bottom of any new post that you create. In this panel you can add details to your post to help its online presence. You will also be provided with a preview of the post as it would appear on a search engine. Add keywords and an SEO title as well as a Meta description. Once you've added these details click on the Page Analysis subheading. Here you will be able to see the strengths and weaknesses of your post in relation to its SEO potential. If you would like to, make some changes to the post. This could get you more green circles in the Page Analysis. Use the Advanced subheading to add more information such as Breadcrumbs title and Sitemap options. Finally, use the Social subheading to create meta data for both Facebook and Google+ updates linking to the post.

are not one hundred percent sure of what you are doing as you can make irreversible changes to the plugin. Below this tool in the tool bar is the extensions option. Here you can download more extensions for the plugin, including WordPress SEO Premium, which offers even more features for SEO management.

Top tip
WordPress does provide a few simple yet very important tools to help you manage your SEO. Go to the Settings tool in the WordPress tool bar. Under the General settings fill in all of these details.



- <top>**
 - One of the easiest ways to help optimise your site for search engines is to manage your permalinks, this can be done without an SEO plugin
- <middle>**
 - WordPress SEO is compatible with data from other SEO plugins, allowing you to import your data for your site's SEO that you have already setup
- <bottom>**
 - The Bulk Editor is the fastest and easiest way to update titles and descriptions for your posts

Add a Social author bio

ADD PRE-SET AND CUSTOM LINKS TO ALL OF YOUR DIFFERENT SOCIAL NETWORKS AND SITES TO AN AUTHOR BIO WINDOW THAT WILL APPEAR AT THE BOTTOM OF YOUR WEBSITES PAGES AND POSTS

🔗 When creating blog posts in WordPress your post will be accompanied with information on the person who created it 📍

TUTORIAL OBJECTIVE

Insert a detailed Author Bio section to your website or blog, featuring an avatar, bio and social links.

TIME REQUIRED

15 minutes



THE USER BIO of any WordPress site is an important part of your website or blog. It provides viewers with details

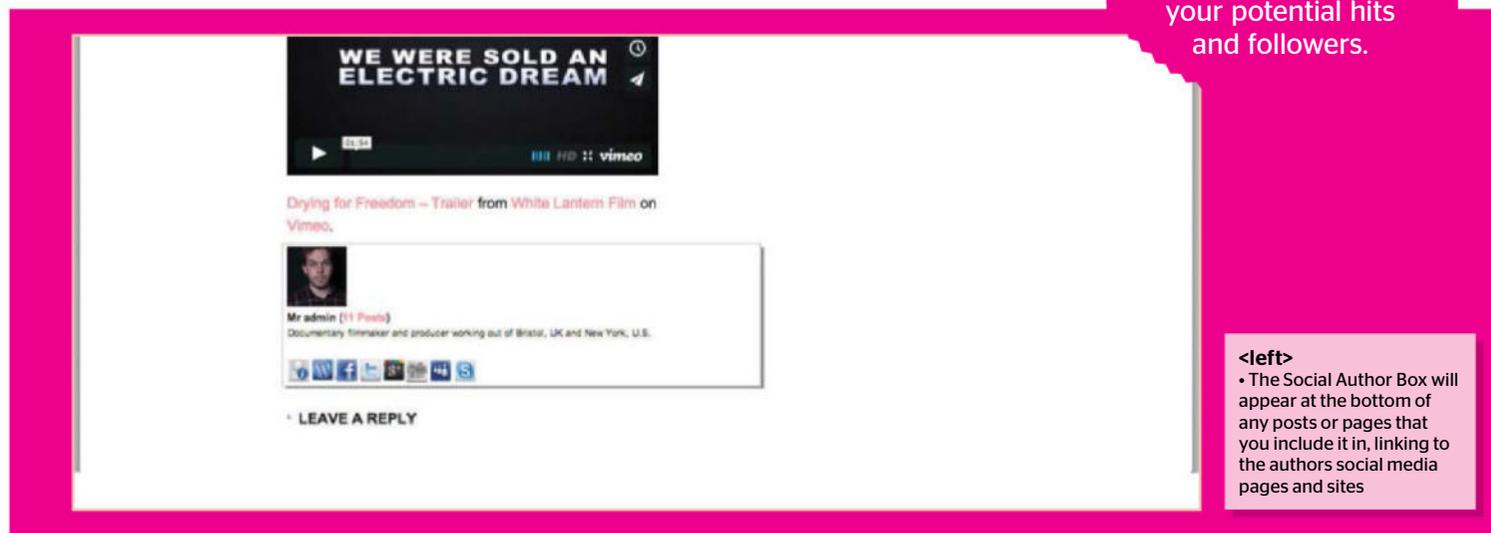
as to who has created the post and makes it easier for those who want to follow your site to connect with you via different social networks. When creating blog posts in WordPress your post will be accompanied with information on the person who created the post. Details on the poster can be created with the User tool in WordPress. Here you can create new users and include bio information and an avatar image. With the Social Author Bio plugin you can fully customise your bio information providing viewers with quick links to your social networks. You will also be able to create custom links to any website of your choosing.

Top tip

Author information is a must if you want to promote yourself and other authors so that visitors can associate your posts with you and link to your social networks, thus increasing your potential hits and followers.

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• The Social Author Box will appear at the bottom of any posts or pages that you include it in, linking to the authors social media pages and sites



01 Social Author Bio

Open the Add New window of WordPress's Plugin tool. Search for Social Author Bio by Nick Powers. Install the plugin then activate it. The Plugin will appear with its own icon in your WordPress toolbar. The Social Author Bio plugin is broken up into three sub-sections. General, Custom Links and Advanced HTML/ Style.

02 General Settings

Open the plugin's general window. Under the 'When to Display Social Author Bio' subheading select where you want the Bio to be displayed. The Bio will

appear at the bottom of your pages and posts by default. You can change the positioning in the General window of the plugin. Enable the Social Author Bio on your posts then preview a post to see how it looks.

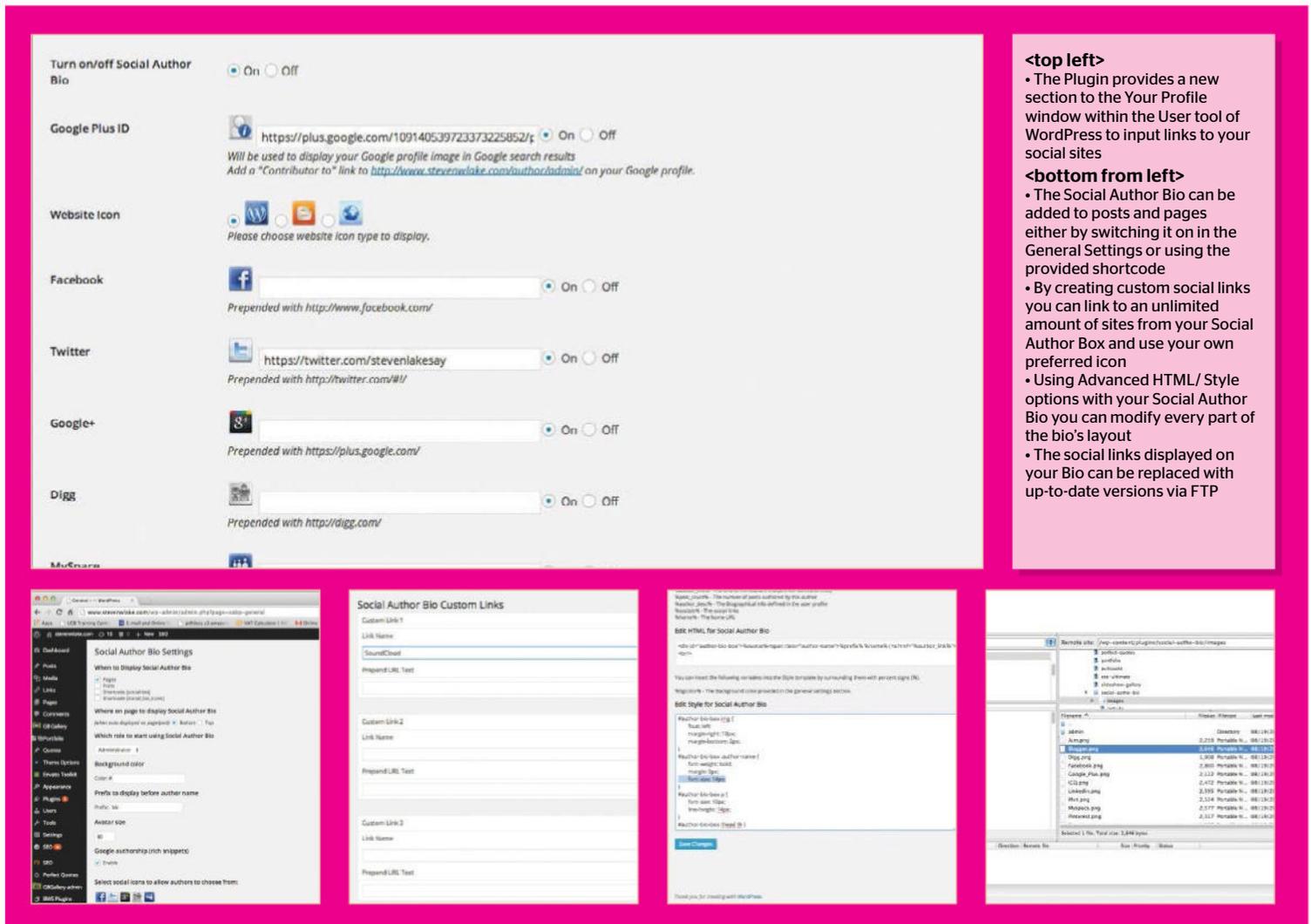
03 Use Shortcode

Selecting the Shortcode option allows you to copy and paste the provided shortcodes into pages and posts that you want to include the bio information. Two Shortcodes are provided, one of just the bio and one that includes all selected social links. The added benefit of working with shortcode placement for your bio is that

you can then place it anywhere on the page or post that you like.

04 Add the code

Now we know what changes we are making we need to add them to the Style.css file of our child theme. Above is how the entire section of text should look within the file. Note that the changes to the text have been added below the @import line. Either we can edit the file locally and upload it via FTP or open Appearance > Editor from the WordPress Dashboard and add the code below the @import line.



<top left>

- The Plugin provides a new section to the Your Profile window within the User tool of WordPress to input links to your social sites

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- The Social Author Bio can be added to posts and pages either by switching it on in the General Settings or using the provided shortcode
- By creating custom social links you can link to an unlimited amount of sites from your Social Author Box and use your own preferred icon
- Using Advanced HTML/ Style options with your Social Author Bio you can modify every part of the bio's layout
- The social links displayed on your Bio can be replaced with up-to-date versions via FTP

05 Custom Links

Returning back to the Social Author Bio plugin open Custom Links to create your own custom links to sites that you want to appear. Add a link name and Image URL as well as prepend URL text and Append URL text if necessary. You can add up to ten custom social links, and remember to click Save Changes. Keep in mind that the image URL provided will appear in full size so you will want to use 32x32 pixel images to keep with the continuity of the pre-set social link thumbnails.

06 Publishing custom links

Once you've created a custom social link return to WordPress's Users>Your Profile window. Below the pre-set social icons any custom social urls that you've created will appear. Input a weblink in the text box below the image. Activate your custom links from here and they will appear at the bottom of your social author bio.

07 Advanced HTML/ Style

Return to the Social Author Bio plugin and open the Advanced HTML/ Style window. In this window

you can edit the HTML code for your Social Author Bio plugin, changing the layout, ordering and arrangement of information that is displayed. You can also edit the style of the bio manually.

08 Match your theme

In the Advanced HTML/Style window scroll down to the Edit Style for Social Author Bio HTML window. Adjust the font weight and size as you like to match your current theme. In the HTML window go to the Bio Socials area to modify the spacing and arrangement of your social link's icons.

09 Replacing social link images

The Social Author Bio plugin provides you with image thumbnails for your social links, however some of these icons can fall out of date. Some of the icons may not be to your taste either. Access your sites FTP folder and go to /wp-content/plugins/social-author-bio/images. Here you can replace any of the provide images with your own thumbnails.

More author tools

There are plenty of other author settings and plugins available within WordPress. The Author Image plugin allows for easy replacement and updating of the image associated with each created author on your WordPress site. The Author Recent Posts plugin works as an embeddable widget that will display all of the latest posts from an author. If this feature is not present in your WordPress theme then it is a great way to identify and promote particular authors' posts on your site or blog. The interface for this widget is fully customisable, allowing you to include image thumbnails and descriptions of each of the listed posts. The Top Authors plugin works in a similar way except it lists the top posting authors of a blog within the widget, again helping to present viewers with your sites top content. It also provides your viewers with a good impression of your content.

Build a WordPress slideshow

INSTALL A WORDPRESS SLIDESHOW GALLERY PLUGIN SO THAT YOU CAN LINK TO BLOG POSTS AND PAGES OR CREATE A GALLERY OF IMAGES ON YOUR WEBPAGE, CREATING A VISUAL NAVIGATION TOOL

🌸 If you know exactly how you want to use a slideshow in your site then it is worth finding a plugin that is specific to your blog's needs 🌸

TUTORIAL OBJECTIVE

Install a WordPress slideshow gallery plugin so that you can link to blog posts and pages or create a gallery of images on your webpage, creating a visual navigation tool

TIME REQUIRED

10 minutes

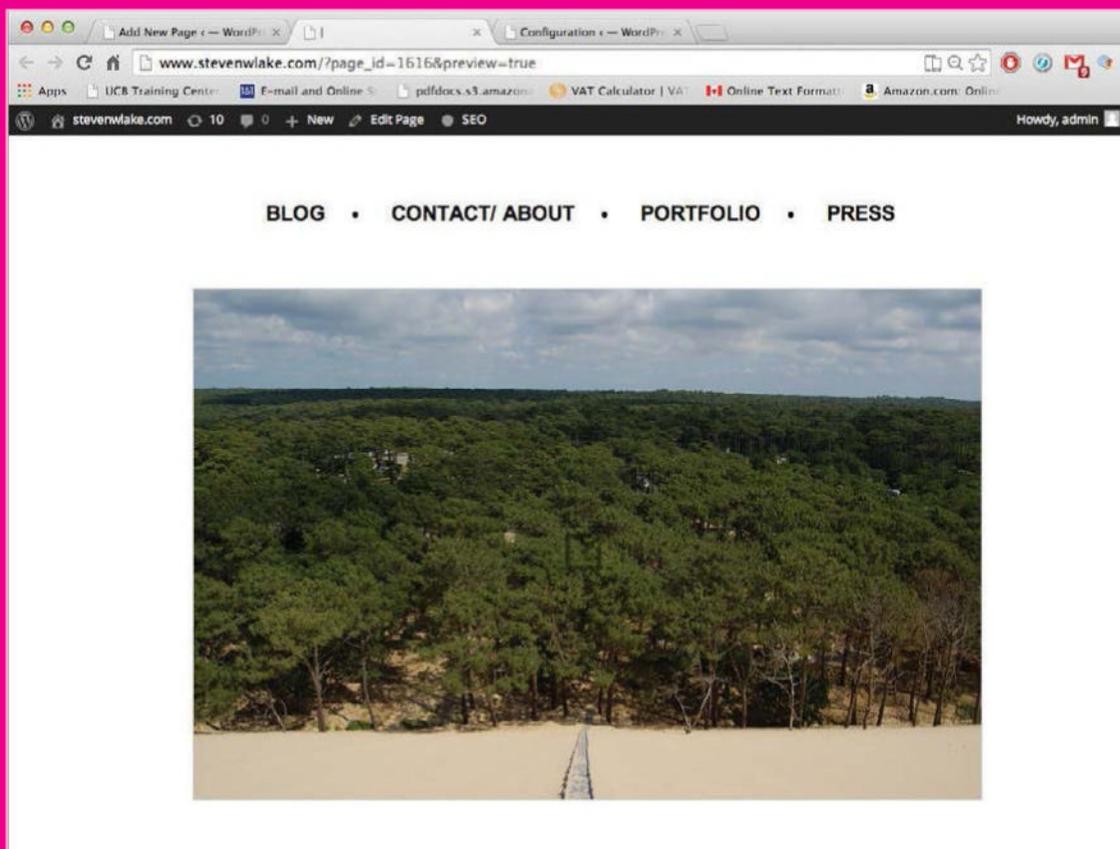


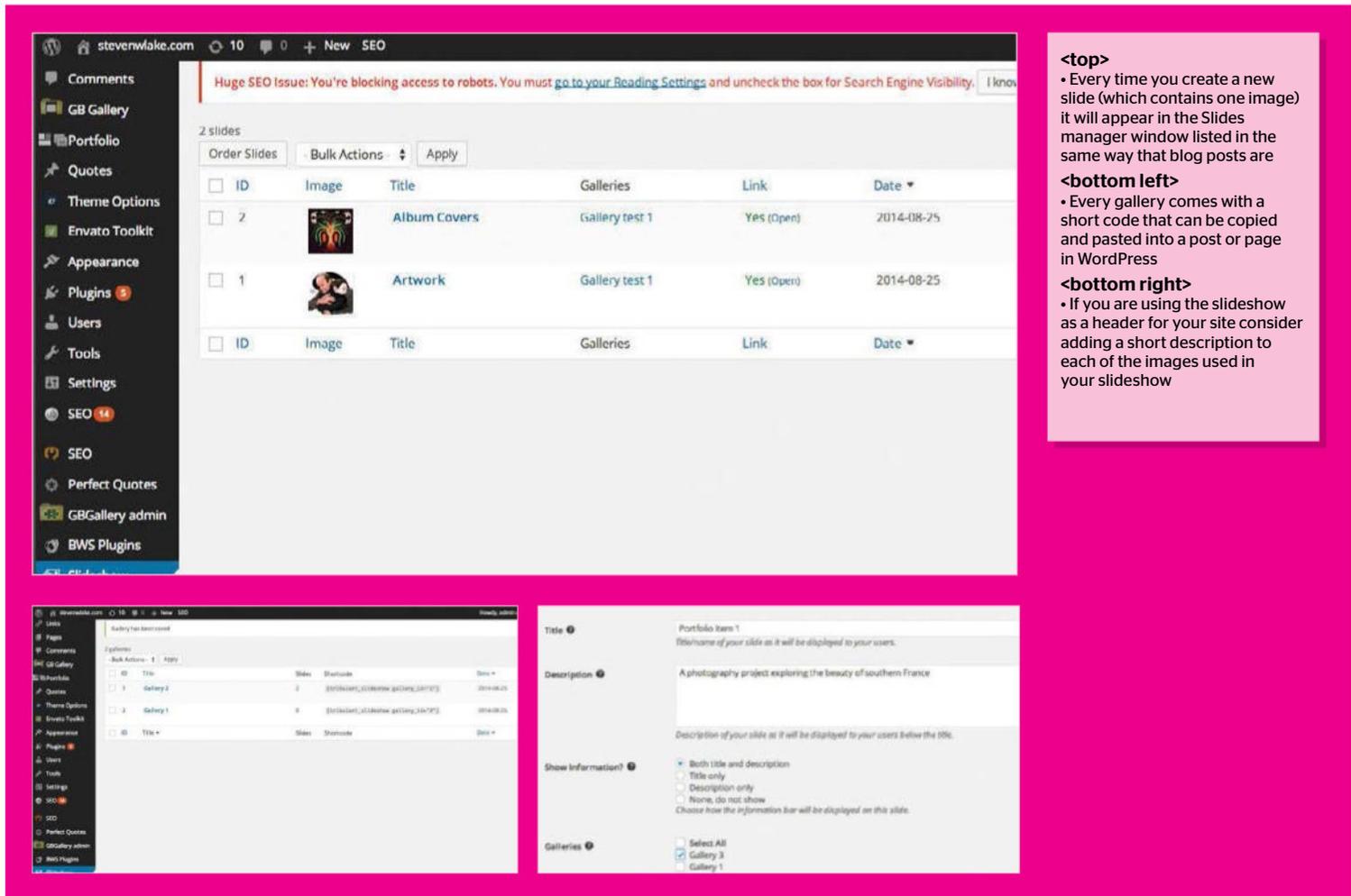
SLIDESHOWS ARE ONE of the easiest assets to add to your WordPress website.

They can be used in a variety of different ways depending on how you want to utilise them. Slideshows can hold a series of high-res images for you, working as an interactive portfolio of your work. This is especially useful for designers, artists and photographers. A slideshow can also work as a great header to your site or blog, displaying header images for your latest blog posts. If you know exactly how you want to use a slideshow in your site then it is worth finding a plugin that is specific to your needs. However, there are a lot of general slideshow plugins to choose from. In the following steps you will learn how to embed a slideshow gallery into your site.

<left>

• This is a much more minimalist approach to a slideshow, taking away navigation control. A link icon appears in the image when hovered over





<top>

- Every time you create a new slide (which contains one image) it will appear in the Slides manager window listed in the same way that blog posts are

<bottom left>

- Every gallery comes with a short code that can be copied and pasted into a post or page in WordPress

<bottom right>

- If you are using the slideshow as a header for your site consider adding a short description to each of the images used in your slideshow

01 Slideshow plugins

In WordPress go down to the Plugins tool from the tool bar and click Add New. Search Gallery Slideshow in the search bar. There are hundreds of Slideshow plugins to choose from, each offering different tools and options. Browse through the details on each plugin to find one that suits your needs.

02 Slideshow gallery plugin

The top rated slideshow gallery plugin is called Slideshow Gallery developed by Tribulant Software. Click Install to install the Slideshow Gallery plugin. After installation click Activate Plugin. A slideshow icon will appear below your settings icon in the WordPress tool bar. Go to Plugins>Installed Plugins to deactivate the plugin.

03 Working with slides

The Slideshow Gallery plugin uses two key tools to create a slideshow for you. Each image that you add is attached to a slide. The slide will have a title and description as well as a link if need be. To create a

slideshow with ten images you will need ten slides. One image per slide.

04 Working with Galleries

The second tool you'll be using to create your slideshow is Galleries. Each slide that you create must be associated with a gallery within the plugin. Once you've associated multiple slides to a gallery you can then paste a galleries PHP code into a post, page or portfolio.

05 Create a gallery

Hover over Slideshow at the bottom of your WordPress tool bar then click Manage Galleries. Click Add New. To add a new Gallery all you have to do is add a title then tap Save Gallery. You will be taken back to the Manage Galleries window. Next to each newly created gallery a shortcode will be displayed. It is this code that you can use to embed your galleries into posts.

06 Create new slides

Under the Slideshow plugin in the WordPress

Top tip
By default your slideshow will be set to a black and white colour scheme. Go to the Appearance & Styles subheading in the Configuration window to add new colour codes to your slideshow.

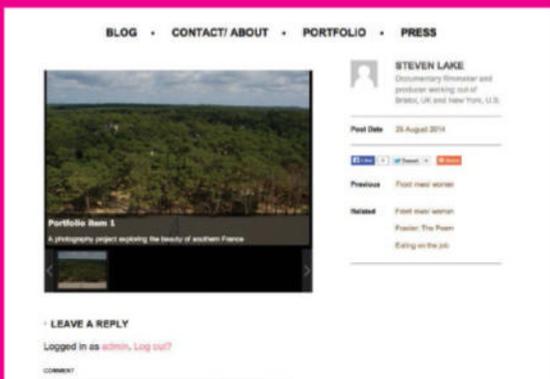
tool bar click Manage Slides. Click Add New. Begin by adding a title and description to your slide. Remember that all slide information will be associated with the image that you link to that particular slide. Under the Show Information subheading select what information you want the slide to display. Any information will appear at the bottom of an image when being viewed in a slideshow.

07 Slide options

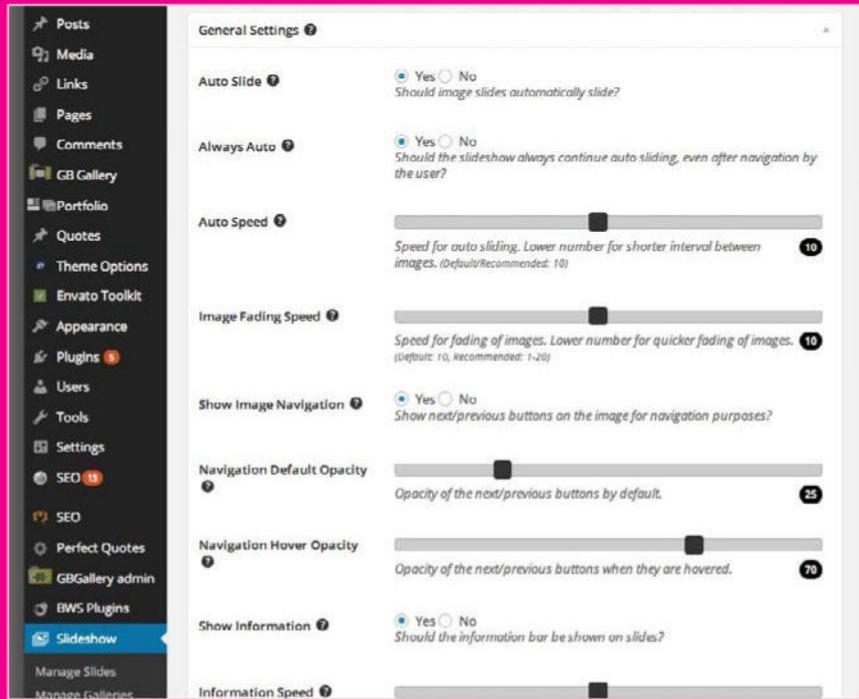
Since you have already setup a gallery you can now link your slide to it. Under the Galleries subheading select a gallery. Now when you paste the



- <left>**
- By attaching links to each of your slideshow images you can allow visitors to navigate your site through the slideshow
- <below>**
- The configuration settings allow you to control every aspect of your slideshow. By default your slideshow will move between images automatically



- <above>**
- Previewing your slideshow in a post will help give you an idea of the formatting of your images, which can be adjusted later



Galleries shortcode into a post this image will be displayed. You can add a slide to as many galleries as you like.

08 Image upload

Images can be imported straight from your computer or through a URL. The Slideshow plugin does not use the WordPress media tool to import images so you can't access images already stored in your media library other than adding the image's URL. Finally click Yes under the Use Link subheading if you want to link to another webpage from this image. Links can be opened in the current window or in a new window. Click Save Slide. Repeat this process for as many images as you want to include in your post.

09 Test your slideshow

Return to the Manage Galleries window. Copy the shortcode from the gallery you have created, which now includes the slides you just created. In WordPress create a new Post or Page. In the post edit window click Text then paste in the shortcode. Click Preview. A slideshow of your images will now appear in the post.

By default the slideshow is set to a certain size. The slideshow will automatically scroll through your images. Click on the image to test the web link that you associated with the image.

10 Order your slides

If your slideshow is working correctly return to the Manage Galleries window. Hover over your gallery title then click Order Slides. In this window you can arrange your slides by dragging and dropping them in the order that you want all of your images to appear in.

11 Configure your slideshow

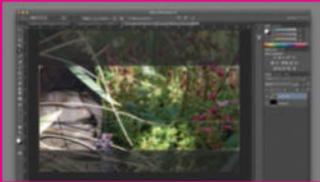
Under the Slideshow plugin in the tool bar click Configuration. In this window you can effect and modify almost every single aspect of your slideshow. The General settings can be used to adjust the slide controls of a slideshow as well as the speed that the gallery goes between slides. You can include navigation controls for people and decide at what point the slideshow stops rolling. You can also turn on image information or turn it off for mobile users.

12 Show Thumbnails

Turn on the Show Thumbnails option to display thumbnails of all the images in the slideshow at the bottom of the slideshow. As with navigation controls you can adjust the positioning, size and opacity of your thumbnails. Use of thumbnails depends on what you



- <above>**
- It's vital you spend some time adjusting the appearance and style settings of your slideshow. Format your images before uploading them to the same dimensions



Formatting images

For the most high quality gallery slideshow you should format your images first. The slideshow plugin will accept different image sizes and formats, however you may find some inconsistency between images as the slideshow slides between images. Within the configuration window of the plugin you can set your slideshow to adjust its size for each image. This means that each image will be presented as is, although there will be no continuity between photos. Using simple photo editing software such as Photoshop, or a browser based editor like pixlr.com, crop your images down to the same size, quality and image format. In this example the image has been cropped down to a banner size, perfect for the header of your site.

Top tip
Under the Appearance & Style subheading select Responsive in the Configuration window for the quickest and tidiest slideshow setup. Next to Resize Images select No then choose a gallery width and height that suits your site.

want to use your slideshow for. If it's to exhibit photography then Thumbnails are a great way to allow people to navigate between images. If your slideshow is to be used as a header to preview sections of your site you may want to turn off thumbnails and just give users navigational control.

13 Responsive slideshows

Under the Appearance & Style subheading you will want to use either a responsive or fixed layout depending on your image types. A responsive slideshow will adjust its dimensions according to the size of an image. You can select the height of a slideshow in pixels or percentage and switch on the Auto Height tool to adjust a slideshow to accommodate the height of each image. A responsive slideshow is useful when exhibiting photography,

making sure that an image is seen in full without being cropped.

14 Fixed slideshows

Selecting a fixed layout for your slideshow will fix the dimensions of a slideshow to a set pixel height and width, which you can determine under the Appearance & Styles subheading. If you are using a slideshow to preview posts or pages on your site then a fixed slideshow is advised. Ideally you will format all of the images in the slideshow to the same size to create a more visually appealing slideshow. The default size of the fixed slideshow is 450x250px, creating a web banner sized slideshow. Play around with dimensions and preview them to see what works for you.

15 Media slideshow

Search for the GMedia Gallery plugin in the Add New window from the Plugin section of the WordPress toolbar. This plugin allows you to create slideshow galleries for all forms of media including video and audio files. With GMedia you can embed videos from sites like YouTube or SoundCloud and implement them in a slideshow layout.

 Using simple photo editing software such as Photoshop, or a browser based editor like pixlr.com, crop your images down to the same size, quality and image format 

Post video players, slideshow albums, photo galleries and music / ...

Description Installation Screenshots FAQ

Smooth Gallery with or without menu

Version: 1.133
Author: Cincopa
Last Updated: 2 months ago
Requires WordPress Version: 2.0.2 or higher
Compatible up to: 3.9.2
Downloaded: 950,111 times
[WordPress.org Plugin Page »](#)
[Plugin Homepage »](#)

AVERAGE RATING
★★★★☆
(based on 257 ratings)

<left>
• There are WordPress plugins for all kinds of gallery slideshows allowing you to include media such as audio tracks and video

Schedule your blog posts

SCHEDULE THE TIME AND DATE FOR POSTS WITH THE WORDPRESS EDITORIAL CALENDAR PLUGIN. USE THE EDITORIAL CALENDAR'S SIMPLE DRAG AND DROP INTERFACE TO SCHEDULE POSTS EASILY

TUTORIAL OBJECTIVE

Schedule posts with the Editorial Calendar's easy to use interface

TIME REQUIRED

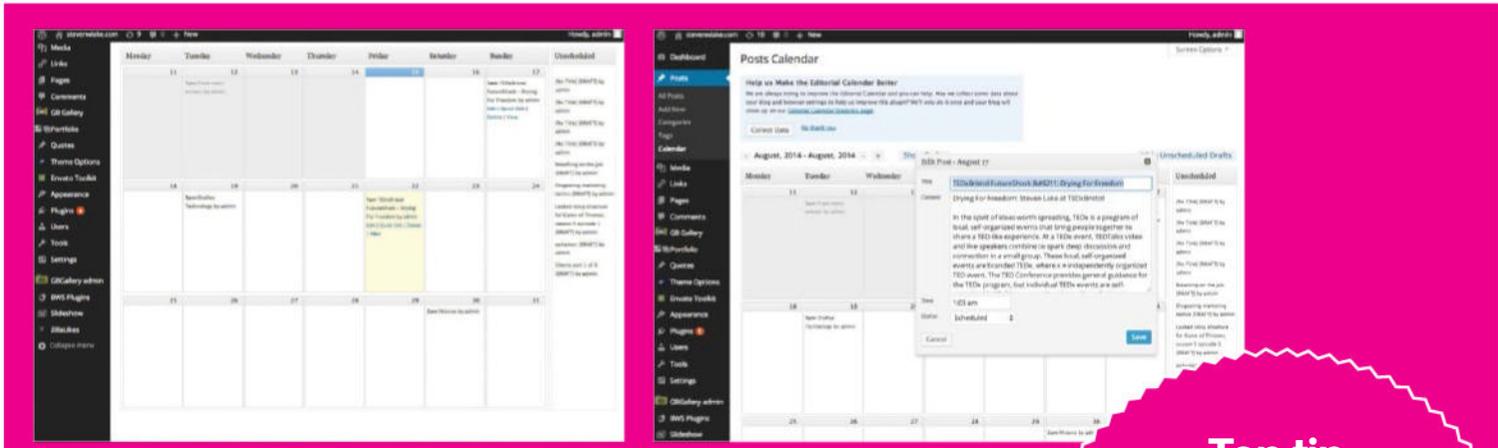
5 minutes



THE EDITORIAL CALENDAR plugin by Colin Vernon provides WordPress users with an easy-to-navigate scheduling system to help you with managing your blog's schedule. When creating a new post in WordPress you can assign a date and time at which the post will be published. Reviewing and changing the publish date of a post can be a little clunky in WordPress and this is where the Editorial Calendar plugin really comes in handy. With its Calendar layout you can easily drag and drop posts into the calendar to determine when they'll be published, as well as being able to go into posts to edit them from the plugin. The Editorial Calendar makes it easy for you to amend and review your publishing dates for posts within your WordPress blog.

The screenshot shows the WordPress Editorial Calendar plugin interface. The calendar is for August 2014, with the current date being August 15th. The interface includes a sidebar with navigation options like Media, Links, Pages, Comments, GB Gallery, Portfolio, Quotes, Theme Options, Envato Toolkit, Appearance, Plugins (4), Users, Tools, Settings, GBGallery admin, BWS Plugins, Slideshow, ZillaLikes, and Collapse menu. The main calendar area shows posts scheduled for various dates: August 12th (5pm Front men/women by admin), August 17th (1am TEDxBristol FutureShock - Drying For Freedom by admin), August 19th (9pm DryDye Technology by admin), August 24th (Breathing on the job [DRAFT] by admin, Disgusting marketing tactics [DRAFT] by admin, Leaked story structure for Game of Thrones, season 5 episode 1 [DRAFT] by admin, pokemon [DRAFT] by admin, Siberia part 1 of 3 [DRAFT] by admin), and August 30th (2am Mizuno by admin). A 'Show Today' button and a 'Hide Unscheduled Drafts' button are visible at the top of the calendar area.

<above>
• Days that have already passed will be shaded in grey. Simply drag and drop a post to adjust its scheduled posting date. The post will be updated automatically



Top tip

Although the content text box in the Calendar post creation window is much more limited than creating a normal WordPress blog you can paste short code and HTML into the content box. This is useful if you have pre-set coding for every post.

<top left>

- You won't be able to drag and drop posts that have already been published, but you can still edit their schedule as you normally would in a WordPress blog

<top right>

- Using the Editorial Calendar Quick Edit tool provides you with an easy way to edit a post without having to load it up through the WordPress post window

<left>

- Use the Editorial Calendar Screen Options to adjust the layout of your calendar and the details presented alongside posts within the calendar

01 Install Editorial Calendar
Go down to the Add New section of the Plugins tool of WordPress and search for the Editorial Calendar plugin. Click Install Now. Once installed, click Activate Plugin. You can access the Editorial Calendar plugin by clicking on Post in the WordPress tool bar then clicking Calendar from the sub-menu.

02 Navigating Editorial Calendar
When viewing the Editorial Calendar you will be taken to the current Month. Any posts that are scheduled to be published within that month will be displayed. You can also go back to previous months where already published posts can be found. Click Show Unscheduled Drafts in the top right corner of the window to display any Draft posts that have yet to be scheduled for publishing.

03 Editing a post
Hover over any post that is displayed in the Editorial Calendar. A sub-menu will appear with the option to Edit, Quick Edit, View or Delete the post. By clicking Edit you will be taken to the WordPress Post edit window. The Editorial Calendar has its own Quick Edit floating window that will appear when using the Quick Edit tool. In the Quick Edit window you can edit a post's title, content, posting time and status.

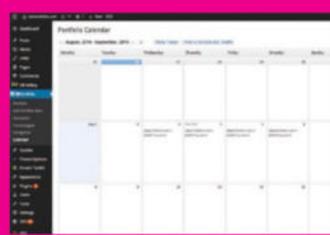
04 Adjusting posts
If a post has not yet been published you can click and drag on it within the calendar. Drag the post to the date that you want it to be published on. You can then use the

Quick Edit tool to setup a publishing time for the post. Posts can also be dragged into the Unscheduled Draft window. Draft posts can be dragged from the Unscheduled list into the calendar and setup with a scheduled publishing date.

05 Managing your calendar
At the top of the calendar window click Screen Options. Here you can adjust what information is displayed in the calendar cell. You can also determine how many weeks are displayed in the calendar. You can use the scroll wheel on a mouse to change the displayed month with a post selected, however this tool can sometimes be a bit buggy so extending the amount of weeks displayed gives you more flexibility for dragging and dropping a post.

06 Create New Posts
Hover over a date on the Editorial Calendar then click New Post to open the Quick Edit window for a new post. Creating a new post in the Editorial Calendar is more limited than building a post in the WordPress post window, however you can quickly add text content and setup a scheduled posting time through this window.

07 Saved calendar posts
Under the content box select a time either in AM or PM and then a status. Either select Draft, Pending Review or Scheduled. Then click save. Once a post has been created within the calendar it will display its current status, showing you if it is a draft, pending or scheduled post. Once the time and date arrives that the post is setup to be published on it will then be made live on your site.



Portfolio Calendar

The Editorial Calendar plugin is applied to the portfolio tool in WordPress as well as posts. Portfolio items may not need to be seen in order of date, nor will they display date information. When you are building a site that has portfolio items featured on the front page or has portfolio items that are ordered by date then the Editorial Calendar can be used as a way of editing and arranging your site's portfolio items. Just Visit your theme settings to make sure that content is displayed in date order then you can prioritise your posts and portfolios within your Calendar to determine what content appears where on your site. You can quickly line up all of your portfolio posts in a simple order, one post per day to order and arrange them.

Customisation

Transform your WordPress site

128 Add multiple moving backgrounds

Add moving background elements to your site

130 Create an animated logo with CSS3

Animate your site's logo with this great tutorial

134 Blur and focus your text with Font Font

Use Font Font to create a fun flur and focus effect

136 Build circular on-hover navigation

Improve your site navigation with on-hover animation effects

138 Create animated buttons with CSS3

Make animated buttons for your website with CSS3

142 Code a fixed image scroll-over effect

Create a scroll-over hover effect with HugeInc

144 Make an animated off-screen 3D menu

Make the most of your virtual real estate by implementing an off-screen menu

148 Master animated pop-up effects

Make great pop-ups for your website with this tutorial

150 Create a rotating product viewer

Display your products for your visitors to see from every angle





Top tip
By adding individually coded elements to your site, you can make it stand heads above the rest.

TUTORIAL OBJECTIVE

Use HTML5 to create an animated header

TIME REQUIRED

1 Hour 30 Minutes

Add multiple moving backgrounds

ADDING A SPECTACULAR VISUAL EFFECT TO YOUR WEBPAGE WILL DRASTICALLY IMPROVE YOUR VIEWERS' EXPERIENCE, AND HERE'S HOW YOU CAN DO IT



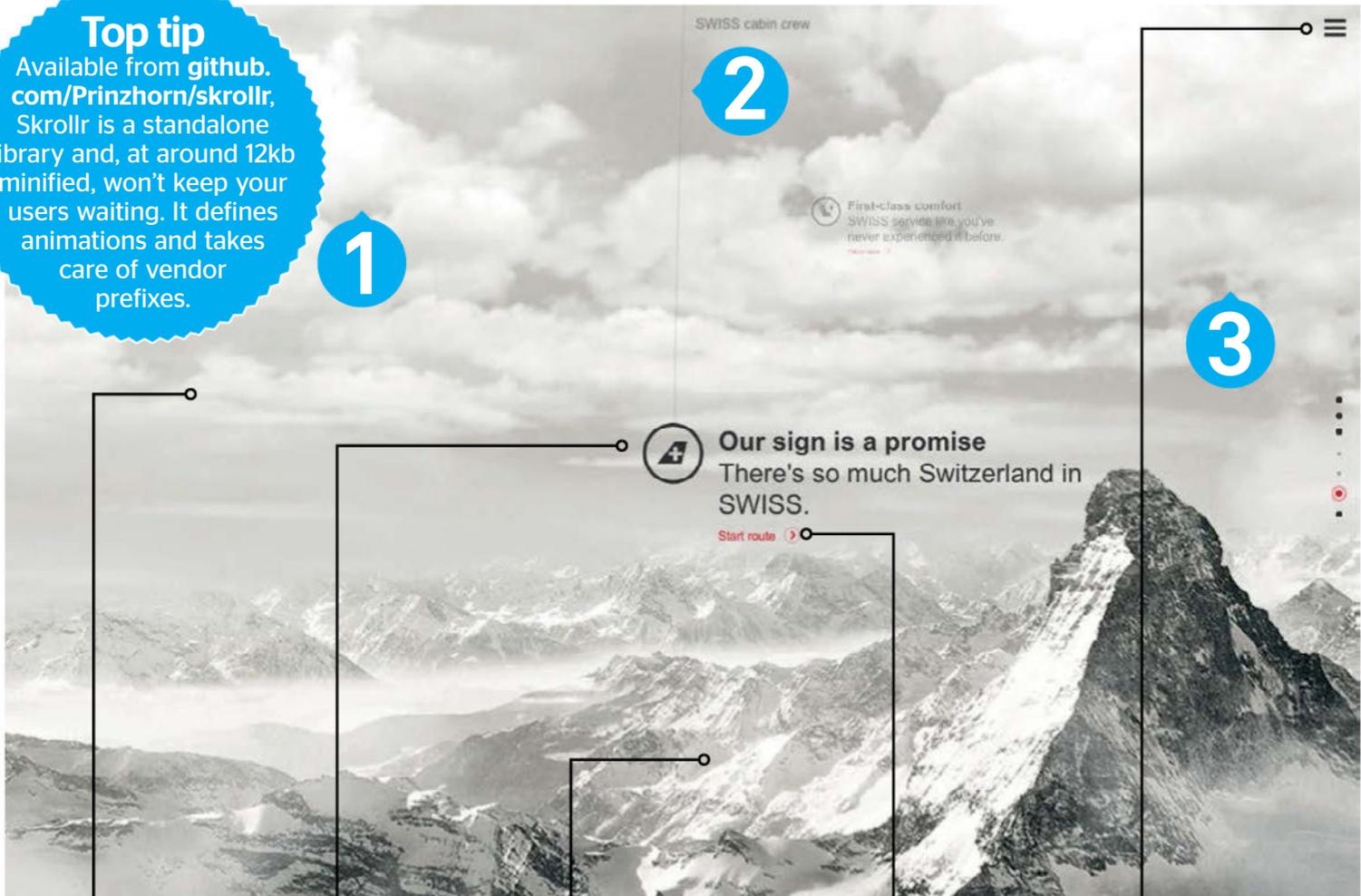
ZÜRICH-BASED CREATIVE AGENCY Hinderling Volkart's tag line is "Integrated at heart" and its work for Swiss International Air Lines showcases the agency's commitment to this philosophy in action.

You will have seen many of the effects used here before, from parallax backgrounds to fullscreen video, but where Hinderling Volkart

excels is in combining these techniques and integrating them into the story that it is telling on its client's behalf. This is a website that demands to be explored; it puts you in the shoes of their pilots, aircrew and passengers. It tells the stories that help express the values of the airline in such a way that you become fully immersed in the world Hinderling Volkart has created: the World of Swiss.

Top tip

Available from github.com/Prinzhorn/skrollr, Skrollr is a standalone library and, at around 12kb minified, won't keep your users waiting. It defines animations and takes care of vendor prefixes.



Background

If you were a Swiss airline you'd be missing a trick if you didn't make use of the amazing alpine landscape. It provides the perfect backdrop for the story

Clean type

Having a Swiss client whose values include minimalism, precision and attention to detail assists the design effort a great deal. As far as typography goes, there won't be a serif in sight

Viewport

The site detects the viewport width and if you don't have the pixels, you don't see the show. Sometimes it's better to just say sorry and move on

Engaging video

The videos are a must watch and are cleverly integrated as part of the site experience. You can enjoy a flight from the cockpit, with the crew, or travel as a customer

Minimal interface

The interface encourages you to explore and there are ample visual cues to point out the availability of content. The menu in the top-right provides more direct access to content

1 Inspiration Where do you want to go today?

When Microsoft threw down this challenge during the Nineties, it was encouraging people to explore possibilities with the tools available. Having a rich set of tools to provide a

dynamic user experience enables designers to explore new options and Alexander Prinzhorn's Skrollr library ranks as one of the best tools for creating visually rich user experiences.

Skrollr lets you animate any CSS property depending on the horizontal scrollbar position. Just decide on the animation(s) you require and define key frames for each element.

2 Technique Standalone animation library

01 HTML first

Skrollr animates your page elements when you assign data attributes to them and specify the animation state that is required for a particular scroll point. The simplest task to set up is any parallax background you may require. Skrollr can handle any size of graphic, including tiled and non-tiled images.

```
001 <div id="bg1" data-0="background-
background-position:0px 0px;" data-end="
background-position:-450px
-10000px;"></div>
002 <div id="bg2" data-0="background-
background-position:0px 0px;" data-end="
background-position:-250px
-8000px;"></div>
003 <div id="bg3" data-0="background-
background-position:0px 0px;" data-end="
background-position: 0px -6000px
;"></div>
```

02 Animated <div>s

You animate an element by specifying its position on screen at the first scroll point: here 30% from the top at scroll point 0 (the top of the page) and the final position: top 0% (top of the page) then the page has scrolled up 500px. You can also apply many other transformations. Here, the opacity of the <div> changes from 0.7 to 0 as the page scrolls up.

```
001 <div id="intro" data-0="opacity:0.7;
top:30%;" data-500="opacity:0; top:0%;">
002 <h1>Multiple Moving
Backgrounds</h1>
003 <h2>Using Skrollr</h2>
004 <p class="arrow">▼</p>
004 </div>
```

03 Flying in

To create a relatively complex animation using these tools is quite straightforward. This animation makes the <div> appear from nowhere (scale 0) and do a 360-degree rotate. Once the user has had the chance to read the content, it continues to fly towards the user (scale 2), spinning round again and disappearing into thin air. Not bad work for three or four data statements. The empty specification in data-1600 is a code-efficient useful

shorthand for saying 'keep things as they were at the previous scroll point'.

```
001 <div id="transform" data-500="
transform:scale(0) rotate(0deg);"
data-1000="transform:scale(1)
rotate(360deg);opacity:1;" data-
1600="" data-1700="transform:
scale(2) rotate(0deg);opacity:0;">
002 <h2>Parallax</h2>
003 <p>Is only part of it</p>
004 </div>
005
```

04 Content blocks

Skrollr also handles content blocks and here the content is brought into view as the scroll continues, made 'sticky' for a few hundred pixels before then scrolling up and off screen again. Skrollr will handle multiple animations concurrently and the range of effects that is achievable is virtually unlimited.

```
001 <div id="properties" data-1700="
top:100%;" data-2200="top:0%;"
data-2300="display:block;" data-
2500="top:-100%;display:none;">
002 <h2>Total control</h2>
003 <p>Anywhere on the page</p>
004 </div>
```

05 No surprises in CSS

The CSS is all standard stuff. When using multiple layers you'll need to use z-index to keep your layers in order - and that's really all there is to it. However, if you want to stand out from the competition, this tool is so easy to use that you'll need to work especially hard to create something fresh and original.

```
001 #intro {
002 position:fixed;
003 left:50%;
004 width:500px;
005 margin-left:-266px;
006 background: rgba(255,255,255,0.7);
007 text-align:center;
008 z-index:49;
009 }
```

3 Technique Multiple moving backgrounds

When it comes to animating pages, less is often more. It's important to consider the best way of communicating your content and which techniques will best support that.



01 Clouds

This is one huge tile at 1500x900px but it weighs in at just 38kb. It's starting to look artefact-y, but if site visitors are looking closely at your backgrounds then it's likely you have more important issues to deal with.



02 First background

This background needs to be a 24-bit PNG to enable the transparency and quality the format provides. As well as the balloons scrolling, Skrollr enables transformations along the X-axis, which helps to reduce the appearance of uniformed repetitive tiles.



03 Second background

A little trial and error is necessary to balance the relationship between the backgrounds - but don't get too carried away fine-tuning, as the relationships will tend to shift in different-sized viewpoints.

Create an animated logo using CSS3

ADD ANIMATION TO SIMPLE DIV'S USING CSS3 KEYFRAMES AND TRANSFORMS

TUTORIAL OBJECTIVE

Create an animated logo for your website using CSS3

TIME REQUIRED

1 hour



CREATING ANIMATIONS USING CSS3 is becoming more and more popular because of the ease of use and the browser support the new properties

now have. Also, as interactive projects get more aggressive and mobile devices are now a priority, performance has become increasingly important. Animating the scale, rotation, and position of an element is now common. In CSS, they're all crammed into one 'transform' property, making them impossible to animate in a truly distinct way on a single element. For example, what if you wanted to animate 'rotation' independently, with different timings and eases? The '@keyframe' rule lets authors control the intermediate steps in a CSS animation sequence by establishing keyframes (or waypoints) along the animation sequence that must be reached by certain points during the animation. This gives you more specific control over the steps of the sequence.

In this tutorial, we look at using keyframes combined with other animation properties, such as 'translate', 'transform' and 'transition', and create an animated cube you could use as a logo for your site.

01 New HTML document

The first step is to create a new HTML5 document and call it 'index.html' and then add in the meta data, which includes the 'viewport' meta name. The 'viewport' meta tag is added just in case we want to make our page responsive. And lastly we can add in our link to our style sheet.

```
001 <meta name="description" content="Animated
    Logo using CSS3">
002 <meta name="viewport" content="width=
    device-width, user-scalable=no">
003 <!-- css -->
004 <link rel="stylesheet" href="styles.css">
```

02 Google fonts

Even though we're not going to be using a large amount of text, it's still a good idea to pick the font that we think would enhance the style of our logo - and what better way than to use Google fonts (www.google.com/fonts) to accomplish this. Simply enough we just choose the font we want to use and then point to it within our head section.

```
001 <!-- Google fonts -->
002 <link href='http://fonts.googleapis.com/
    css?family=Questrial' rel='stylesheet' type
    ='text/css'>
```

03 Page and cube wrapper

Using the 'section' element, we can add in a wrapper section that we will use to centre all our content. Then within this wrapper we can add in another wrapper called 'cube-wrapper' and use

that to give us even more control on positioning any elements within.

```
001 <section id="wrapper">
002   <div class="cube-wrapper">
003     </div>
004 </section><!-- END wrapper -->
```

04 Logo text

Adding in the HTML for our logo is going to be pretty straightforward as all we are going to do is add in a div with a class name of 'logo_text'. And then within that we will add an 'h1' tag and use a span tag with a class name of 'green' to wrap around the first word, so we can then give it a green colour using CSS.

```
001 <div class="logo_text">
002   <h1><span class="green">iCube
    </span> Designs</h1>
003 </div>
```

05 Building the cube

The idea of this tutorial is to have a rotating cube that just sits below our logo, so the next step will be to add a div with a class name of 'cube'. Then inside that we add another six divs all with a class name of 'side'. I'm sure you can guess each 'side' div represents each side of the cube, so let's finish that off in the next step.

```
001 <div class="cube">
002   <div class="side"></div>
003   <div class="side"></div>
004   <div class="side"></div>
005   <div class="side"></div>
```

```
006 <div class="side"></div>
007 <div class="side"></div>
008 </div>
```

06 Cube content

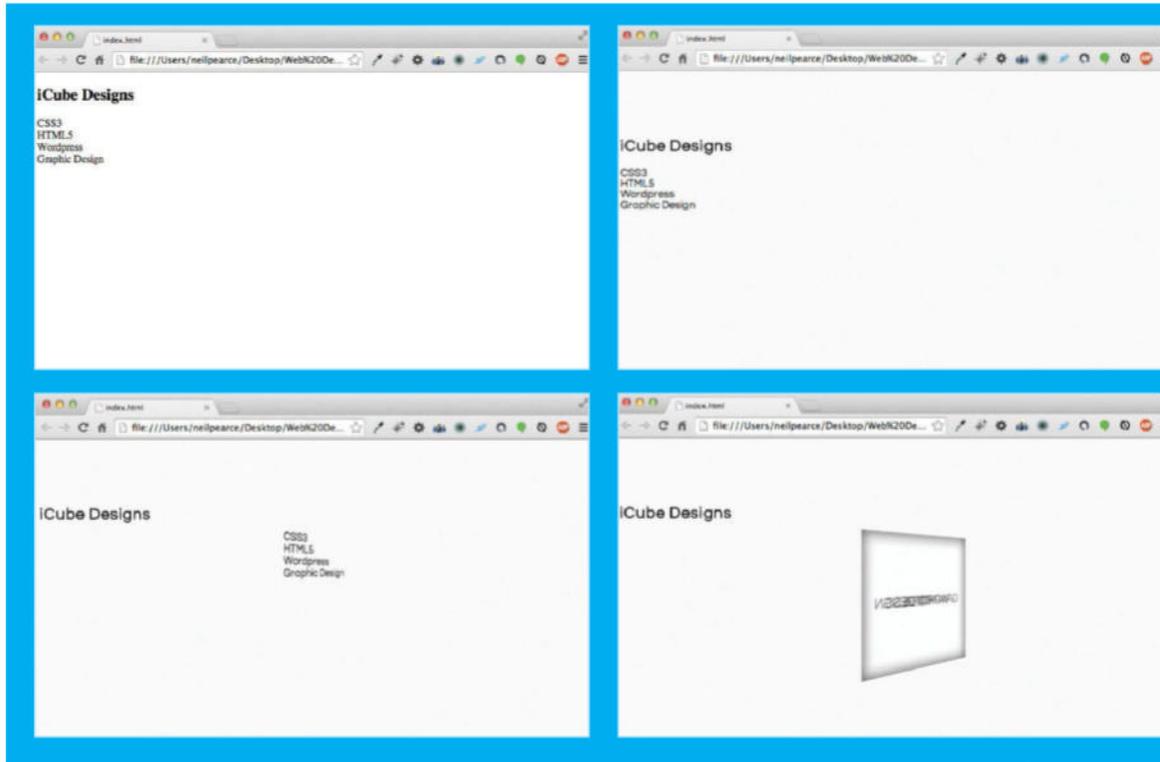
Having added our side divs in the last step, we now need to add an extra class to each one. As you can see each new class represents the side of that cube. Then lastly we want each side to show some text within and the only sides we won't be seeing as the cube spins are the top and bottom, so leave those empty.

```
001 <div class="cube">
002   <div class="side front">CSS3</div>
003   <div class="side back">HTML5</div>
004   <div class="side top"></div>
005   <div class="side bottom"></div>
006   <div class="side left">Wordpress</div>
007   <div class="side right">Graphic Design
    </div>
008 </div>
```

07 Adding our CSS

As always when we open a new CSS file, we add in some default styles to our page. Here we give our background an off-white colour and set the font to 'Questrial' which is what we chose from Google fonts. We then centre everything and push it down by 100 pixels to give our cube some room.

```
001 body{
002   background: #f9f9f9;
003   font-family: 'Questrial', sans-serif;
```



- <top left>**
 - Now that we have all the HTML completed, we are left with just the barebones of our project
- <top right>**
 - The first bit of CSS has now been added with our Google font and background colour clearly being seen
- <bottom left>**
 - With the first animation sequence added, we can see the content spin around
- <bottom right>**
 - Now that we've added some styles to the side panels, things are taking shape

```
004 }
005 #wrapper {
006   width: 900px;
007   margin: 100px auto;
008 }
```

08 Cube perspective

The cube isn't a cube until we give it some perspective, and we can do that by targeting the 'cube-wrapper' class. We first set its positioning to 'relative' and then we give it some perspective.

```
001 /* cube wrapper */
002
003 .cube-wrapper {
004   position: relative;
005   -webkit-perspective: 500;
006   -webkit-perspective-origin: 50% 100px;
007 }
008
```

09 @keyframe rule

With the @keyframe rule, we can specify where an animation starts and where it finishes and tie that into any CSS animation property such as 'transform'. So here we are rotating our cube from '0' to '360' degrees. We then add what is known as an 'identifier' called 'spin' which allows us to add that identifier to any CSS rule.

```
001 /* keyframes for rotating animation */
002 @-webkit-keyframes spin {
```

```
003   from { -webkit-transform: rotateY(0); }
004   to { -webkit-transform:
005     rotateY(360deg); }
```

10 Spinning the cube

Now that we have set the starting point and finishing point of our 'spin' animation sequence, we can add that to our cube using 'animation: spin' and set its speed to four seconds and make it infinite. One thing to remember is the keyframe identifier can be called anything you want, we've called it 'spin' so we then know what that animation identifier will do.

```
001 .cube {
002   position: relative;
003   margin: 0 auto;
004   width: 200px;
005   -webkit-transform-style: preserve-3d;
006   -webkit-animation: spin 4s infinite
007     linear;
008 }
009
```

11 Side panels

If we viewed this in the browser now, we would see nothing but our cube's content spinning around, lost and confused. So let's now add some CSS to the side panels of our cube so we can start making things look how we want them to look.

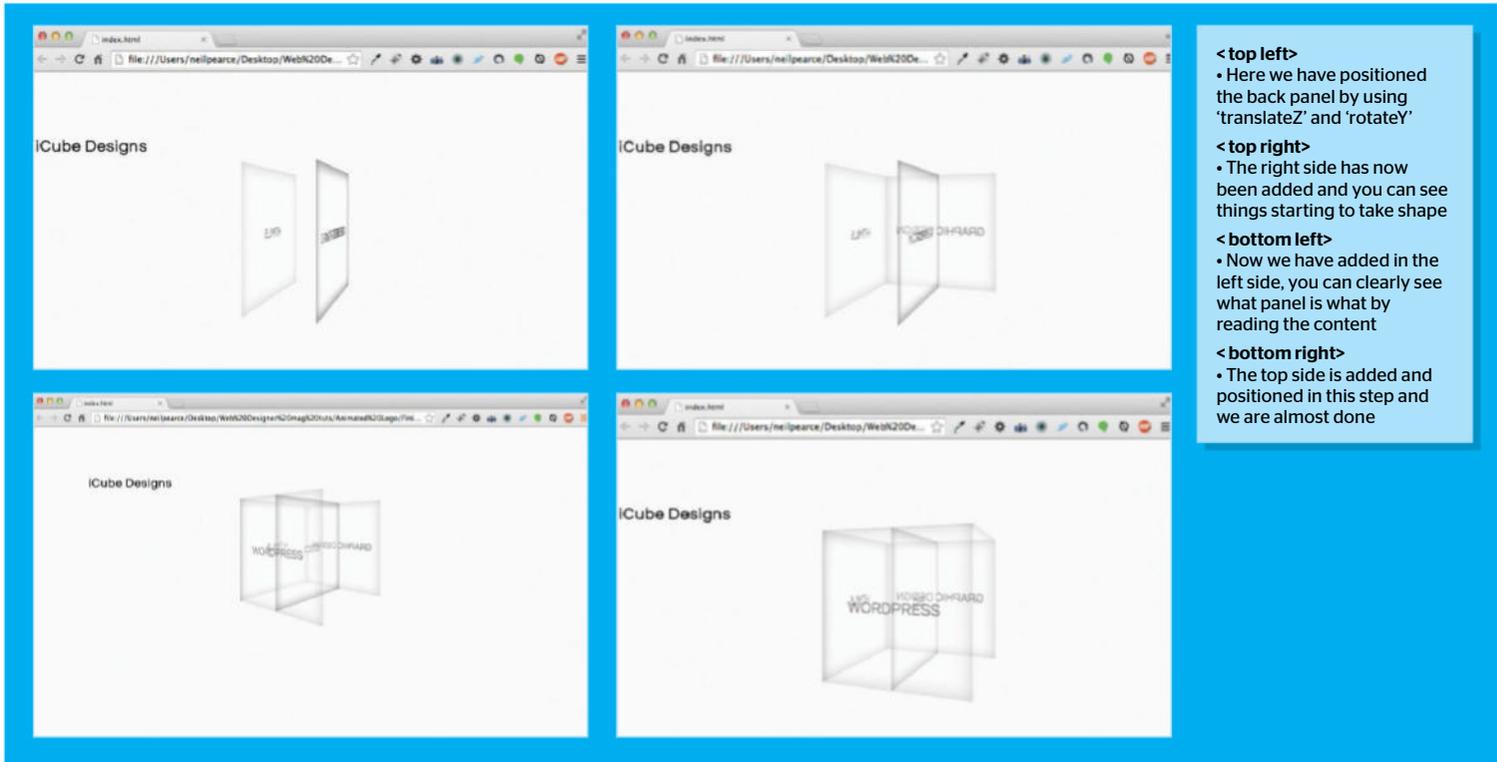
Top tip
The 'preserve-3d' value determines if that element's children are positioned in 3D space or flattened.

```
001 /* cube sides */
002 .side{
003   position: absolute;
004   width: 200px;
005   height: 200px;
006   display: block;
007   background: rgba(255, 255, 255, 0.1);
008   box-shadow: inset 0 0 30px
009     rgba(0, 0, 0, 0.2);
010   font-size: 20px;
011   text-align: center;
012   line-height: 200px;
013   color: rgba(0, 0, 0, 0.5);
014   text-transform: uppercase;
015   -webkit-transition: all 1s linear;
016 }
```

12 Back side

Now that we have some styles added to our side panels, we want to think about moving our side panels away from the centre to give us that cube look. We can achieve this by using the 'transform: translate' property and position the back panel using the 'z' axis and rotate it 180 degrees.

Customisation



```
001 .back
002 {
003   -webkit-transform: translateZ(-100px)
004     rotateY(180deg);
005 }
```

13 The right panel

In this step we are going to rotate our right-sided panel on the 'Y' axis and translate it on the 'X' axis. To help us position the panel to exactly where we want it, we make sure we set the rotation point top right by using the 'transform-origin' property.

```
001 .right{
002   -webkit-transform:rotateY
003     (-270deg) translateX(100px);
004   -webkit-transform-origin: top right;
005 }
```

14 The left-sided panel

The left-sided panel is going to sit exactly the opposite to our right-sided panel. So all we really need to do is use the same set of properties and values as our right-sided CSS rule, but make sure we use a positive and negative accordingly. We then set the rotation point to be centre left.

```
001 .left{
002   -webkit-transform:rotateY(270deg)
003     translateX(-100px);
004   -webkit-transform-origin: center left;
005 }
```

15 The top panel

We have three more panels left and those are the top, bottom and front. Both the top and bottom panels don't have any content within them as we didn't add that within the HTML, simply because we wouldn't really see it once we have positioned them. But looking at the animation now, we can clearly see what panel is what by referring to the HTML content.

```
001 .top{
002   -webkit-transform:rotateX(-90deg)
003     translateY(-100px);
004   -webkit-transform-origin: top center;
005 }
```

16 Bottom and front panels

To finish off our cube we can now position our bottom and front panels. The bottom panel is self-explanatory, but the front panel doesn't need much work because it is already at the correct angle. So all we need to do is push it forward on the Z axis by 100 pixels.

```
001 .bottom{
002   -webkit-transform:rotateX(90deg)
003     translateY(100px);
004   -webkit-transform-origin: bottom center;
005 }
006 .front{
007   -webkit-transform: translateZ(100px);
008 }
```

17 The typing animation

To add some more animation to our project, we can create a typing animation to our title. So again let's add in a start and stop sequence with a custom identifier called 'typing'. We have set the ending point to a width of 7em, but you may want to adjust this depending on the length of your own title.

```
001 @-webkit-keyframes typing {
002   from { width: 0 }
003   to { width: 7em }
004 }
```

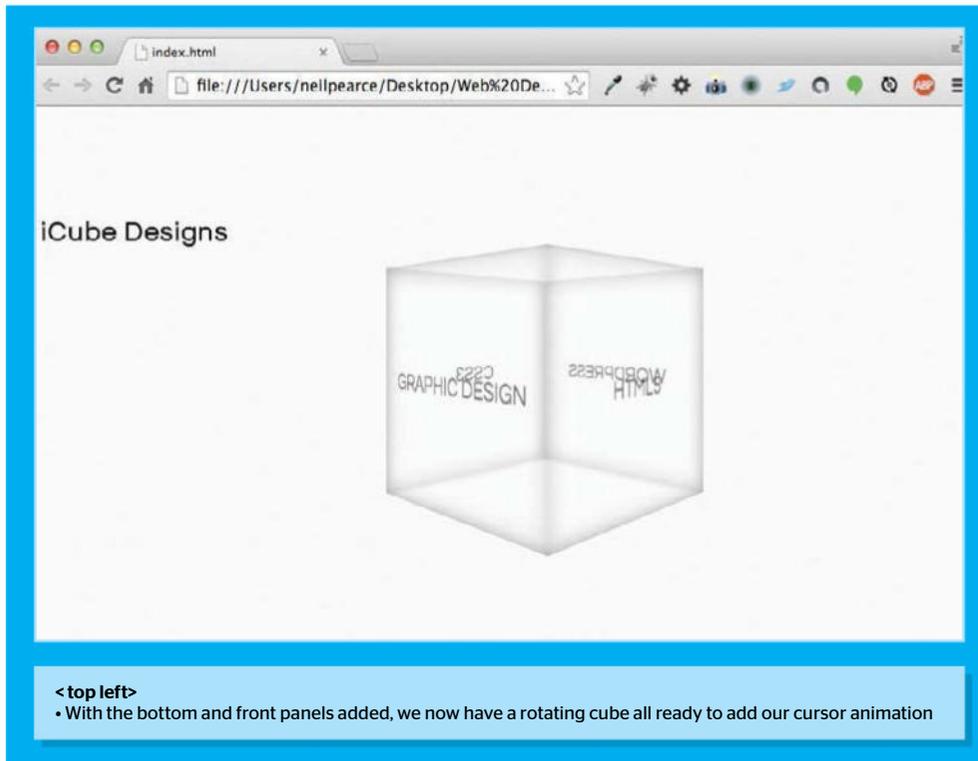
18 Blinking cursor

Now that we have the typing animation sequence set we need to create a blinking cursor animation sequence so it looks like the text is being typed. Again to keep things nice and simple and descriptive, let's give this animation sequence the name 'blink' and a default colour of black.

```
001 @-webkit-keyframes blink {
002   from, to { border-color: transparent }
003   50% { border-color: black }
004 }
```

20 Logo text styles

So now we need to style our text and position it accordingly using absolute positioning. We then use the Google font we chose (Questrial) and set its size. Then let's create the cursor and we will make the blink by adding a border right. Then



to shorten the cursor we can add in a line height of 1 pixel.

```
001 .logo_text {
002   position: absolute;
003   top: -70px;
004   left: 350px;
005   font-family: 'Questrial', sans-serif;
006   font-size: 2em;
007   white-space: nowrap;
008   overflow: hidden;
009   border-right: .1em solid black;
010   line-height: 1px;
011 }
```

21 Animate the cursor

To animate the right border to look like a cursor, all we need to do is add this next bit of CSS to the end of the same rule as in the last step (`logo_text`) The values we have set here allow us to control the speed of our animation and how many steps it will go through, so in our case the number of characters - which is 13 (including the space in between the words).

```
001 -webkit-animation: typing 2s steps
002   (13, end),
003   blink 1s step-end infinite;
004 }
```

22 Finishing off our logo

To give our logo text a bit of colour, we're going to target the `` tag we added with the class name

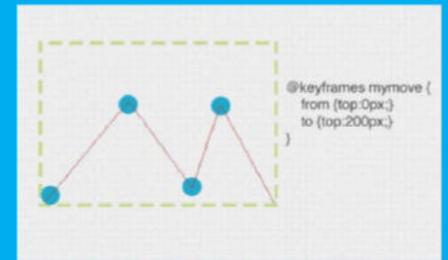
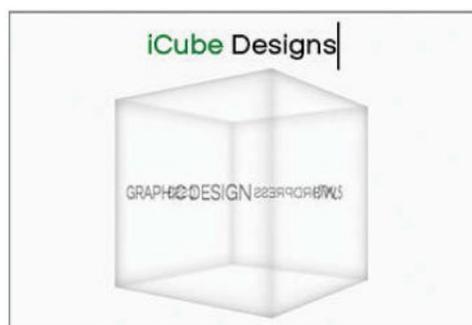
Top tip
The `transform-origin` property is used in conjunction with CSS transforms, letting you change the point of origin of a transform.

of 'green' and give it a default green colour. We will also set the font weight to bold so it's more prominent, and that's it.

```
001 .logo_text .green { font-weight: bold;
002   color: green; }
```

23 Final thoughts

CSS animations can be used to really bring a website to life. While the code for our cube logo may not be the most semantic, it hopefully shows how simple it can be to bring almost anything on the page to life using CSS. So go forth and animate!



The @keyframes at-rule

The first unusual thing you'll notice about any CSS3 animation code is the keyframe @ rule. According to the spec, this specialised CSS @ rule is followed by an identifier that is referred to in another part of the CSS.

```
001 @-webkit-keyframes blink {
002 }
```

The word 'Blink' is an identifier and it's chosen by us, the developer. The @ rule and its identifier are then followed by a number of rule sets (ie style rules with declaration blocks, as in normal CSS code).

```
001 @-webkit-keyframes blink {
002   from, to {
003   }
```

```
001   50% {
002   }
```

```
001   80% {
002   }
003 }
```

With the addition of those new rule sets, we've introduced keyframe keywords and selectors. In the code example above, the keyframe selectors are 50% and 80%. And the keywords are 'from' and 'to' - which is what we used throughout this tutorial, but you can use either of these to get the same result.

 We use the same set of properties and values as our right-sided CSS rule, but we use a positive and negative accordingly 

TUTORIAL OBJECTIVE

Use HTML5 to create an animated header

TIME REQUIRED

1 Hour 30 Minutes

Blur and focus your text with Font Font

THE RIGHT FONT CAN BE THE ICING ON YOUR WEBSITE CAKE. CHOOSING WHICH IS BEST, AND HOW TO ADAPT ITS LOOK, IS VITAL TO ANY WEBSITE

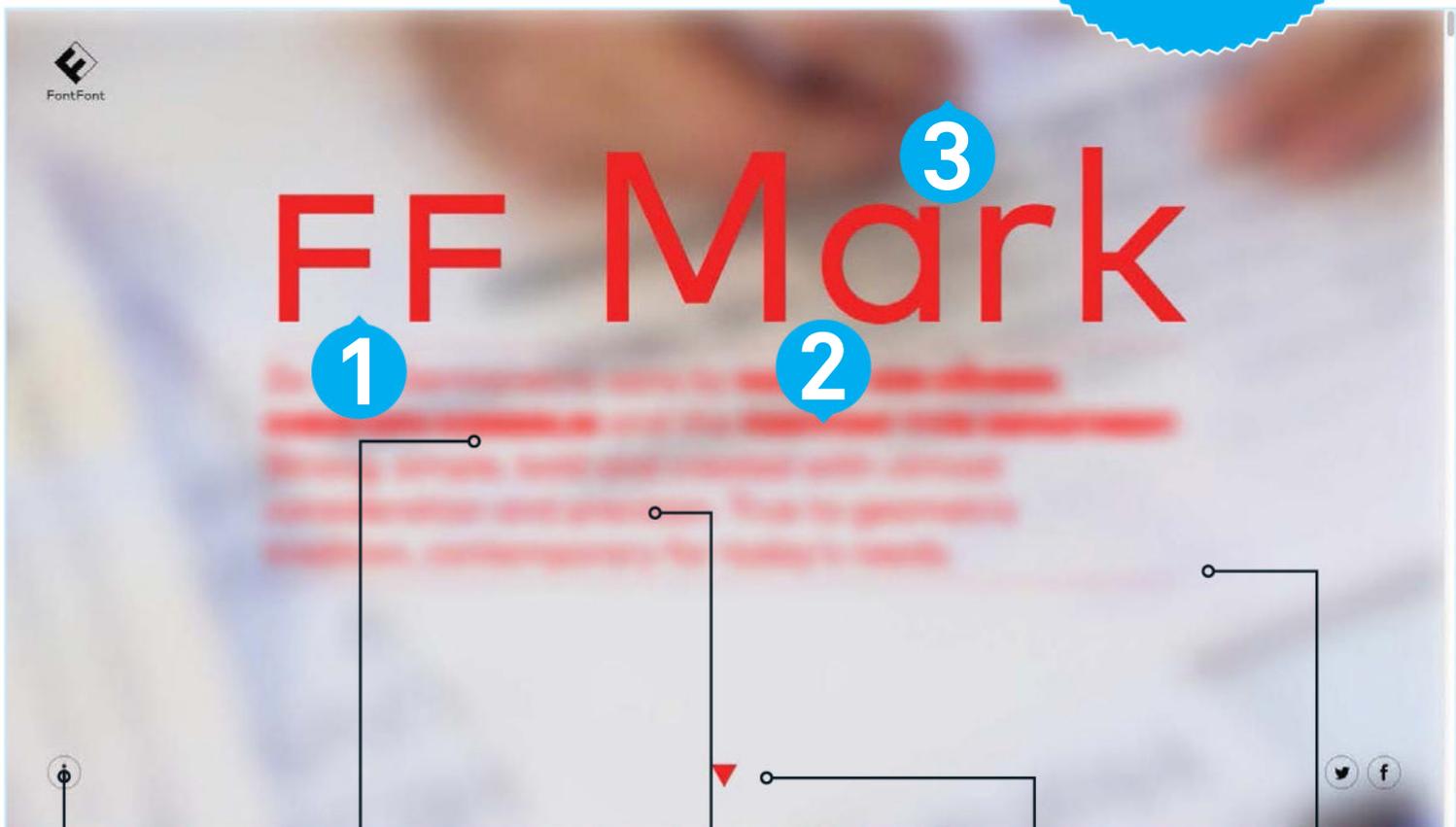


WHEN TYPEFACES ARE the very nature of your business, such as with Font Font, who design and produce some of the best typefaces in the industry, then your site must show these off in all their glory. The [ffmark.com](#) site has some lovely touches on the website, such as being able to edit type on books, page layouts and even with a world clock. Not only does the user have the ability to edit these typefaces but they can

change them and see them in action before purchasing the associated type. Users are able to get as creative as they want with all the possibilities at hand, and the site offers a great source of inspiration. This site really shows off the rich typography that is now available for all web designers to use today.

Top tip

Type geeks may spot Eric Spiekermann in the video of [ffmark.com](#) who is a self-pronounced 'typophile' and one of the world's leading experts on typography.



Info button

The info button contains instructions to scroll down just in case the user doesn't understand the arrow. The icon is kept consistent with site branding and the social icons

Keep the focus

The main headline of the site is in focus while the remaining text and the background, which is a video, is blurred so that the user cannot see the content

Fixed and fading

As the user scrolls down the page the text and video remain fixed in place but the headline starts to fade out, while the other text and video fade into focus

More to explore

The arrow at the bottom of the screen is essential in allowing the user to know that there is more content below. This is always particularly useful when the video fills the full screen

Try it yourself

Once the user scrolls down the page, other content becomes available with more interactive features that enable the user to try out the typography

1 Inspiration Focusing the typography

One of the most stunning aspects of the fmark.com site is the blurred text and background video that appears when you enter the site. As the user scrolls down the page the headline

starts to blur, while the background and second text area are brought into focus. The blurring is fairly straightforward to do: just add `‘-webkit-filter: blur(32px);`. The same

technique can also be applied to text but we have shown another way using the text shadow effect and making the text transparent over the top. Then just change the amount of blur.

2 Technique Blur text with Scrollr

01 Style the body

We're going to start this project by adding some CSS which can be placed either in the head of the document or in a separate CSS file. Here we are making the font weight bold and increasing the default size of the text on the page. As we are blurring text, it's a good idea to make it just a little bigger.

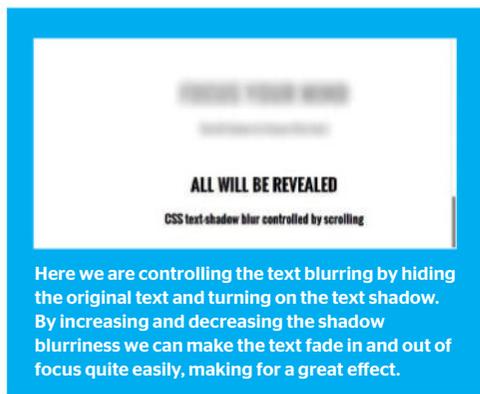
02 Position the text

We now position our text that will be placed into a container with the ID of intro. We are making this fixed on the screen so that as the scrollbar moves down the page we can still see the text. This is important as we'll be blurring the text. We centre the text on the page.

```
001 #intro {
002   position: fixed;
003   width: 80%;
004   left: 50%; top: 1em;
005   margin-left: -40%;
006   padding: 2em;
007   text-align: center;
008 }
009 .top { margin-bottom: 80px;}
010 </style>
```

03 Add body copy

We will now move to the body section of our HTML document and add in the intro ID `<div>` to place our text inside. We then add our text to another `<div>` that has a data element. This will be picked up by



JavaScript with the Scrollr (github.com/Prinzhorn/skrollr) library that we'll add in the final step.

```
001 <div id="intro">
002 <div class="top" data-0="color:
transparent; text-shadow: 0 0 0.1px
rgba(0,0,0,1);" data-1000=" text-
shadow: 0 0 32px rgba(0,0,0,0.5);">
003 <h1>FOCUS YOUR MIND</h1>
004 <p>Scroll down to focus the text</
p>
005 </div>
```

04 The remaining text

The first text will blur out as the user scrolls and the next text will become sharp. We are doing this by setting a 32px text-shadow blur at 0px scroll, while at 1000px scroll we change the text-shadow blur to 0 - so no blurring at all. We then hide the original text so that we can only see the text shadow.

```
001 <div data-0="color: transparent;
text-shadow: 0 0 32px rgba(0,0,0,0.5);"
data-1000="text-shadow: 0 0 0
rgba(0,0,0,1);">
002 <h2>ALL WILL BE REVEALED</h2>
003 <p>CSS text-shadow blur controlled
by scrolling</p>
004 </div>
005 </div>
```

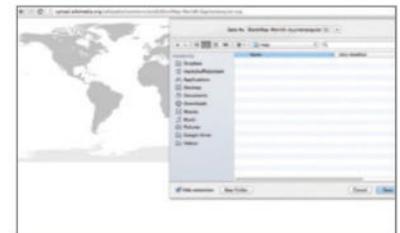
04 Finishing touches

Download the Scrollr library from GitHub and move the 'dist' folder into your local folder. Then, before closing the body tag, add the code shown below to link up the library and start it all up. Now save the document and view it in the browser to see everything in action.

```
001 <script type="text/javascript"
src="dist/skrollr.min.js"></script>
002 <!--[if lt IE 9]>
003 <script type="text/javascript"
src="dist/skrollr.ie.min.js"></script>
004 <![endif]>>
005 <script type="text/javascript">
006 var s = skrollr.init();
007 </script>
```

3 Technique Create the map

The background to the world time section of the site features a large and engaging world map. Here we show how to create and customise a world map for use in your own backgrounds to your sites.



01 Get the map

It's virtually impossible to start drawing a world map - and why bother when there are so many available online? Head over to Wikipedia (bit.ly/pTfg9) as they have several maps available in SVG format, so can be scaled easily to fit any page. Click one that you think will best suit your needs, it will be displayed on its own page, save this page in order to save the SVG image.



02 Edit the map

SVG files can be opened in vector editing applications such as Illustrator or Inkscape. Open the file and change the colour of the fill to one that will suit the design you are creating. You can also select local areas such as Antarctica which you perhaps don't want to display.



03 Save for use

The final step is to use the image on the web so you can either choose File>Save for Web and save as a transparent PNG image or choose File>Save As and choose SVG. Modern browsers will be able to display either one of these in the document.

Build circular on-hover navigation

IMPLEMENT A MINIMALIST GEOMETRIC DESIGN WITH ON-HOVER EFFECT FOR EASIER SITE NAVIGATION, AS INSPIRED BY HENGE07.COM/TRAVEL

Inside content

The navigation items are made as regular HTML containers, so any content type can be inserted like images

Animation trigger

The animations on the page are triggered when the user hovers the mouse cursor over one of the navigation items

Circular shape

The circle shape of the items is achieved by using a border radius of 100 per cent, enabling any sized circle to be made

Navigation items

The items are regular navigation links refined to show as table cell style elements for content flow and sizing

Container control

Each navigation item displays with a navigation container, allowing size control and location of the navigation items

TUTORIAL OBJECTIVE

Create animated hover effects to make menu elements stand out

TIME REQUIRED

1 hour



SOME TYPES OF navigation design are intended to be highly noticeable. In the case of the inspiration for this tutorial, it is clear that the navigation's purpose is to present itself in a way that directs the user straight to a specific part of the website. This type of navigation is ideal for areas of a website that different types of visitor are accessing by making it clear where the information of interest can be found. This approach to website design can be highly useful for projects that rely on making enquiries or sales conversions from users who have never previously visited the website. In these scenarios, users who don't immediately see what they want are more likely to click on the back button, meaning that the website has failed to achieved its purpose. The consequences of these 'bounces' can be costly in terms of lost opportunities to produce conversions and actual cash expenditure. The ability to present clear options doesn't have to be restricted to multipage websites - the same concept can also be used to navigate to sections on the same page. Just use ID names for page content elements and refer to them in your navigation elements using # followed by the ID name to navigate to in the href attribute. Make sure you download the full tutorial code by following this link: <http://goo.gl/VS9ejb>.

01 Define HTML

First create the main HTML content that contains the effect's elements. We'll use a <nav> element to contain the <a> links that become the menu items. The HTML links to CSS and some JavaScript for the visual effects.

02 Adapt navigation HTML

Create a file called 'menu.js'. Our technique requires the HTML navigation items to have two span items - the first is used as the background circle and the second will contain visible content. Adapting navigation items with JavaScript means that the default HTML is good for SEO.

03 Define page basics

Create a new file called 'styles.css'. Insert the initial element formatting CSS to define the page body and navigation. This example will have the navigation set to have child content placed in the middle and display as a block element to display at full screen width.

04 Navigation Items

Page navigation items are the <a> links inside the navigation container. These display with a red border and have a bigger font size. Navigation items will animate when hovered, therefore the transition property

is used to define an animation transition for an opacity of one second for later CSS states.

05 Navigation interaction

The circular navigation items should fade to become semi-transparent when the user hovers over an item that isn't being selected. This is achieved in two stages - the first defines all navigations to have a quarter opacity, then the second stage will select the item to have full opacity.

```
001 nav:hover a{
002 opacity: 0.25;
003 }
004 nav:hover a:hover{
005 opacity: 1;
006 }
```

06 Background animation

The appearing circle animation used in the background is made from the first item used as a square block refined into a circle using clip-path. Only the first element has the properties applied to it to show as the animated circle when the user hovers over the nav item.

```
001 nav a span{
002 position: absolute;
003 display: table-cell;
004 vertical-align: middle;
005 text-align: center;
006 z-index: 0;
007 top: 0;
008 left: 0;
009 width: 100%;
010 height: 100%;
011 }
012 nav a span:first-child{
013 background: #c00;
014 opacity: 0.5;
015 transition: -webkit-clip-path 1s, -moz-clip-path 1s, clip-path 1s, border-color 1s, opacity 1s;
016 -webkit-clip-path: circle(0% at center);
017 -moz-clip-path: circle(0% at center);
018 clip-path: circle(0% at center);
019 }
020 nav a:hover span:first-child{
021 -webkit-clip-path: circle(30% at center);
022 -moz-clip-path: circle(50% at center);
023 clip-path: circle(50% at center);
024 border-color: rgba(0,0,0,0);
025 }
```

 The navigation's purpose is to present itself in a way that directs the user straight to a specific part of the website 

Pay-per-click clarity

This type of navigation can be highly useful for pay-per-click campaigns that are designed to direct people to a targeted landing page. People often want to see an overview of the information and then select for themselves to see the parts that interest them, which this type of navigation can be made to provide.

Use CSS3 to create animated buttons

USING THE TRANSFORM PROPERTY, WE'LL CREATE SOME COOL-LOOKING 3D BUTTONS THAT WILL ADD THAT EXTRA POLISH TO YOUR SITE

TUTORIAL OBJECTIVE

Create animated buttons for your WordPress blog with CSS3

TIME REQUIRED

60 minutes



CSS3 TRANSFORM HAS been doing the rounds for quite some time. Browsers like Firefox, Chrome and Opera have full support for CSS3 2D and 3D transform techniques.

Along with transform, we also have another cool property called perspective.

The perspective property defines the intensity of the 3D effect. This is because it defines how far the object is away from the user. So, a lower value will result in a more intensive 3D effect than a higher value. But one thing we need to remember is, when defining the perspective property for an element, it is the child elements that get the perspective view, not the element itself. When the transform and perspective properties are combined, you can create some great-looking 3D animations on a number of different elements.

In this tutorial we're going to work with the transform and perspective properties and their values to create four cool-looking 3D buttons that you can use on your webpages. Each button will be slightly different in its perspective, which will allow us to really get to know how the perspective property works. So, open up your favourite text editor and let's get started!

01 Get ahead

After creating a new HTML5 file, open it up within your favourite text editor and add in the head section. We will need to add in the link to our CSS file and make sure we have good browser support for our HTML5 and CSS3 - so we will use Modernizr. Head over to modernizr.com and grab the latest version.

```
001 <!DOCTYPE html>
002 <html lang="en" class="no-js">
003 <head>
004 <meta charset="UTF-8" />
005 <meta http-equiv="X-UA-Compatible"
006 content="IE=edge,chrome=1">
007 <meta name="viewport" content=
008 "width=device-width, initial-scale=1.0">
009 <title>Creative 3D Buttons</title>
010 <link rel="stylesheet" type="
011 text/css" href="css/main.css" />
012 <script src="js/modernizr.custom.js">
013 </script>
014 </head>
```

02 Content body

With the head section done, we can now move on and start adding some HTML within the <body> section. As always, we are going to add in a container element with a class name of 'container' to allow us to centre things easily. Then, we will use the <section> element and give it a class name of '3d-buttons'.

```
001 <body>
002 <div class="container">
003 <section class="3d-buttons">
```

```
004 </section>
005 </div><!-- END container -->
006 </body>
007 </html>
```

03 Button HTML

Within the <section> element, we add in a paragraph tag with a class name of 'btn_perspective', which we'll target later using the perspective CSS3 attribute. We then add in our first button, which will contain several class names that we'll target later on.

```
001 <body>
002 <div class="container">
003 <section class="3d-buttons">
004 <p class="btn_perspective">
005 <button class="btn btn-3d btn-3da">Submit
006 </button>
007 </p>
008 </section>
009 </div><!-- END container -->
010 </body>
011 </html>
```

04 Finish up the HTML

We already have the HTML for one button, but we want to create another three so we can really test out our 3D skills. So, copy and paste the paragraph tag we created in the last step and make sure the last class name is changed accordingly.

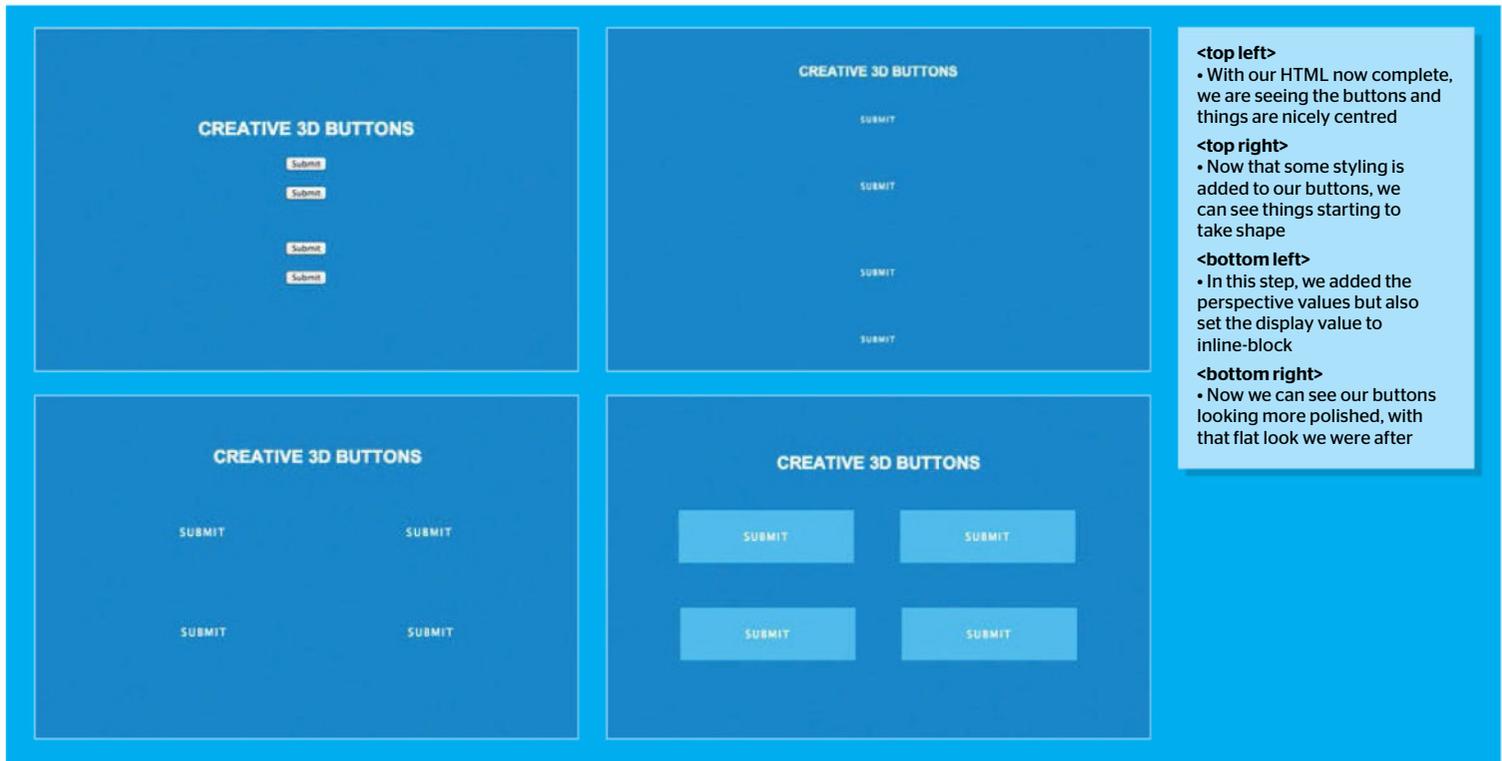
```
001 <body>
002 <div class="container">
003 <section class="3d-buttons">
```

```
004 <h2>Creative 3D buttons</h2>
005 <p class="btn_perspective">
006 <button class="btn btn-3d btn-3da">Submit
007 </button>
008 </p>
009 <p class="btn_perspective">
010 <button class="btn btn-3d btn-3db">Submit
011 </button>
012 </p>
013 <br />
014 <p class="btn_perspective">
015 <button class="btn btn-3d btn-3dc">Submit
016 </button>
017 </p>
018 </section>
019 </div><!-- END container -->
020 </body>
021 </html>
```

05 The CSS

It's important to start every project with some default CSS that we often add to an external CSS reset file. For this tutorial we'll just keep it simple and go ahead and add some CSS to the top of a file called 'main.css', and with this CSS we are making sure our box model is set properly to every single element that uses the box model (css-tricks.com/box-sizing).

```
001 *, *:after, *:before {
002 -webkit-box-sizing: border-box;
```



- <top left>**
- With our HTML now complete, we are seeing the buttons and things are nicely centred
- <top right>**
- Now that some styling is added to our buttons, we can see things starting to take shape
- <bottom left>**
- In this step, we added the perspective values but also set the display value to inline-block
- <bottom right>**
- Now we can see our buttons looking more polished, with that flat look we were after

```
003 -moz-box-sizing: border-box;
004 box-sizing: border-box;
005 }
006 body, html {
007 font-size: 100%;
008 padding: 0;
009 margin: 0;
010 height: 100%;
011 }
012
```

06 Body styles

Next we need to add in some default styles for our body and links. This is not vital but makes things nice and simple as it keeps it all in one place. The background colour is going to be a nice light blue and we're going to stick to using Arial as our main font.

```
001 body {
002 font-family: Arial, sans-serif;
003 background: #0e83cd;
004 }
005 a {
006 color: #888;
007 text-decoration: none;
008 }
009 a:hover,
010 a:active {
011 color: #333;
012 }
```

07 Contain it

Now we need to create a container that

wraps around our content. We're going to set the height of the outer container to 100% and position it relative. Then we use a child combinator selector (>) to target our <section> element and centre everything within and add some other default styles.

```
001 .container {
002 height: 100%;
003 position: relative;
004 }
005 .container > section {
006 margin: 0 auto;
007 padding: 6em 3em;
008 text-align: center;
009 color: #fff;
010 }
011
```

08 Heading styles

What would a page be without a page title? Let's add some styles to that. We're going to keep it simple and make the text white with a 20px margin all around. Then we align it centre and make it uppercase. All nice and straightforward - so let's move on to the buttons.

```
001 h2 {
002 color: #fff;
003 margin: 20px;
004 text-align: center;
005 text-transform: uppercase;
006 }
007
```

09 Button styles

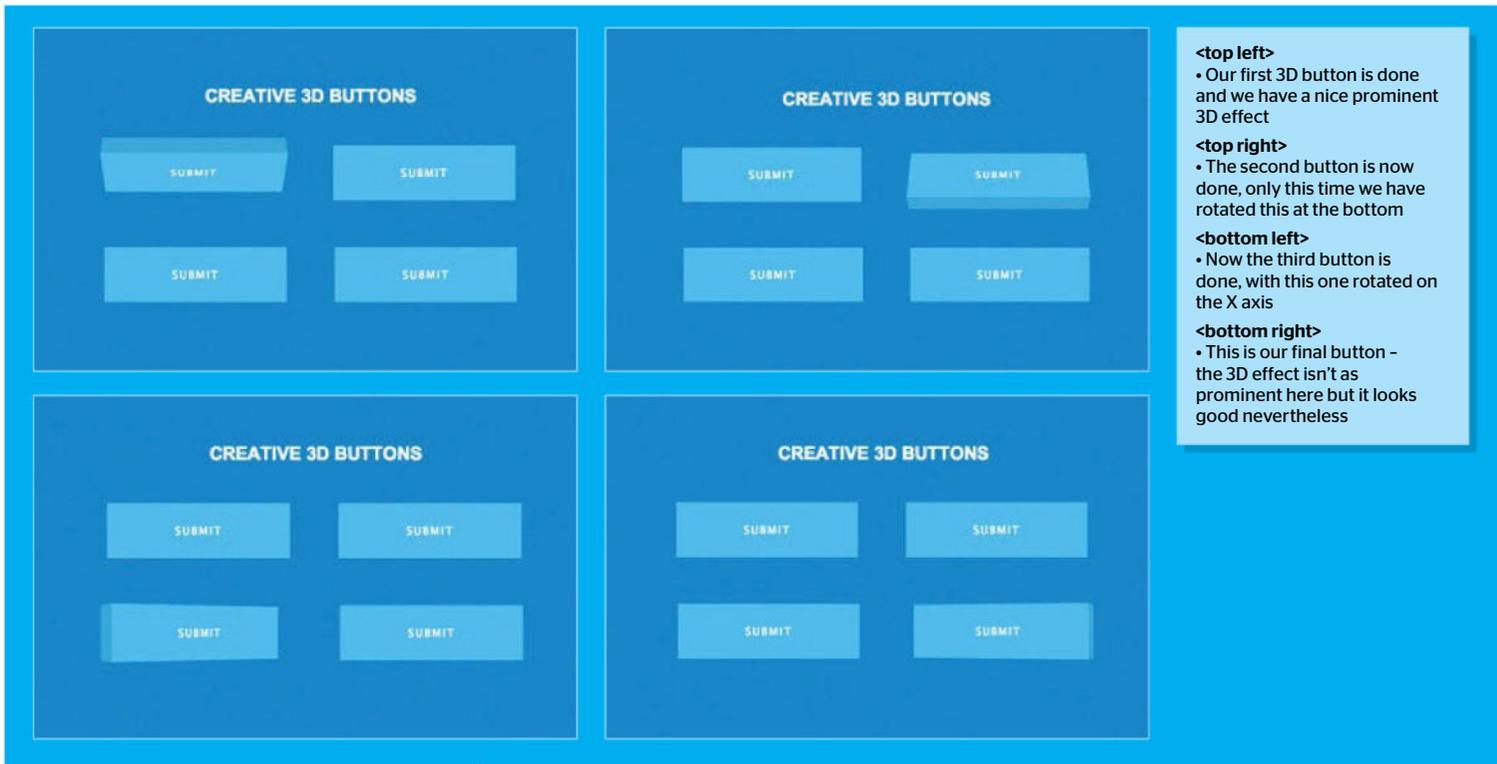
The idea is to give our buttons that flat look, which can easily be achieved by not adding any rounded corners or drop shadows. We will make sure they are fairly large so we can clearly see the 3D effect once we are finished and, as they are buttons, let's not forget to add the 'cursor: pointer' at the bottom of our rule.

```
001 /* General button styles */
002 .btn {
003 border: none;
004 position: relative;
005 background: none;
006 padding: 28px 90px;
007 display: inline-block;
008 text-transform: uppercase;
009 margin: 15px 30px;
010 color: inherit;
011 letter-spacing: 2px;
012 font-size: .9em;
013 outline: none;
014 -moz-transition: all 0.4s;
015 -webkit-transition: all 0.4s;
016 transition: all 0.4s;
017 cursor: pointer;
018 }
```

10 Button pseudo

Using the 'after' pseudo-element, we will make sure any content behind our button is taken out by using the 'content' property. We then ensure that everything is positioned absolute so we can then set its index to '-1', with everything else behind.

Customisation



<top left>
• Our first 3D button is done and we have a nice prominent 3D effect

<top right>
• The second button is now done, only this time we have rotated this at the bottom

<bottom left>
• Now the third button is done, with this one rotated on the X axis

<bottom right>
• This is our final button - the 3D effect isn't as prominent here but it looks good nevertheless

Top tip

There are several different transform functions, each applying a different visual effect. Be sure to experiment and find your favourites.

```
001 .btn:after {
002   content: '';
003   position: absolute;
004   z-index: -1;
005   -webkit-transition: all 0.4s;
006   -moz-transition: all 0.4s;
007   transition: all 0.4s;
008 }
```

11 Button perspective

The 'perspective:' CSS property gives an element a 3D-space by effecting the distance between the Z plane and the user. The strength of the effect is determined by the value. The smaller the value, the closer you get from the Z plane and the more impressive the visual effect is. The greater the value, the more subtle the effect will be.

```
001 /* Button */
002 .btn_perspective {
003   -webkit-perspective: 800px;
004   -moz-perspective: 800px;
005   perspective: 800px;
006   display: inline-block;
007 }
```

12 Button 3D

The 'transform-style' property will determine whether that element is in 3D space or is flattened. Of course we want it to be in 3D, so we add the 'preserve-3d' value to bring the button into 3D space and not be flattened (which is the default).

```
001 .btn-3d {
002   display: block;
003   background: #5cbcf6;
004   outline: 1px solid transparent;
005   transform-style: preserve-3d;
006 }
007 .btn-3d:active {
008   background: #55b7f3;
009 }
```

13 3D animation

Here we add our first 3D animation to our first button (a) and set some other styles. The 'transform-origin' property sets the point of origin of a transform; the first value is the horizontal position, the second is the vertical position. We rotate the 'x' plane to 90 degrees.

```
001 .btn-3da:after {
002   width: 100%;
003   height: 42%;
004   left: 0;
005   top: -40%;
006   background: #53a6d7;
007   transform-origin: 0% 100%;
008   transform: rotateX(90deg);
009 }
010 }
```

14 Hover state

Now this is where the magic happens. We are going to rotate the whole button when we hover over it, making the rotate quite big so that we can see the 3D effect more prominently. To do that we add a -45 degree tilt to the button on the 'x' plane.

```
001 .btn-3da:hover {
002   transform: rotateX(-45deg);
003 }
```

15 Button B

The next button (button B) will be using similar styles as our first button, but with a few changes. First we make sure that the button is positioned 100% to the top and origin values both set to 0%. Then we just need to rotate this -90 degrees.

```
001 /* Button 3db */
002 .btn-3db:after {
003   width: 100%;
004   height: 40%;
005   left: 0;
006   top: 100%;
007   background: #53a6d7;
008   transform-origin: 0% 0%;
009   transform: rotateX(-90deg);
010 }
```

16 Hover state B

Now we have our first button animated in all its glory, we just need to use the same property on this one. To give us some variation, we will not make this as

CREATIVE 3D BUTTONS

SUBMIT

SUBMIT

SUBMIT

SUBMIT

<above>

• All done! Now we can see how things look when we resize the browser window

Top tip

Even with a small project like this, you should always think about making it responsive and suitable for mobile like how we made our buttons larger.

deep as the first button, so we give the rotateX property a value of just 35 degrees.

```
001 .btn-3db:hover {
002   transform: rotateX(35deg);
003 }
```

17 Button C styles

Here we continue on to our next button and add some slightly different styles. The thing to note here is that the origin is now set to 100% at the top and we are rotating the 'Y' axis, not the 'X'. Also, to make sure we are targeting all browsers, we've added the browser prefixes to this rule (which you should do for the previous rules)

```
001 /* Button 3dc */
002 .btn-3dc:after {
003   width: 20%;
004   height: 100%;
005   left: -20%;
006   top: 0;
```

```
007   background: #53a6d7;
008   -webkit-transform-origin: 100% 0%;
009   -webkit-transform: rotateY(-90deg);
010   -moz-transform-origin: 100% 0%;
011   -moz-transform: rotateY(-90deg);
012   -ms-transform-origin: 100% 0%;
013   -ms-transform: rotateY(-90deg);
014   transform-origin: 100% 0%;
015   transform: rotateY(-90deg);
016 }
```

18 C button animation

Let's animate button C by using the same rule as before. This time we need to make sure we are rotating the 'Y' axis. Again, we'll change things up a little by making this 3D effect less prominent by giving it a smaller value of 25 degrees.

```
001 .btn-3dc:hover {
002   transform: rotateY(25deg);
003 }
```

19 Finish up

Now we are almost done with our 3D buttons. All we need to do is add some styles to our last button. Again, there's only some small adjustments in this rule, but we are staying on the 'Y' axis at a positive 90 degrees and our origin top and left is 0%.

```
001 /* Button 3dd */
002 .btn-3dd:after {
003   width: 20%;
004   height: 100%;
005   left: 100%;
006   top: 0;
007   background: #53a6d7;
008   -webkit-transform-origin: 0% 0%;
009   -webkit-transform: rotateY(90deg);
010   -moz-transform-origin: 0% 0%;
011   -moz-transform: rotateY(90deg);
012   -ms-transform-origin: 0% 0%;
013   -ms-transform: rotateY(90deg);
014   transform-origin: 0% 0%;
015   transform: rotateY(90deg);
016 }
```

20 Button D animation

Finally we will add in our animation for Button D. We are going to rotate this one on the 'Y' axis and again we will make this a lot less prominent than before by lowering the value to 15 degrees. We've also added in our browser prefixes too.

```
001 .btn-3dd:hover {
002   -webkit-transform: rotateY(-15deg);
003   -moz-transform: rotateY(-15deg);
004   -ms-transform: rotateY(-15deg);
005   transform: rotateY(-15deg);
006 }
007
```

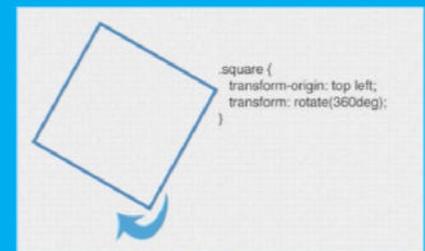
21 Responsiveness

It's only natural that before we wrap this little project up, we think about making the buttons responsive. By default the buttons will fall underneath each other when the browser window is resized, but we want to think about making these buttons slightly bigger so that they are easily clickable using your finger. So, all we do is increase the font size as shown.

```
001 @media screen and (max-width:480px) {
002   .container {
003     font-size: 1.2em;
004   }
005 }
```

22 Final thoughts

Creating 3D buttons can really help enhance your web projects. Hopefully this tutorial has demonstrated that not only is it a fun thing to do, but it's fairly straightforward to implement as well. A challenge for you now would be to try this technique to other elements on your page, such as vertical menus - it can look really great on logos, too.



Understanding transform-origin

As indicated throughout this tutorial, the transform-origin property can take up to two space-separated keywords or length values for a 2D transform and up to three values for a 3D transform.

```
.square {
  transform-origin: top left;
  transform: rotate(360deg);
}
```

Using the code above on a 100 x 100px box, with the transform applied to a transition using a click event, a box would swing around 360 degrees once clicked on. By default, the origin of a transform is '50% 50%', which is exactly in the centre of any given element. Changing the origin to 'top left' (as in the code above) causes the element to use the top-left corner of the element as a rotation point.

The first value is the horizontal position, the second value is the vertical position and the third value represents the position on the Z axis. The third value will only work if you are using 3D transforms - and it cannot be a percentage.

TUTORIAL OBJECTIVE

Create this simple effect to live by the 'less is more' philosophy

TIME REQUIRED

1 hour

Code a fixed image scroll-over effect

FOLLOW THIS TUTORIAL TO EMULATE THIS ACE DESIGN INSPIRED BY THE FOLKS AT WWW.HUGEINC.COM



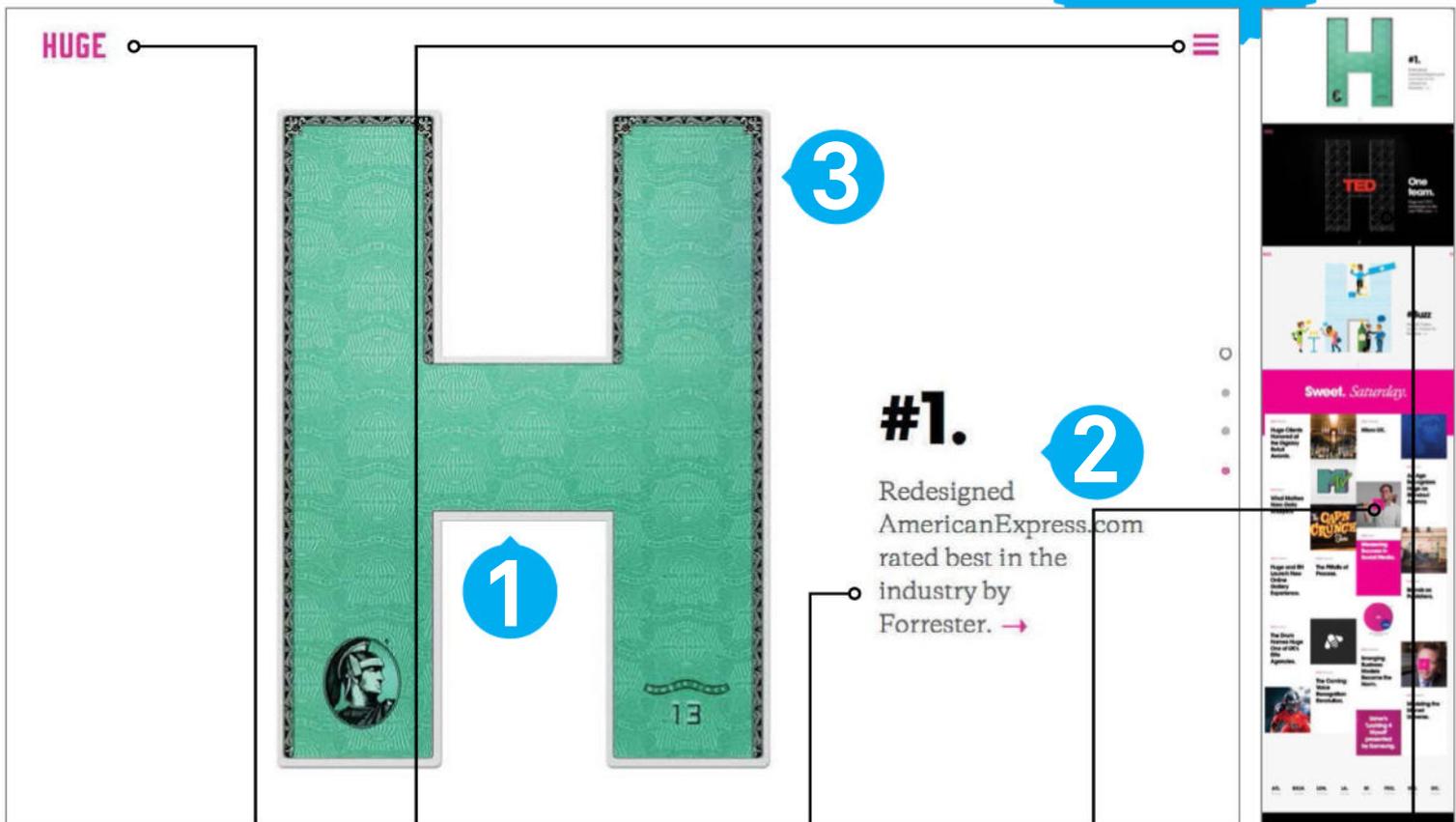
SIMPLICITY IS A goal many designers seek but with its 'less, but better' philosophy, Huge seems to achieve so much more than the rest. When

redesigning its own website, Huge continued to realise opportunities to evolve, and has masterfully engineered an online experience that powerfully communicates its brand.

Positioning their emblematic 'H' front and centre provides a perfect vehicle for telling the

story of the brand and how it works with clients. On arriving at the site, three full-page slides demonstrate the agency's approach and values, and when that message has been delivered, the site flows into a magazine-style presentation of what it means to be Huge. Less, but better it certainly is.

Top tip
Huge's Wes Hatch discusses the fullscreen scroller at bit.ly/1jxW2HY providing a fascinating glimpse into the development process.



Colour palette

If you're looking for a Huge colour, magenta's not a bad choice. It has a confident, simple purity that is also conveyed through absence of anything remotely round cornered or drop shadowed

Accessible content

The 'hamburger' menu provides ready access to the content you'd typically see on a main menu without making you have to look at them the whole time

Keep it simple

There is so much to appreciate in the simplicity of this page. With only one graphic and ten words it communicates so much - what was done, who it was for and how it was received. Job done

Candid moments

Definitely check out the video of the people holding axes! Other candid photos and videos of the Huge team in action also help explain what the agency is all about much better than a traditional 'About' page

Consistency

The home page adopts the popular long single-page approach but by scrolling up in whole page chunks for the first three sections, the simplicity and consistency of the 'H' emblem remains in place

1 Inspiration Huge inspiration

"At Huge, we really try to understand our audience and design for them. So when the time came for our own redesign, we found that the majority of people visiting agency websites fell into

two groups: those who want to work with us and those who want us to do work for them. So, we set out to create an experience that showed off the work that we do, with style and

simplicity for both groups. What we came up with is the iconic 'H': a way to celebrate great client work, but always through the lens of the Huge brand and the great people who make it."

2 Technique Scroll-over effect using fullPage.js

01 HTML head

This technique uses the jQuery library and jQuery-UI if you want easing effects. The fullPage.js plugin is well documented in the 'README.md' file. There are more than twenty configurable options and advanced settings. For this workshop the verticalCentered option has been set to false so that the titles can appear at top of the page rather than over the main graphic. The continuous scrolling and page navigation feature have been set to true.

02 HTML body

To simulate the effect used on the Huge site, the layout and functionality has been kept nice and simple for its visitors. However, you can obviously populate each <div> with whatever content you would like, as well as make use of the many additional options offered by the fullPage.js plugin. For example you can introduce the addition of a landscape slider just by adding in some nested <div>s. There are ten examples within the plugin package.

03 Style the content

This example uses only a fullscreen background for each section and a single heading. You just need to create a new class for each background you want to display and then apply the class to the relevant section. If you just want to change the background colour of each section you



Spanish developer Álvaro Trigo is the creator behind the fullPage.js plugin. It is well documented and under active development. If you want to extend the functionality you are sure to be able to find support on Trigo's GitHub page, at github.com/alvarotrigo/fullPage.js.

can do this using one of the plugin configuration options, slidesColor.

```
001 @import url(http://fonts.
googleapis.com/
css?family=Righteous);
002 h1{
003 font-size: 70px;
004 line-height: 75px;
005 padding-top: 40px;
006 font-family:
Righteous,arial,Helvetica;
007 color: #eee;
008 text-shadow: 3px 3px #000;
009 }
010 .section{ text-align:center; }
011 .w1 {
012 background: url(imgs/w1.jpg)
no-repeat center center fixed;
013 background-size: cover;
014 }
015
```

04 Space out the pips

The jquery.fullPage.css file gives you access to the styling applied by the plugin. In the tutorial, the navigation 'pips' on the right-hand side have been made much bigger and lighter and these changes were made in the .fullPage-slidesNav li and span. Increasing the height enables the 'pips' to be spaced out.

```
001 .fullPage-slidesNav li {
002 display: block;
003 width: 14px;
004 height: 40px;
005 margin: 7px;
006 position:relative;
007 }
```

05 Grow and colour the pips

The pip heights and widths have been increased to 30px each. As the border radius was set to 50 per cent, there was no need to change that value to have it render the square as a circle. RGBA colours with 80 per cent and 30 per cent opacity were used to enable the background to show through the new white controls. There you have it, your scroll-over effect is ready to go!

3 Technique Initial ideas

In homage to Huge's iconic Hs, the workshop files use the World Wide Web's recent 25th birthday for its inspiration. You could choose your own letter or initials, or maybe create an original party invitation, the possibilities are endless!



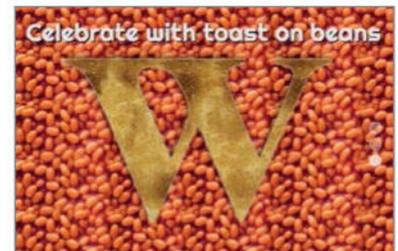
01 Beauty and boards

People images are a good choice for creating full-page designs and Flickr's Creative Commons library is a great free source. You can also find plenty of public domain images online or simply create your own.



02 Consistency and contrast

The key to mastering the effect is to ensure that your central element stays put on each section, so you'll probably want to copy your layer letter into a new Group for each section that you need.



03 Create the unexpected

Do something out of the ordinary if you really want to be remembered. Whatever you do, make it your own. Here we have celebrated the completion of the project

Make an animated off-screen 3D menu

GET YOUR MENU TO STAND OUT WITH A 45-DEGREE PAGE VIEW OFF SCREEN

TUTORIAL OBJECTIVE

Add engagement to navigation with 45-degree page views

TIME REQUIRED

1 hour 30 minutes



A LOT OF THE projects that are featured in this bookazine demonstrate how to approach the implementation of some really unique features.

Most of these have some quirky way of interacting with the menu, and as the user tends to do most of the interaction with the menu, it's usually a good place to start when creating a unique focal point for your site. In this tutorial we are going to look at CSS3 transformations that, by default, are hardware accelerated. As such, we can add lovely 3D effects and transitions to our content by adding and removing classes that will trigger the animations. In this menu we will have an off-screen menu that slides in from the left-hand side. There's nothing out of the ordinary about that, except that our page content will flip out of the way using a 3D transform that will enable the menu to take full focus on the page. Then, when it's time to bring the page back, the user can simply click on the page to get the menu to slide back out and the page to rotate back into full view. A little trick here to make this work is to stop the page from being scrollable while the page is rotated out to one side. Experiment with the effect on your site, starting by downloading resources from the following link: <http://goo.gl/S1BKTO>.

01 Start the project

Open the start folder in Brackets or place it in your local web server folder. Take a look at the page, before starting the project, in a web browser to see that there is a basic page on display - a menu needs to be added to this. There is a comment in the index.html page showing the end of the twist div. Add the menu in here.

```
001 <nav class="offscreen-nav">
002 <a href="#">Home</a>
003 <a href="#">News</a>
004 <a href="#">Blog</a>
005 <a href="#">Portfolio</a>
006 <a href="#">Contact</a>
007 <a href="#">About</a>
008 </nav>
```

02 Switch to the CSS

Save the index page and move to the style.css in the CSS folder. Add the following code in here. It can go at the bottom of the document, just make sure that it isn't inside a media query. Here the twist class is being given a relative position on the page. This will hold the menu outside the page.

```
001 .twist {
002 position: relative;
003 }
```

03 Build the content

All of the real pages go inside the container class. Here it is given a white background because later the menu will be given a red background to match the

design on the screen. It's given a z-index that's higher than the rest of the menu so that all the main content will be visible above this.

```
001 .container {
002 background: #fff;
003 min-height: 100%;
004 position: relative;
005 outline: 1px solid rgba(0,0,0,0);
006 z-index: 10;
007 -webkit-transform: translateZ(0)
translateX(0) rotateY(0deg);
008 transform: translateZ(0) translateX(0)
rotateY(0deg);
009 }
```

04 More page positioning

There is a wrapper class just inside the container, again this needs to be set to relative so that when the design opens, it works correctly. When the menu is opened a class gets added to it and this is called 'open'. Here the twist class is made to be fixed and the perspective added.

```
001 .wrapper {
002 position: relative;
003 }
004 .twist.open {
005 position: fixed;
006 -webkit-perspective: 1500px;
007 perspective: 1500px;
008 }
009 }
```

05 Tidy up the open page

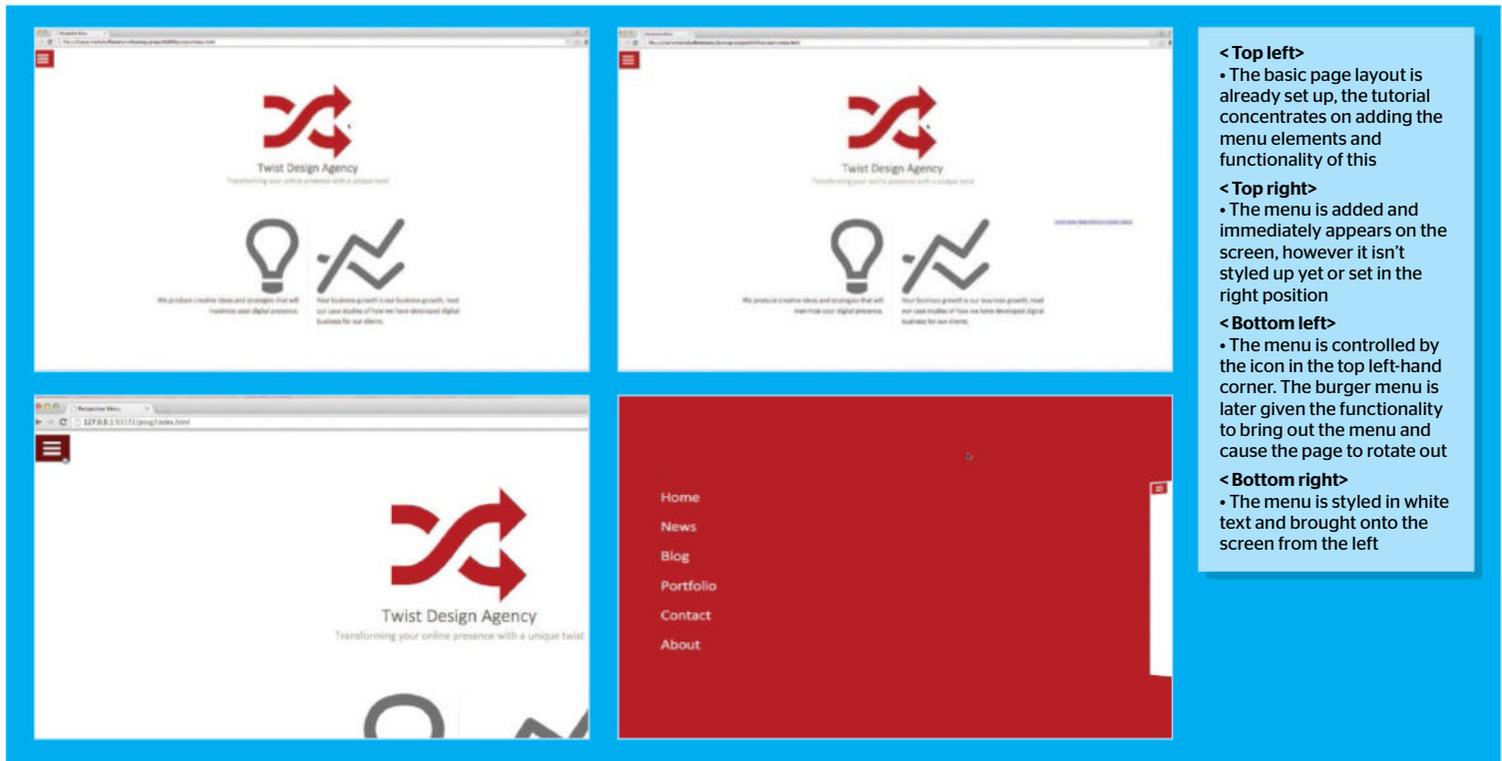
When the menu opens, the container that holds the regular page content is made to have no overflow. This helps it to twist out with a 3D perspective to it without having the rest of the page on display. At this point the cursor is set as a pointer so that the container becomes the button to bring the page back into the main view.

```
001 .open .container {
002 position: absolute;
003 overflow: hidden;
004 width: 100%;
005 height: 100%;
006 cursor: pointer;
007 -webkit-backface-visibility: hidden;
008 backface-visibility: hidden;
009 }
```

06 Add functionality

As the content is being animated in 3D space the open wrapper is given a CSS transformation on the z axis. The container is slightly altered when it is in animation to be slightly bigger than the screen with full opacity. The transition takes less than a third of a second.

```
001 .open .wrapper {
002 -webkit-transform: translateZ(-1px);
003 }
004 .animate .container::after {
005 opacity: 1;
006 height: 101%;
007 -webkit-transition: opacity 0.3s;
```



- < **Top left**>
- The basic page layout is already set up, the tutorial concentrates on adding the menu elements and functionality of this
- < **Top right**>
- The menu is added and immediately appears on the screen, however it isn't styled up yet or set in the right position
- < **Bottom left**>
- The menu is controlled by the icon in the top left-hand corner. The burger menu is later given the functionality to bring out the menu and cause the page to rotate out
- < **Bottom right**>
- The menu is styled in white text and brought onto the screen from the left

Normalize.css file

The project makes use of normalize.css, which makes browsers rendering all elements more consistently and in-line with modern standards. It's available from [necolas.github.io/normalize.css](https://github.com/necolas.github.io/normalize.css).

```
008 transition: opacity 0.3s;
009 }
```

07 Position the navigation menu

Here the navigation for the off-screen menu is set in the CSS. The position is set at absolute so that it can be animated from the side and made to have a height that fits its content. This is given the transform position of 50% of the height and to ensure hardware acceleration the preserve-3d is set.

```
001 .offscreen-nav {
002 position: absolute;
003 height: auto;
004 font-size: 2em;
005 top: 50%;
006 -webkit-transform: translateY(-50%);
007 transform: translateY(-50%);
008 -webkit-transform-style: preserve-3d;
009 transform-style: preserve-3d;
010 left: 25%;
011 }
012 }
```

08 Menu items

Each menu element needs to be styled up in the right font weight, with the underline and the margin taken off to make it appear in the right place on the screen. A transition is added so that the text colour can change on rollover and to make it all visible.

```
001 .offscreen-nav a {
002 display: inline-block;
003 white-space: nowrap;
004 font-weight: 300;
005 text-decoration: none;
006 margin: 0 0 30px 0;
007 color: #fff;
008 -webkit-transition: color 0.3s;
009 transition: color 0.3s;
010 -webkit-transform-style: preserve-3d;
011 transform-style: preserve-3d;
012 }
```

09 Finish the menu items

The next CSS will give the hover a bright yellow colour to make it stand out against the red background. The background is set in the effect-persp class to a red colour to match the logo in the page. The white page will rotate out to the right while the menu will animate in from the left on the red background.

```
001 .offscreen-nav a:hover {
002 color: #fff72f;
003 }
004 .offscreen-nav a {
005 display: block;
```

```
006 }
007 .effect-persp {
008 background: #b40000;
009 }
```

10 Add the transition

In order to make the container swing out and twist in 3D space we need to change its transform origin point to the centre of it. This is given a slightly longer transition time than in Step 6, but it all works together to bring the effect on the screen.

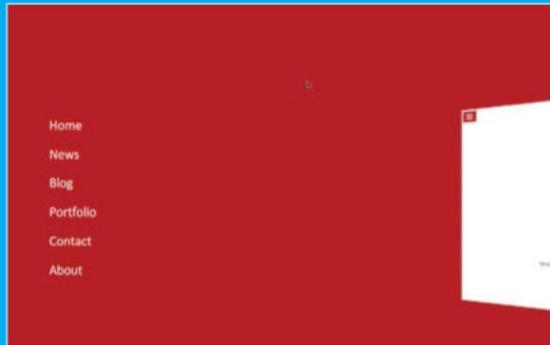
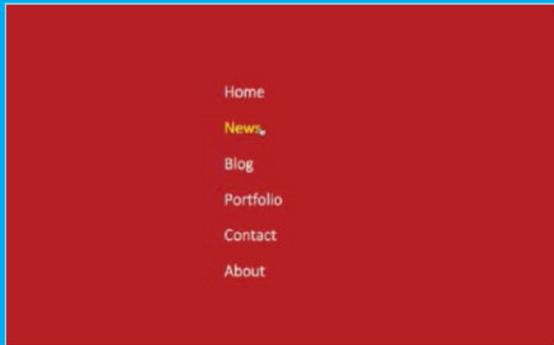
```
001 .effect-persp .container {
002 -webkit-transition: -webkit-transform 0.4s;
003 transition: transform 0.4s;
004 -webkit-transform-origin: 50% 50%;
005 transform-origin: 50% 50%;
006 }
```

11 Close the row

When the container is swinging out, a class of 'animate' will be added to it. This is the class that will actually contain the animation effect. As you can see, the animation rotates the interface on the y axis by 45 degrees. Try and imagine that there is a pin in the top of the screen that rotates the page 45 degrees away from the view.

```
001 .effect-persp.animate .container {
002 -webkit-transform: translateZ(-1500px)
003 translateX(100%) rotateY(-45deg);
004 transform: translateZ(-1500px)
005 translateX(100%) rotateY(-45deg);
```

Customisation



< Top left >

- The rollover for the menu elements is set to yellow to bring a transition highlight colour to the interface

< Top right >

- The CSS controls the page rotating on the y axis so that it moves slightly over to the right and rotates 45 degrees

< Bottom left >

- The menu is in mid-transition as the page rotates out of the way and the menu fades in from the left of the browser window

< Bottom right >

- When the menu is open, the page that is rotated becomes the link to bring this back to the forefront. Notice that scroll is disabled in the menu view

Project add-ons

The project uses classie.js, a lightweight class editor that saves using the whole of jQuery, it's available from github.com/desandro/classie.

12 Second row of columns

The actual links are positioned off the screen to the left so the translateX CSS transform is applied to keep them 150 pixels off the screen to the left. These are animated in from a transparent opacity, in the next step they'll be given full opacity to be fully visible to the viewer.

```
001 .effect-persp .offscreen-nav a {
002 opacity: 0;
003 -webkit-transform: translateX(-150px);
004 transform: translateX(-150px);
005 -webkit-transition: -webkit-transform 0.4s,
006 opacity 0.4s;
007 transition: transform 0.4s, opacity 0.4s;
008 }
```

13 Final CSS

Finally the menu is brought onto the screen with the full opacity for each menu element. Save the style.css now because it has been completed. There won't be anything to see in the browser though because there is no functionality added to the page yet. That will come next by applying the CSS classes with JavaScript.

```
001 .effect-persp.animate .offscreen-nav a {
002 opacity: 1;
003 -webkit-transform: translateX(0);
004 transform: translateX(0);
005 }
```

14 Start the JavaScript

Open the file twist.js and you will see that it is an empty document ready for us to begin. This tutorial is using the classie.js external library for adding and removing classes with JavaScript to CSS. In this function the code returns how much the page has scrolled.

```
001 function scrollY() {
002 return window.pageYOffset || docElem.
003 scrollTop;
004 }
```

15 Setting variables

The next part of the code sets out some variables that are needed in the code. The biggest section is an object containing the browser prefix names. These are used to check when the transition has ended by dynamically adding an event listener to the transition later in the code.

```
001 var docElem = window.document.
002 documentElement,
003 support = "transition",
004 transEndEventNames = {
005 'WebkitTransition': 'webkitTransitionEnd',
006 'OTransition': 'oTransitionEnd',
007 'msTransition': 'MSTransitionEnd',
008 'transition': 'transitionend'
009 },
```

```
006 'OTransition': 'oTransitionEnd',
007 'msTransition': 'MSTransitionEnd',
008 'transition': 'transitionend'
009 },
010 transEndEventName = transEndEventNames[
011 'transition' ],
012 docscroll = 0;
```

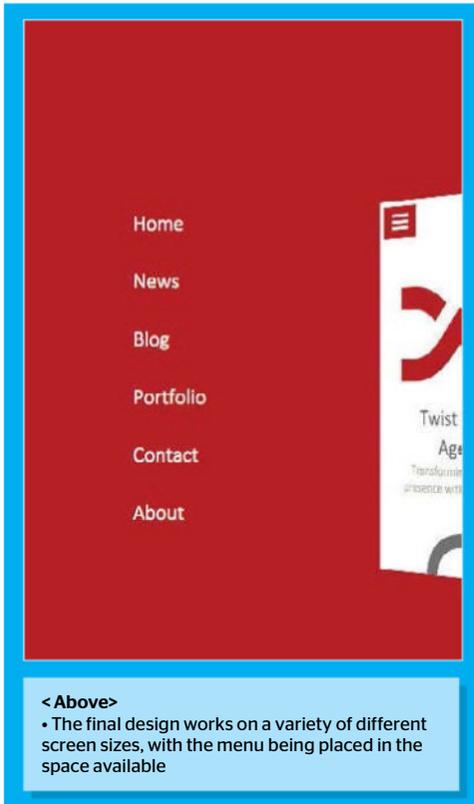
16 Initialise the interface

Most applications have an init function to initialise all the things that are necessary. The first part of this function will get a reference to all the necessary elements in the DOM so that these can be manipulated through the code without having to continuously traverse the DOM.

```
001 function init() {
002 var showMenu = document.getElementById(
003 'showMenu' ),
004 twistWrapper = document.getElementById(
005 'twist' ),
006 container = twistWrapper.querySelector(
007 '.container' ),
008 contentWrapper = container.querySelector(
009 '.wrapper' );
```

17 Show the menu

Here the menu button is detected for when a user clicks on it. The click event fires the remaining function, which is only partially shown in this step. The event is stopped from propagating and the default action of the button is also prevented. This enables the code to run without default actions interfering.



< Above>
• The final design works on a variety of different screen sizes, with the menu being placed in the space available

```
001 showMenu.addEventListener( 'click',
function( ev ) {
002 ev.stopPropagation();
003 ev.preventDefault();
004 docscroll = scrollY();
005
```

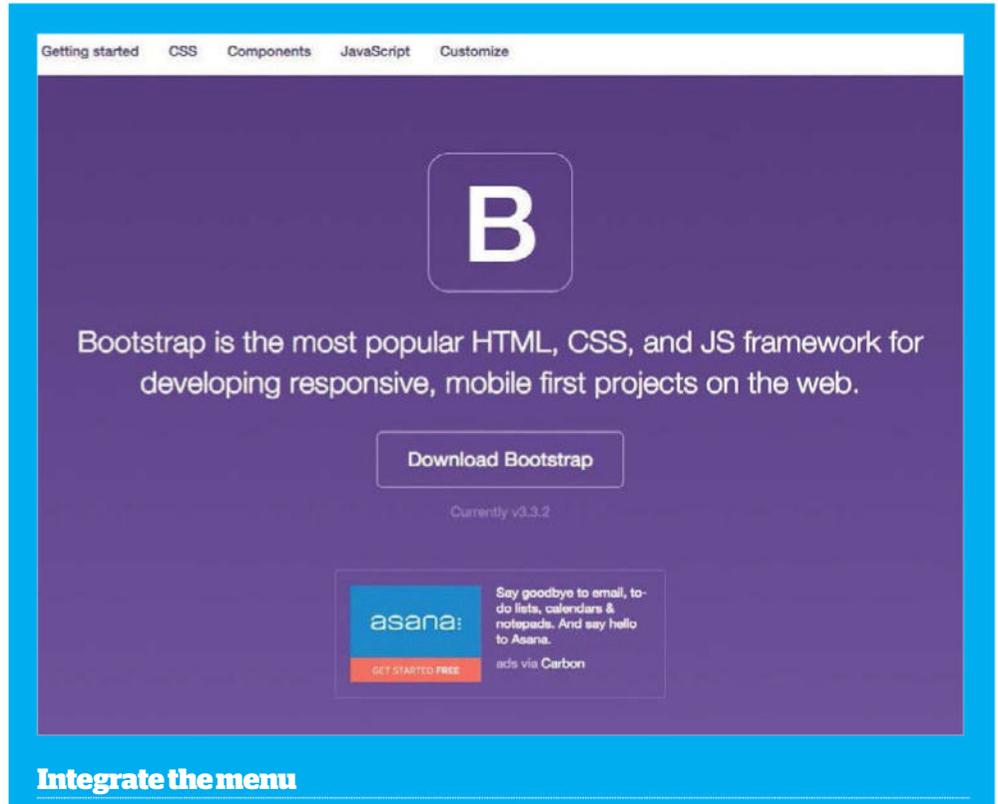
18 Finish the image

The rest of the function is shown here. The scrolling is set to stop at this point as the class of 'open' is set to the twistWrapper element. Just marginally after this, triggered by the setTimeout command, another class is added called the 'animate' class and this therefore starts the animation.

```
001 contentWrapper.style.top = docscroll * -1 +
'px';
002 document.body.scrollTop = document.
documentElement.scrollTop = 0;
003 classie.add( twistWrapper, 'open' );
004 setTimeout( function() { classie.add(
twistWrapper, 'animate' ); }, 25 );
005 });
006
```

19 Return the menu

The container gets an event listener added to it, which also detects input from a click. This should only fire if it has the 'animate' class already added to it because that means it's actually open and needs to go back when clicked, otherwise it won't fire.



Integrate the menu

This menu could easily be implemented with a responsive framework such as Bootstrap or Foundation as an alternative to their respective menus. Remember that each of those frameworks give you a custom download of what is available, you don't need the whole framework. As such, you can leave out the existing menu that comes with those frameworks and add your own. Doing this is a great way of customising and making the design look less like an existing framework because those menus are very obvious. Custom web design menus will always create a more appropriate look for your web projects and with so many responsive frameworks, it's almost possible to take the best parts of each to kick-start your own work.

```
001 container.addEventListener( 'click',
function( ev ) {
002 if( classie.has( twistWrapper, 'animate' ) )
{
003 var onEndTransFn = function( ev ) {
004 if( support && ( ev.target.className !==
'container' || ev.propertyName.indexOf(
'transform' ) == -1 ) ) return;
```

20 Remove the event

If the transitions have finished then the 'open' class needs to be removed, which makes sense as the menu isn't open any more. At this point scrolling is returned to the user so that the page can carry on like a normal web page under the control of the user.

```
001 this.removeEventListener(
transEndEventName, onEndTransFn );
002 classie.remove( twistWrapper, 'open' );
003 document.body.scrollTop = document.
documentElement.scrollTop = docscroll;
004 contentWrapper.style.top = '0px';
005 };
006
```

21 Removing the animate class

Similar to the previous step the twistWrapper has an event listener added that detects that the transition has finished. When it does it removes the class of 'animate' as this is no longer applicable to it. Just the final finishing off of the init function is left.

```
001 twistWrapper.addEventListener(
transEndEventName, onEndTransFn );
002 classie.remove( twistWrapper, 'animate' );
003 }
004 });
```

22 Finish off

Add the final code and bracket to close off the init function. The final line calls this function so that the previous code is applied. Now save this JavaScript and open the index.html page in your browser to see the menu open and close while the transition takes full effect.

```
001 twistWrapper.addEventListener( 'click',
function( ev ) { return false; } );
002 }
003 init();
```

TUTORIAL OBJECTIVE

Give your blog a great pop-up animated effect

TIME REQUIRED

1 hour

Master animated pop-up effects

CREATE THIS AWESOME EFFECT THAT WAS INSPIRED BY WWW.PINKANOVA.COM



AVIDEO PRODUCTION COMPANY, Pinkanova is based in Toulouse in the south-west of France. With the European

headquarters of Intel and world-renowned university located nearby it's certainly not a bad place to have your company's headquarters.

Pinkanova is the epitome of the digital native. Many video companies are catching up

with what can be achieved digitally with video but all too often the results look like after thoughts. Where Pinkanova distinguishes itself is in the integration of digital elements, with the creation of fun, memorable and engaging sights into exciting new worlds where the real and virtual co-exist.

Top tip

Pinkanova created the designs, but the technical build was completed by Toulouse-based agency Glüe Design. You'd struggle to find better words to describe their work than their strapline: 'passion, rigour, envie, innovation, creative, emotion'.



Fullscreen video

As a video production company, the fullscreen video background rightly takes centre stage. With each visit, the home page alternates between two videos to keep the site fresh

No loops

The video plays once and ends leaving the last frame on display. This removes the need for a tricky loop and ensures the video doesn't become annoying

Frame rate

The animated frames are contained with a PNG and played at about half the rate of a typical video, so it's a little jerky. This technique can be adjusted to suit you

Console bar

The site features an attractive and functional console that rises up when you select Follow Us. The simple horizontal movement of the console bar hides the social icons as the console opens, adding sophistication

Subtle suggestion

The 'Why Trust Us?' and 'Why Use Video?' links move slightly, and the user is treated to a Jack-in-the-box style animated sequence when they mouse-over

1 Inspiration Attention grabbing

The home page's actors break 'the fourth wall' by looking into your world just as you look into theirs. The site makes use of moving images but it would become tedious if it was all

wall-to-wall video. For the key navigation on the home page, they have brought back to life the old-school, frame-by-frame technique used in animated GIFs and flipbooks.

Used here as a pop-up effect and all achieved using CSS, this code-light technique provides plenty of scope for you to really unleash your animation skills and create your own effects.

2 Technique Easy on the code

01 The head For the purposes of the workshop, a fullscreen image is used and loaded by linking the background stylesheet. This is achieved by assigning a background image to the HTML. Here the background-size keyword 'cover' is used. This scales the background image, preserving the original aspect ratio so that the background is completely covered.

```
001 <!DOCTYPE html>
002 <html>
003 <head>
004 <meta charset="utf-8">
005 <title>Animated Popups</title>
006 <link rel="stylesheet" type="text/
css" href="styles/background.
css">
007 <link rel="stylesheet" type="text/
css" href="styles/popups.
css">
008 </head>
```

02 The body The two pop-ups are contained within a <div> with the class 'main'. Each of the pop-ups sits within its own <div> 'left' and 'right' and the graphics themselves are displayed by assigning appropriate classes to the links, in this case for 'men' and 'women' retrospectively. The link text is hidden using CSS.

```
001 <body>
002 <div class="main">
003 <div class="left"><a class="men"
href="#">Menswear</a></div>
004 <div class="right"><a class="women"
href="#">Womenwear</a></div>
005 </div>
006 </body>
007 </html>
```

03 The container The main class provides a container for the two pop-ups. Max-width and min-width are used to provide an element of responsiveness in the layout, but you will undoubtedly need to create your own container styling to meet the needs of your own page. The float property is used to position each pop-up <div> at the far-left and far-right of the container <div>.

```
001 .main {
```

```
002     max-width: 800px;
003     min-width: 620px;
004     margin: 150px auto;
005 }
006 .left {
007     float: left;
008 }
009 .right {
010     float: right;
011 }
012 }
```

04 The pop-ups The graphics for the pop-up are background images, so the links are set to display as block elements at the appropriate height and width. This workshop avoids the increasingly disavowed negative text-indent technique to hide unwanted text, instead opting for the Zeldman-approved Kellum Method (no longer used by Scott Kellum, who now prefers custom font sets).

```
001 a {
002     display: block;
003     height: 400px;
004     width: 300px;
005     text-indent: 100%;
006     white-space: nowrap;
007     overflow: hidden;
008 }
009 .men {
010     background: url(..images/
men.png);
011 }
012 .women {
013     background: url(..images/
women.png);
014 }
```

05 The animation The pop-up graphics are comprised of eleven frames, each occupying a 300px-wide area. In order to animate the pop-up, it is simply a case of stepping through each of these frames by moving the graphic left ten times (eg 3000px/10 = 300px steps) to the last frame. If you want to use a different number of frames, all you need to do is ensure that the step distance matches the width of each frame.

3 Technique Heavy on the graphics

You can add extra pop-ups by creating a new class specifying the new image as its background. It's worth spending time getting the graphics right, but keep an eye on the file sizes you are generating.



01 Choose your style If you are going for a video style, you may want to shoot some video or use a camera with a high burst rate to take some original footage. You'll need to remove the background if you want a non-rectangular look, keep this in mind when shooting!



02 Create your canvas In Photoshop, open a new file with the height of your animation. The width will be the number of steps times the width of the frame. Set your ruler to pixel units and add guides at the start of each frame.



03 Lose the background Remove the background in your raw footage. Then, copy the result into the multi-frame graphic. Repeat this until done and tweak the PNG optimisation options until happy. Save and you're done!

Create a rotating product viewer

DISPLAY YOUR PRODUCTS FROM EVERY ANGLE WITH A ROTATING PRODUCT VIEWER, AS SEEN ON NUABIKES.COM

Signposted URL

Getting sales for the bike is key so a large pre-order label in the top-right of the screen will always provide access to it

Fixed menu

The menu is fixed into position on the left side of the screen and remains in place as the rest of the page is scrolled through

Fullscreen photos

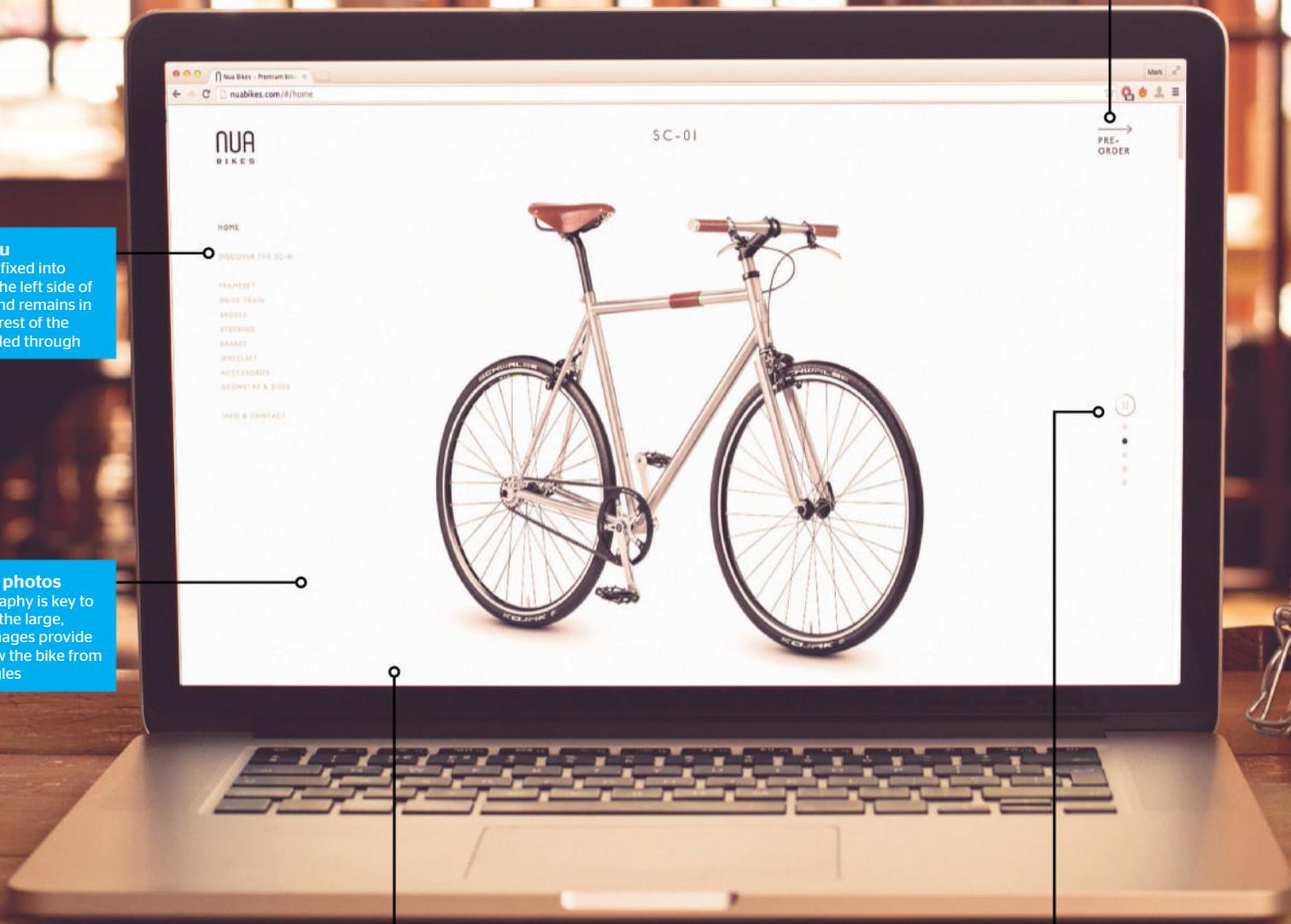
The photography is key to this site and the large, fullscreen images provide a way to view the bike from different angles

Fluid sections

The page is a one-page site that enables the user to scroll down each section or use the menu on the left-hand side

Pausable scroll

The right-hand navigation controls the images and the user can click on the image, pause it or watch it from different sides



TUTORIAL OBJECTIVE

Create 360 degree views of a product for e-commerce platforms

TIME REQUIRED

1 hour

Keep navigation simple

On the homepage the navigation is hidden away in an offscreen menu, giving space on the page to create more of a showcase for the site. As the user moves through onto content pages, the menu is on hand to provide easier browsing and there are even previous and next buttons to move through the content.



NUA BIKES PRODUCE an elegant and clean urban bike that has a minimal impact on the environment due to the simplicity in its design. The bikes are handcrafted and reflect

the conscious commuter who needs to get around urban environments with ease. The company website needs to reflect the style of the bike, which is always easy to do with photography when the product is strong. The home page features a fullscreen image of the bike that has been photographed from different angles so that the user can see the bike rotating on screen automatically so the viewer can see the design in detail. When the product has such clean, elegant lines and is made from quality materials such as titanium, carbon fibre and aluminium, then it is important that the styling of the site reflects the construction aesthetic. It is so easy for designers to get carried away by adding more and more complex content to sites but sometimes all that is needed is good typography, navigation, simple colour and the product itself. Organising the content can be tricky, but the Nua Bikes site has managed to do this without overstating the simplicity of the design. See how to get the function for yourself.

01 Add the images

To create a rotating image of a bike, we need to add five images to the body section of the page. Using jQuery a simple image rotator can be created which moves the image on every few seconds.

```
001 <div id="fader">
002 
003 
004 
005 
006 
007 </div>
```

02 Style the images

Now move to the head section of your page and add the style tags for the div tag that holds the images. This simply positions them relatively so that the JavaScript can change the images later on.

```
001 <style>
002 html, body{
003 height: 100%;
004 background-color: #f0f0f0;
005 padding: 20px;
006 }
007 #fader {
008 position: relative;
009 width: 100%;
```

```
010 height: auto;
011 }
012 </style>
```

03 Library link

The images have to be hidden and positioned on top of each other, so a link to the jQuery library is needed. This will aid the adding and removing of CSS to make each of the images appear at the appropriate time.

```
001 <script src="https://code.jquery.com/
jquery-
002 2.1.3.min.js"></script>
```

04 Move through the images

After the link to the jQuery library the following code can be added. This hides all the images except the first one. They are positioned within the div tag so that they will be in the right position when they are called to fade in with the code in the next step.

```
001 <script>
002 $(function() {
003 $('#fader img:not(:first)').hide();
004 $('#fader img').css('position',
'absolute');
005 $('#fader img').css('top', '0px');
006 $('#fader img').css('left', '50%');
007 $('#fader img').each(function() {
008 var img = $(this);
009 $('<img>').attr('src', $(this).
attr('src'));
010 load(function() {
011 img.css('margin-left', -this.width / 2 +
'px');
012 });
013 });
```

05 Switch images

The 'fadeNext' function does the hard work of fading out the old image while fading in the next. This is called every three seconds by the set interval, which in turn calls the fadeNext function. Save this now and test it in your browser to see the images appear on the screen.

```
001 function fadeNext() {
002 $('#fader img').first().fadeOut();
003 appendTo($('#fader'));
004 $('#fader img').first().fadeIn();
005 }
006 var rotate = setInterval(fadeNext, 3000);
007 });
008 </script>
```

 Sometimes all that is needed is good typography, navigation, simple colour and the product itself 

Beyond WordPress

Take your blog to the next level

154 Google Analytics

Get the low-down on how to interpret your stats and improve site traffic

160 Speed up WordPress

Use Varnish software to boost the performance of your site

164 Create a single input 3D form with CSS3

Add a 3D form to your WordPress site to let people sign up to your site

168 Design layered backgrounds in Photoshop

Utilise your Photoshop skills to create a fabulous layered background

172 Create an eCommerce web element with CSS3

Make money from your website by turning it into a web shop

 Selling online allows businesses to reach out to huge markets 





Top tip

Recent studies show that 40% of users will abandon your site if it takes over three seconds to load.

GOOGLE ANALYTICS

GOOGLE ANALYTICS IS THE MOST WIDELY USED WEB ANALYTICS SERVICE IN THE WORLD AND IT'S FREE. FIND OUT THE MOST IMPORTANT PARTS OF THE DATA TO STUDY AND MASTER KEY FEATURES TO GET MORE HITS FOR YOUR SITE



🔗 Google Analytics is the window into your site's data. Use it to understand who is visiting, what they are looking at, and what you can do to get them to stay longer 📊

Know your audience

Your first port of call for getting insights into your audience and visitor behaviour should be the Acquisition>All Traffic Channels report

The Channels report enables you to see at a glance where your visitors are coming from according to Google's rules. Not all your traffic will be captured by Google automatically, specific traffic such as Email will not automatically go under the Email channel. Google uses their Direct channel as a catch-all mechanism for traffic that it just cannot categorise in any of its other channels. So it's important that you familiarise yourself with the UTM tags in order to make sure all campaigns you are running are accounted for.

To understand how Google uses these tags, it's important to get familiar with the concept of source – this could be Google, Bing, Facebook; and the concept of medium –

for example, paid search CPC, organic and so on. Google then uses rules based on these dimensions (not restricted to the ones mentioned) to define their channels.

For example the organic search channel is defined by all traffic that has a 'medium' exactly matching 'organic'.

The default channel grouping Google provides to you would cover most business' needs, but if you think you need a custom channel, Google enables you to create custom groupings based on these specific needs of yours. Just like the default ones, the custom channels are based on rules that you will have already defined in the interface utilising dimensions set out by Google Analytics.

Understand key metrics

Get to grips with the terminology used in the Google Analytics interface

Channels

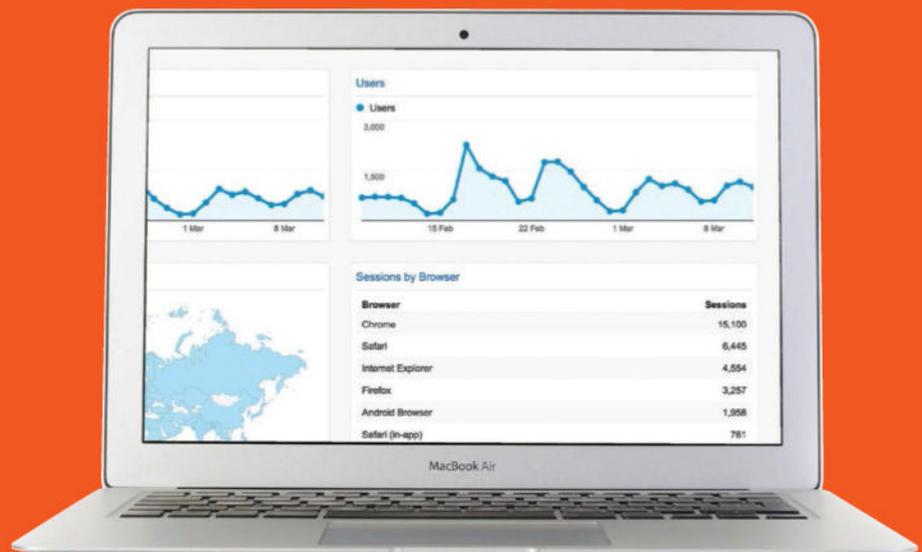
Google's Default channel grouping splits traffic into eight groups and these are: Direct, Organic, Referral, Paid Search, Other Advertising, Email, Social and Display. You cannot change how these channels are defined but Google may evolve them in future. By using these groupings you will be able to clearly review visitor behaviour from a particular source and determine the channel's effectiveness without being muddled up by another channel.

UTM tags

If you're planning some activity that will drive traffic to your site – email or social for example, it's key that you identify this traffic and make sure you can understand and measure the yield of your efforts. Google uses custom campaign parameters called UTM tags to enable you to identify each piece of activity or 'campaign'. For example, these identifiable activities can include the source, the keyword or term used, the content and ads or the specific name of a brand. By tagging the links to your posts, for example in an email newsletter, you can ensure that this traffic is correctly identified as it comes through. Google has a handy URL builder tool that makes it very easy to identify the most effective URLs.

Real-time

Once you have tagged your campaign URLs you can test everything is working as it should be by looking at the Real Time analytics report by going to Real Time>Traffic Sources. By clicking through to your site using your newly tagged link, you should see this visit showing the correct medium and source in the report if you've done this right. You will then be able to monitor spikes and trends as they happen on your website.



Sessions

The number of periods in which any user interacts with your website. If a user leaves the site and returns after 30 minutes or more, a new session is recorded.

Users

This is the number of unique users who have visited your site for at least one session during the selected date range.

Bounce rate

The proportion of total sessions which consist of only a single pageview being generated before the user leaves your website.

Pageviews

The total number of page impressions during user sessions within the selected date range.

Explaining relationship

A session consists of a grouping of one or more pageviews or other interactions which take place on your site. A session ends once a user has been inactive for 30 minutes, or leaves your site and returns via a different channel.

In-page analytics

Accessed from the Behavior section, In-Page Analytics offers

insight into how users navigate around your site. A live website overlay indicates the proportion of clicks made from any page to each linked page, enabling you to establish the most popular paths taken to explore your content.

Audience behaviour

The Audience>Behavior report reveals how loyal your visitors are and how often they return to the site. It's possible to compare the behaviour and performance of new versus returning visitors and also see the number of sessions each user generated during the selected date range.

Best new features

Google Analytics is regularly updated with new features and reports. Here are some recent additions that you need to know about

Spreadsheets add-on

This handy Google Analytics add-on for Google Spreadsheets enables easy access to your data via the Analytics API. It's possible to build your own reports that query multiple Analytics views and manipulate the returned data. With a little setup you can create your own regularly updated custom dashboards merging Analytics data with any other measurements and making use of the Google Spreadsheets charts in order to visualise the results.

Cohort analysis

Currently in beta and rolling out across Google Analytics accounts, Cohort Analysis splits your audience into distinct groups. These are based on a particular behaviour or attribute and enables deeper level analysis. There is no such thing as an 'average user' and at present much analysis does not distinguish between differing behaviours, instead bundling all users into a single pot. Each grouping, or cohort, shares common characteristics and new trends may be unearthed.

Benchmarking

The Audience Benchmarking reports enable your performance to be compared against aggregate data from other sites of a similar size in the industry and country. You'll be able to see how your traffic sources and engagement metrics compare to other sites in the sector and discover areas where you outperform your competitors and those where you underperform. To access benchmarking reports you need to agree to share your data anonymously with Google.

Audience groups

Google's DoubleClick advertising technology collects anonymous information about web surfers and shares this in Google Analytics. This enables you to discover more about who is actually using your website. It's possible to view an estimated age and gender breakdown of site visitors, user affinities and the products and services users are seeking through In-Market Segments. Your audience can be segmented by these filters to enable you to find your most valuable user types.

Content Experiments

Content Experiments enables easy webpage split-testing which can help when working towards improving the performance of your website. When setting up a content experiment you must define a goal or conversion metric for which you are looking to enhance. For example, an eCommerce site could monitor revenue or the total number of transactions, whilst a lead generation site could look to increase the number of overall completed form fills.

Intelligence Events

Intelligence Events are a commonly overlooked feature. Analytics continuously checks for metrics that have seen statistically significant variations over recent days or weeks and highlights these anomalies. Intelligence Events help to surface any unexpected changes which could be indicative of a problem or a success on a particular page. It's also possible to set up automated email or text alerts which are triggered when a particular metric changes outside a defined threshold.

Plan your content

When it comes to creating content for your audience, making a decision can take up time. Luckily, it doesn't have to be this way.

Best performing existing content: pageviews

Use the 'All pages report' to check your most popular posts. If one topic outstrips the others in terms of pageviews then see if you can address another aspect of the same topic.

Most engaging existing content: time on page

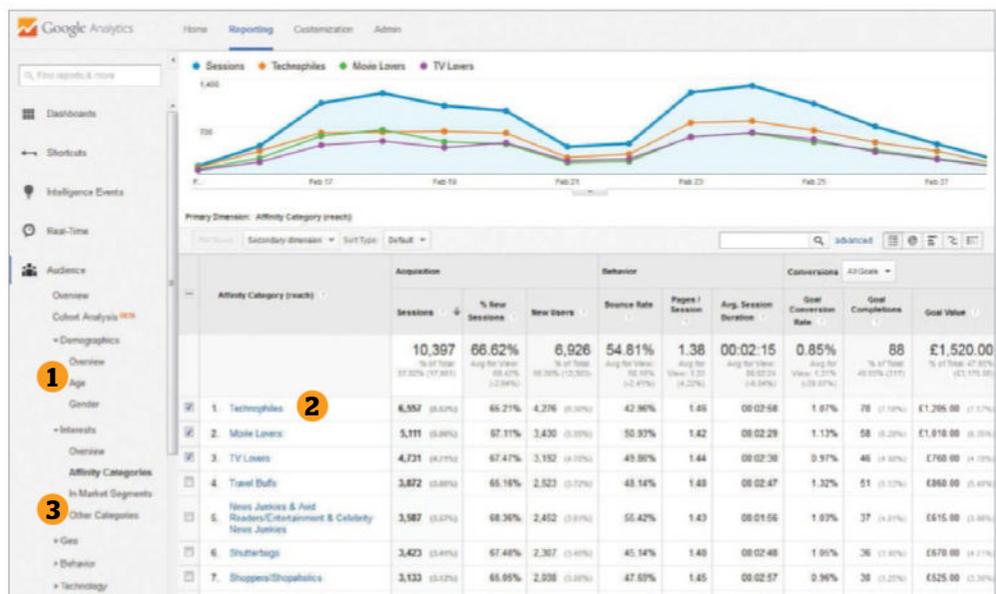
If you find an unusually high time spent on a post then write another with a similar angle, and interlink for the same effect. Use 'All pages report' again to find this out.

Internal site search

This one is straightforward. Found in the Behavior tab, the site search lets you know what your visitors have been looking for within your website.

Affinity Categories

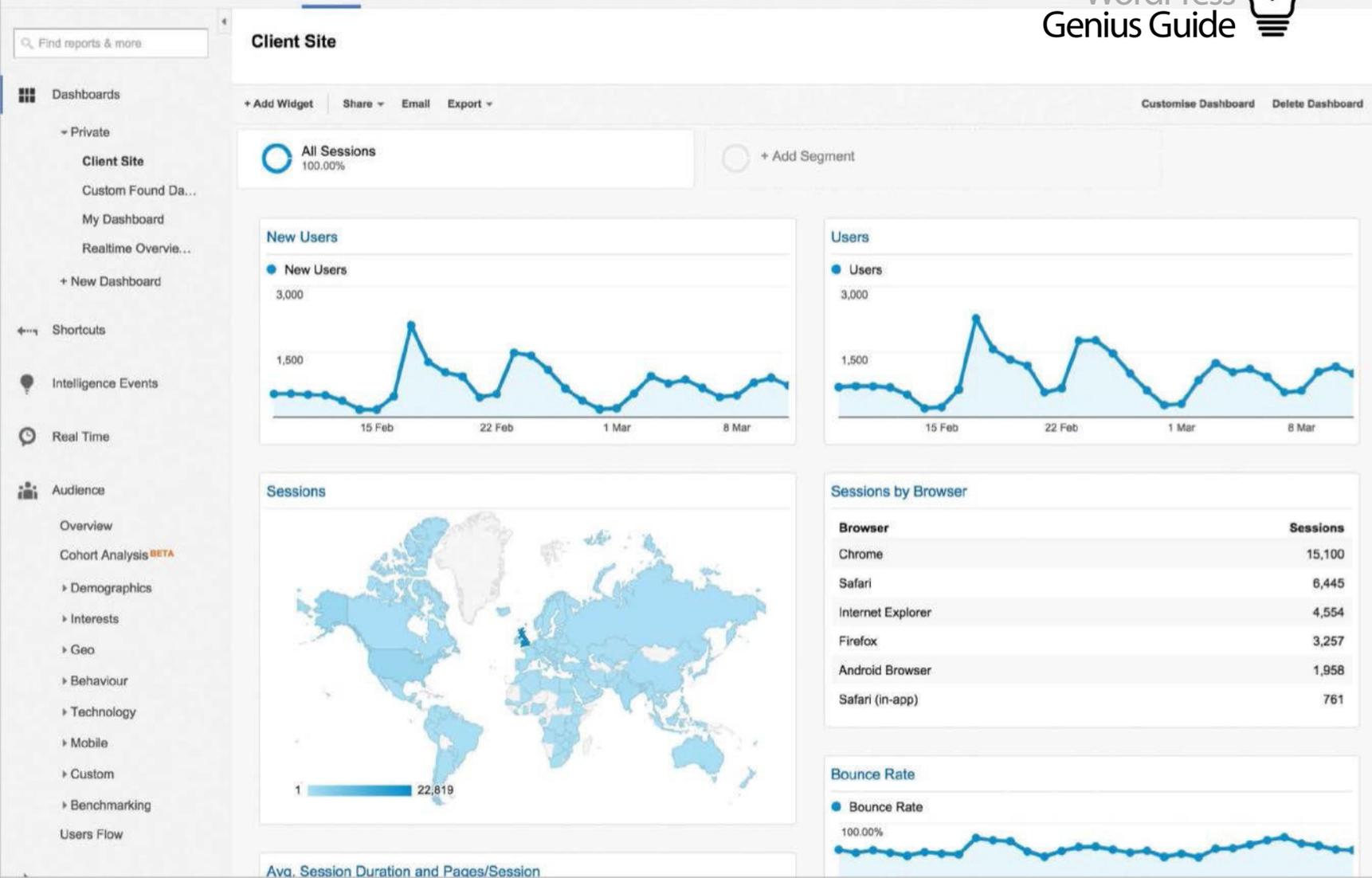
The Affinity Categories report can reveal visitors' interests. Including a post on a related interest and referencing effectively can provide new engagement.



01 Demographic reports can be viewed to reveal your visitors' data, including aspects like their gender split and age groupings.

02 User Affinity Categories can give insight into what else your users do online. Affinities reveal a more detailed interest breakdown.

03 The In-Market Segments report highlights areas of commercial intent in which your users have expressed a degree of interest.



Customise the Google Analytics UI

Intelligence Events and custom alerts

GA generates automatic web alerts whenever there is a significant change in usage or traffic metrics. It can generate AdWords alerts in the GA interface if your accounts are linked. You can also set up custom alerts to be generated when traffic reaches or decreases to a certain threshold. Google enables you to receive these alerts via email or text message so that you can stay in the know even though you are not checking your GA reports.

There are four reports Google has available in terms of Intelligence Events: Overview, Daily Events, Weekly Events and Monthly events.

There are also some useful alerts you can set up like, if revenue drops by 10 per cent, if a landing page's bounce rate increases by 20 per cent, or if a PPC campaign performance increases revenue by 10 per cent, for example.

Custom dashboards

The usefulness of GA goes beyond the standard reports they provide - the interface is completely customisable and enables you to create bespoke dashboards and reports to match your needs. While most of the default dashboard provided out of the box may suffice, there are countless widgets you can create to really enhance your data analysis. Along with this, Google provides a great dashboard, report and segment repository called the Solution Gallery - a crowdsourced area where Google Analytics users publish their own dashboards, reports, anything that they have found useful for the benefit of fellow GA fans. This is a great shortcut and a brilliant resource too as the uploaded shortcuts are rated with stars by other users. You can download any of these premade dashboards to your own account and start using them straight away for your own site analysis.

Custom reports

Just like custom dashboards, GA enables you to create custom reports that are very powerful for drilling down into your site data. Here you will get to choose and select only the dimensions and metrics that you want to display. This is so that you can easily and quickly access the data relevant to you without spending ages clicking around in Google Analytics each and every time you want that kind of specific data.

Google's help section is very useful here as it has a handy list of all the dimensions and metrics that GA uses, and also gives hints on the valid dimensions or metrics combinations as not all of them can be queried together.

As mentioned, the Solutions Gallery has a large repository of well-made, crowdsourced custom reports from other Google Analytics users that you can easily download, utilise and customise for your website's needs.

Automated emails

It's very easy to set up GA so that it can send you customised reports via email at a frequency that suits. This will then save you from having to go in and generate them each time and ensures that you are comparing like-for-like each week or month. These emails also act as a handy prompt to go in and have a further dig around in your Google Analytics data so that you're always on top of the latest trends on your website. Intelligence Events reports can also be set up to alert you with an email when certain criteria are met. If set up correctly these can be utilised as an extremely useful warning system that will alert you to problems with your site or server that may need urgent attention, like if the bounce rate or page load time has increased significantly for example. Alternatively, the reports can be set up to make you aware of large traffic spikes that may warrant further investigation.

Internal site search

If your site utilises an internal search function to display a filtered selection of products or list of related articles, GA can track and report on this data. The Site Search report, accessed under the Behavior section, provides details of the most commonly searched for keywords and the pages from which users make such queries.

A quick look through these terms will enable you to identify the content that users are actively seeking on your site. If this content exists, its prominence should be improved, if not, you have a list that is all ready to go with suggestions for future content additions.

Search queries

Connecting your Google Webmaster Tools account to Google Analytics enables Webmaster Tools' off-site data to be combined with the on-site data in GA and unlocks the Search Engine Optimisation series of reports. The most useful of these reports, Acquisition>Search Engine Optimisation>Queries, lists the different Google search queries for which your site has appeared in results. The data returned shows an estimate of the number of times your site was shown for each query as well as the average ranking position and click-through rate.

With most keyword referral data now reported as not provided, this report can give you visibility on the search terms that are sending traffic.

Pinpoint the best

As well as identifying pages that are performing below par, it's important to understand and learn from the success of your best performing content. If you can identify common themes in this content then similar content could be developed to bring in more traffic. The Behavior>Site Content>Landing Pages report reveals details of the sessions which result from a user landing via a certain channel. Ecommerce and goal conversion data can be particularly insightful here as after landing on a particular page, users may go on to explore your site and convert at a different URL. It's possible that a page with a low average time on page may in fact be extremely valuable, for instance a category page which funnels users to products they then go on to purchase.

Determine the issues

Identify your poor-performing pages via presentable data

Bounce rate

Pages that record having a high bounce rate are usually an indication that the content is not what the user expected to find. On eCommerce websites, product pages frequently have high bounce rates as users may land on them from a search engine when looking for a particular product. It is possible to decrease bounce rate on these kinds of pages by ensuring that all possible related products are interlinked.

A page that records a bounce rate significantly greater than other pages of the same type should be investigated further.

It's also possible to view bounce rate by channel, which may reveal that users from social platforms are interested primarily in a single piece of content and less in exploring the rest of your site.

Time on page

As well as recording average session duration, GA also reports on the average duration of pageviews of each individual URL on your site. Pages can easily be sorted by the average time on page metric, and this can be accessed through Behavior>Site Content>All Pages to reveal the pages where users are leaving quickly. This data suggests that users do not find these pages engaging enough to stay on.

The Content Drilldown report aggregates page-level metrics by a site's URL directory structure, which can quickly highlight particular subfolders such as product categories that are under-performing.

Low converting pages

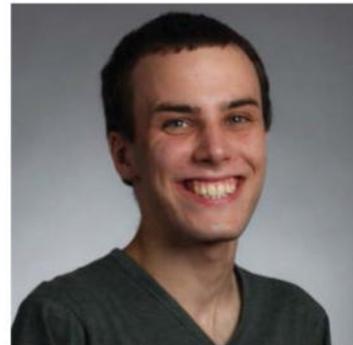
If you've set up eCommerce or goal-tracking then Google Analytics will be able to report on a true monetary value of a page. Selecting the eCommerce option at the top of Behavior>Site Content>Landing Page will reveal a report on the number of sessions, transactions and revenue that has been generated through visitors who have landed on a particular page that you want to analyse. It's also possible for you to view the average order value, eCommerce conversion rate and per-session monetary value for that particular landing page, which can flag up any poor-performing pages for your attention. This will then enable easier fixing later on.

Selecting a Goal Set option at the top of the same report enables conversion rates for different predefined goals to easily be compared.

Pages with low click-through rates

The Acquisition>Search Engine Optimization>Queries report can highlight pages which rank highly in search results but aren't delivering much traffic. It will identify a troublesome query, for which your site occupies a high average position but has a low click-through rate and this will suggest that your listing is not as enticing as other competing sites at encouraging searchers to go ahead and click through to your website.

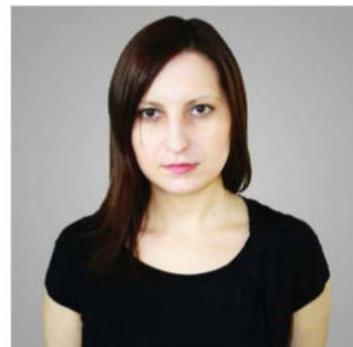
You can effortlessly improve upon this by updating webpage title tags and meta descriptions to ensure they contain the related search query and a strong call to action. This is a quick-and-easy optimisation that should increase click-through rate and result in additional traffic.



🔑 If you're not a regular Google Analytics user, spending just half an hour or so looking through the reports could reveal some easy opportunities to boost traffic 📈

Philip Gamble

Technical SEO manager, Founder



🔑 The Users Flow report is an overview of your best and worst performing pages. It's useful for gathering ideas on user journeys needing improvement 📈

Dora Moldovan

Head of technology, Founder

PPC

If you are running a PPC campaign, it's important that you understand whether the traffic that's being generated is money well spent. By setting up goals in Analytics and assigning a monetary value to those goals, you can quickly establish the ROI on your PPC spend even if you aren't selling something. For

example, a subscription to your mailing list or a form submission can be a goal and assigned a value.

Remember that PPC traffic should always have clear objectives and be directed at the most relevant landing page on your website. This will also need to be via the keywords that you are already using in order to give it the best chance at converting.



Social media

Social media visitors have generally arrived with far less intent to convert and have followed an interesting article or post that has led them to your site as opposed to an advert or offer. Understanding their behaviour, however, is no less important. Do they go on to read

additional content on your site? Does a particular type of post generate more interactions than the others? Do they go on to find other content from your site and share that with their network of friends and followers? This information is invaluable for growing your audience and maximising the effectiveness of what you do for your site on social media and for building your brand.

Tracking your conversions

The best way to determine if your site is successful is by measuring your goals

Once you set up the Google Analytics tracking code for your site, it's important to set up some conversion points for your site. Your business goals can vary - from tracking your online transactions to tracking whether someone has filled in your contact form, signed up to a newsletter or clicked to view a video.

Defining your conversions in conjunction with your channel is key to your campaign success. For example, you may find that your paid search campaigns might be better at getting users to convert, whereas your social media campaigns might be better at creating awareness of your brand and is a better traffic driver. Define conversion points wisely and check your channels so you can understand your website and know where to channel your marketing efforts.

Types of conversions in GA

GA lets you set up different conversions for different needs. For example, Goals can be used for tracking key actions that occur on the site that usually reach a confirmation page, eg submitting a contact form, whereas Events is used to keep track of interactions that are actions typically tied in with page elements, like clicking a button. GA provides a powerful API to enable merchants to track their website sales.

Goals

Google Analytics goals represent completed activities and conversions that measure your business objective success. Having properly defined goals enables GA to provide you with great insights on the effectiveness of your website page design or marketing campaigns. You can define up to 20 goals per reporting view.

GA lets you define your goals in several ways: Destination - where the goal is defined by reaching a specific page; Duration, a session that lasts a set amount of time or longer; Pages/Screens per session, where your goal might be to make sure the users see an x number of pages per session; and Event, where you can set up a goal based on an event, and this is useful if you want that event to be part of an attribution model like video play.

You can also define funnels for your goals and these are specific paths the users take to conversion. This is useful if you want to view where users abandon the funnel and where optimisation efforts should be spent.

Events

Events are user interactions that can be tracked independently from a page visit or load like video plays, AJAX content, button clicks and so on. The difference

between goals and events is that while goals are counted once per session, events are counted once per interaction. So if someone plays a video five times in a visit, that would register as five events. If they submit a form twice, that would count as a single goal. It is important that this difference is understood and the goals and conversions are implemented accordingly.

Another difference between goals and events is that the events need to be implemented programmatically via JavaScript code on the site, while goals can simply be defined in the GA interface. Using Google Tag manager makes goal implementation easy, so you should make sure that this is a consideration.

Ecommerce tracking

Based on information like products bought, transactions, and the time it takes for a user to purchase, you can get insights on your best-selling products or brands or categories, which channels are your best performers, your paid search ROI, and how long it takes customers to make a decision to purchase.

You can set up eCommerce tracking programmatically, but many kinds of shopping cart software will include GA eCommerce out of the box or provide easy-to-install extensions.

Glossary

Conversion

Any completed action that helps your business measure success. They can be macro or micro conversions depending on importance. A completed purchase would be a macro conversion and a Facebook like would be a micro conversion.

Event

A type of user interaction with the page content to track conversions when the interaction is independent on a page load. Examples can include AJAX loaded content, link clicks, social buttons interactions, flash elements etc.

Goal

User interaction measured by the user reaching a specific URL or closely tied to a page load. Examples would be a user reaching some form of a 'Thank you' page, a purchase completed or a specified amount of time spent on a specific page.

Segment

A subset of sessions or users that share common attributes so you can isolate and better analyse sessions or users. You can apply up to four at a time and use predefined segments or import them from the Analytics Solution Gallery.

Channel grouping

A roll-up of traffic sources in the Acquisition reports that groups marketing activities together to let you compare aggregated metrics by channel name, individual traffic source, medium or campaign name.

Attribution model

This model determines the channels your sales and conversions get assigned to. This is based on contribution. User models include a Last Interaction model that assigns the credit to the last click before its conversion.

Speed up WordPress with Varnish software

INCREASE THE PERFORMANCE OF WORDPRESS USING VARNISH AND OPTIMISE YOUR CONTENT-HEAVY SITES

TUTORIAL OBJECTIVE

Use Varnish software to increase the performance of content-heavy sites

TIME REQUIRED

1 hour 30 minutes



NOBODY LIKES TO wait ages for a page to load. If your site is loading slowly people will just go somewhere else before they get to look at all the

content on your site or read the great article you wrote. Page speed is still an issue for many sites, and recent studies show that 40 per cent of users will abandon your site if it takes more than three seconds to load.

This is where Varnish comes in. Varnish is a HTTP accelerator or caching HTTP reverse proxy. It receives requests from clients and tries to answer them from the cache. If it cannot answer from the cache it will forward it to the origin server, fetch the response, store it in the cache and deliver it to the client. When Varnish has a cached response ready, it is typically delivered in a matter of microseconds: two orders of magnitude faster than the average origin server, so make sure that Varnish answers as much as possible from the cache.

In this tutorial we will go through some of the common steps required to install and configure Varnish and integrate it with WordPress to take your site to the next level.

01 Install Varnish

Varnish packages are readily available for many Linux distributions including Red Hat, Centos, Debian and Ubuntu. In this tutorial we will assume that Ubuntu 14.04 LTS as the underlying operative system and we'll be installing the latest version of Varnish. For other operating systems check the latest releases on varnish-cache.org/releases. Open a command prompt and type the following as root.

```
001 apt-get install apt-transport-https
002 curl https://repo.varnish-cache.org/ubuntu/GPG-key.txt |
apt-key add - echo "deb
https://repo.varnish-cache.org/ubuntu/ trusty varnish-4.0"
003 >> /etc/apt/sources.list.d/varnish-cache.list
004 apt-get update
005 apt-get install varnish
006
```

02 Add the plugin

After installing Varnish we need to instruct WordPress to purge the cached content whenever modified. There are several plugins to achieve this. In this tutorial we will use Varnish HTTP Purge. Go to the WordPress dashboard and click on Plugins>Add New and search for Varnish HTTP Purge. Click on Install Now and confirm. Finally activate it.

03 Enable custom permalinks

For the Varnish HTTP Purge plugin to work correctly we need to enable mod_rewrite and use a custom URL structure for permalinks and archives. In the WordPress dashboard click on Settings>Permalinks and select Custom Structure. Then type `/%year%/%monthnum%/%post_id%` and click on Save Changes. To finalise, open a command prompt and run the following as root.

```
001
002 a2enmod rewrite
003
```

04 Move Apache

Before we configure Varnish to handle all the web traffic to our WordPress site, we will need to move Apache to a different port. Let's then change all occurrences of port 80 with a text editor in `/etc/apache2/ports.conf` and any files under `/etc/apache2/sites-enabled/` to 8080.

05 Serve from Varnish

Now that port 80 is available we can update the Varnish configuration, effectively putting it in front of Apache and WordPress. On the default installation Varnish will wait for connections on port 6081. With this in mind let's change `/etc/default/varnish` with a text editor and replace 6081 with 80.

```
001 DAEMON_OPTS="-a :80 \
002 -T localhost:6082 \
003 -f /etc/varnish/default.vcl \
004 -S /etc/varnish/secret \
005 -s malloc,256m"
```

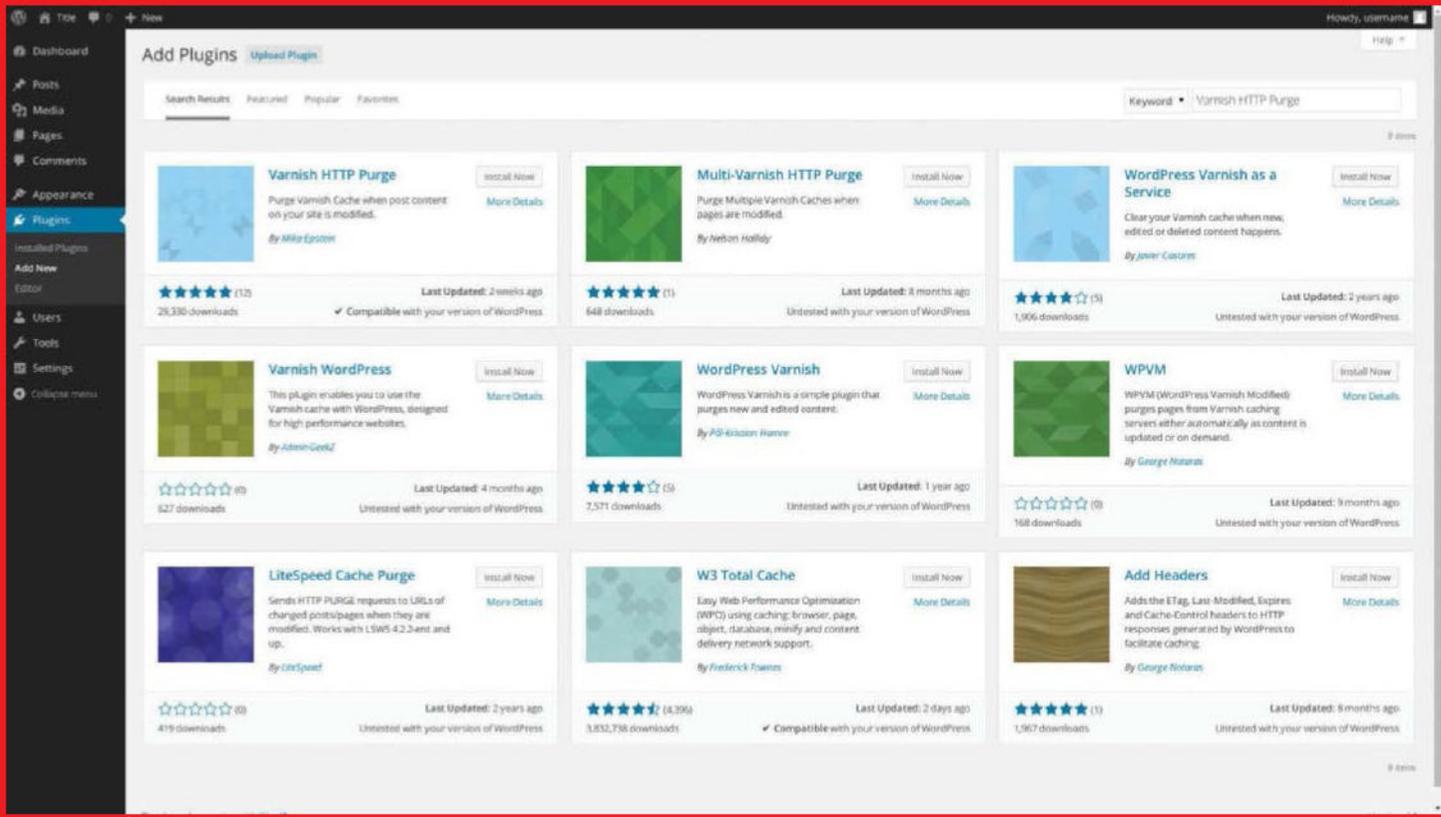
06 Set the backend

Varnish uses the concept of backend or origin server to define where it should retrieve the content from if it's not present in its cache. In this case we will be using the Apache location that we defined in step 4. Edit `/etc/varnish/default.vcl` with a text editor and ensure the following is present.

```
001 backend default {
002 .host = "127.0.0.1";
003 .port = "8080";
004 }
```

07 Make it effective

Now we are ready to start Varnish and restart Apache. Once this is done, all traffic to our WordPress site will pass through Varnish before it hits the Apache server. Open the command prompt again and run the following as root.



The screenshot shows the WordPress 'Add Plugins' page with the search term 'Varnish HTTP Purge'. The search results are displayed in a grid of plugin cards. The first card is for 'Varnish HTTP Purge' by Mike Epson, which has 26,330 downloads and is compatible with the current version of WordPress. Other plugins shown include 'Multi-Varnish HTTP Purge', 'WordPress Varnish as a Service', 'Varnish WordPress', 'WordPress Varnish', 'WPVM', 'LiteSpeed Cache Purge', 'W3 Total Cache', and 'Add Headers'.

<Above>

- Install the Varnish HTTP Purge plugin in WordPress to evict the content in the cache when it is updated

```
001 service varnish start
002 service apache2 restart
```

08 Ignore cookies

By default, Varnish will not cache content for requests including the Cookie header or responses including the Set-Cookie header. WordPress sets many cookies that are safe to ignore during normal browsing so let's update /etc/varnish/default.vcl and add the following inside vcl_recv to remove them.

```
001 set req.http.cookie = regsuball(req.http.cookie, "wp-
settings-\d+=[^;]+(; )?", "");
002 set req.http.cookie = regsuball(req.http.cookie, "wp-
settings-time-\d+=[^;]+(; )?", "");
003 set req.http.cookie = regsuball(req.http.cookie,
004 "wordpress_test_cookie=[^;]+(; )?", "");
005 if (req.http.cookie == "") {
006 unset req.http.cookie;
007 }
008
```

09 Exclude URLs

In most web applications there are some URLs that shouldn't be cached no matter what and WordPress is no exception. We will be excluding any admin or login related pages from hitting the cache. Once again open /etc/varnish/default.vcl and add the following before we remove the cookies from the previous step.

```
001 if (req.url ~ "wp-admin|wp-login") {
002 return (pass);
003 }
```

10 Extend caching

Varnish uses the max-age parameter in the Cache-Control HTTP header to establish how long the content is considered fresh before contacting the backend again. Varnish will use 120 seconds by default if this value is missing or is equal to zero. To extend this period to one hour we could update /etc/varnish/default.vcl.

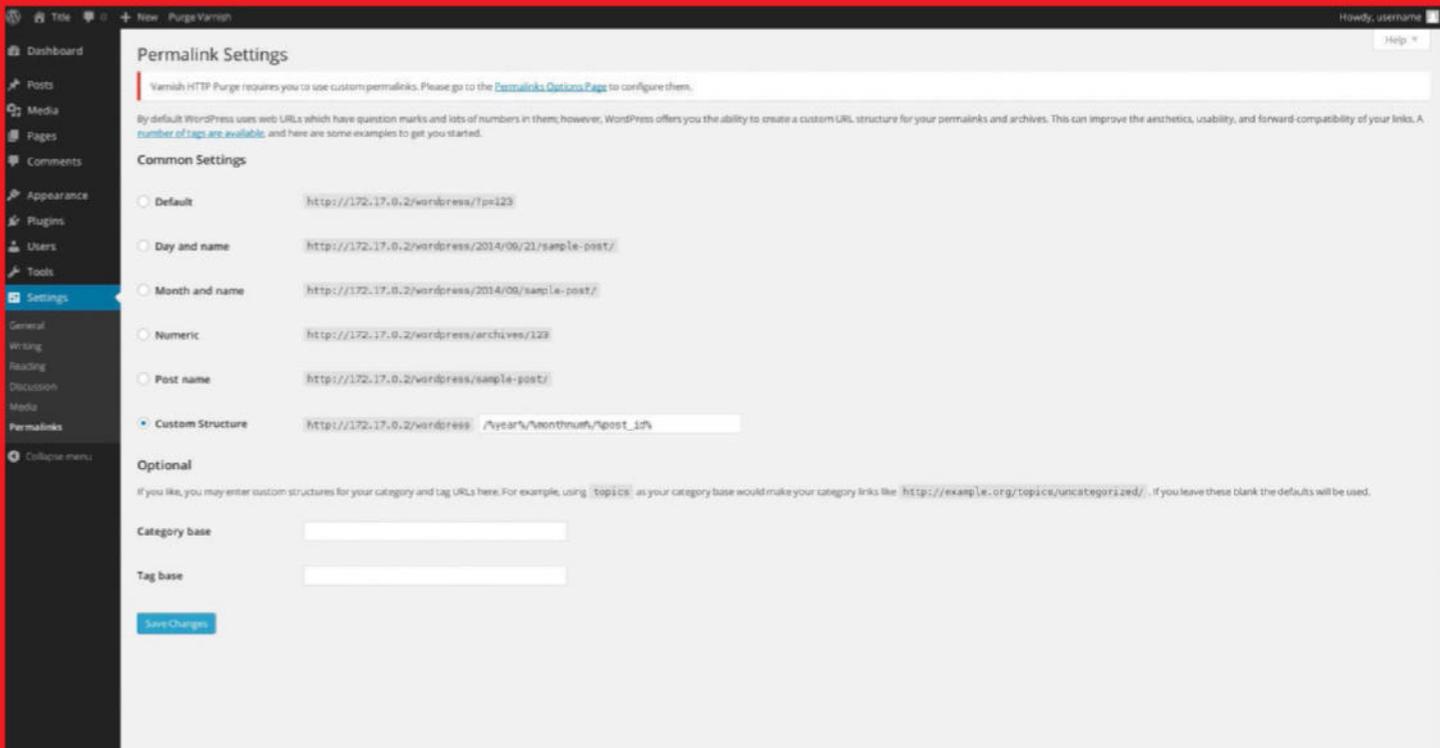
```
001 sub vcl_backend_response {
002 if (beresp.ttl == 120s) {
003 set beresp.ttl = 1h;
004 }
005 }
```

11 Handle purge requests

Whenever existing content in WordPress is updated the Varnish HTTP Purge plugin will ask Varnish to remove it from the cache. The next time it's requested, the most up-to-date version will be retrieved from the backend. But in order to do this we will need to add the following at the top of vcl_recv in /etc/varnish/default.vcl.

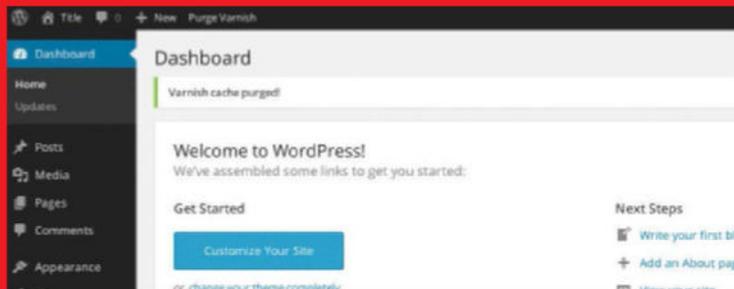
```
001 if (req.method == "PURGE") {
002 if (req.http.X-Purge-Method == "regex") {
003
```

Beyond WordPress



<Above>

- Here you can set a custom URL structure for permalinks and archives



<Above>

- Want to empty your cache before testing some changes? No problem, just click on Purge Varnish



<Above>

- Examine all incoming and outgoing web traffic in real-time as it flows through Varnish

Varnish Book

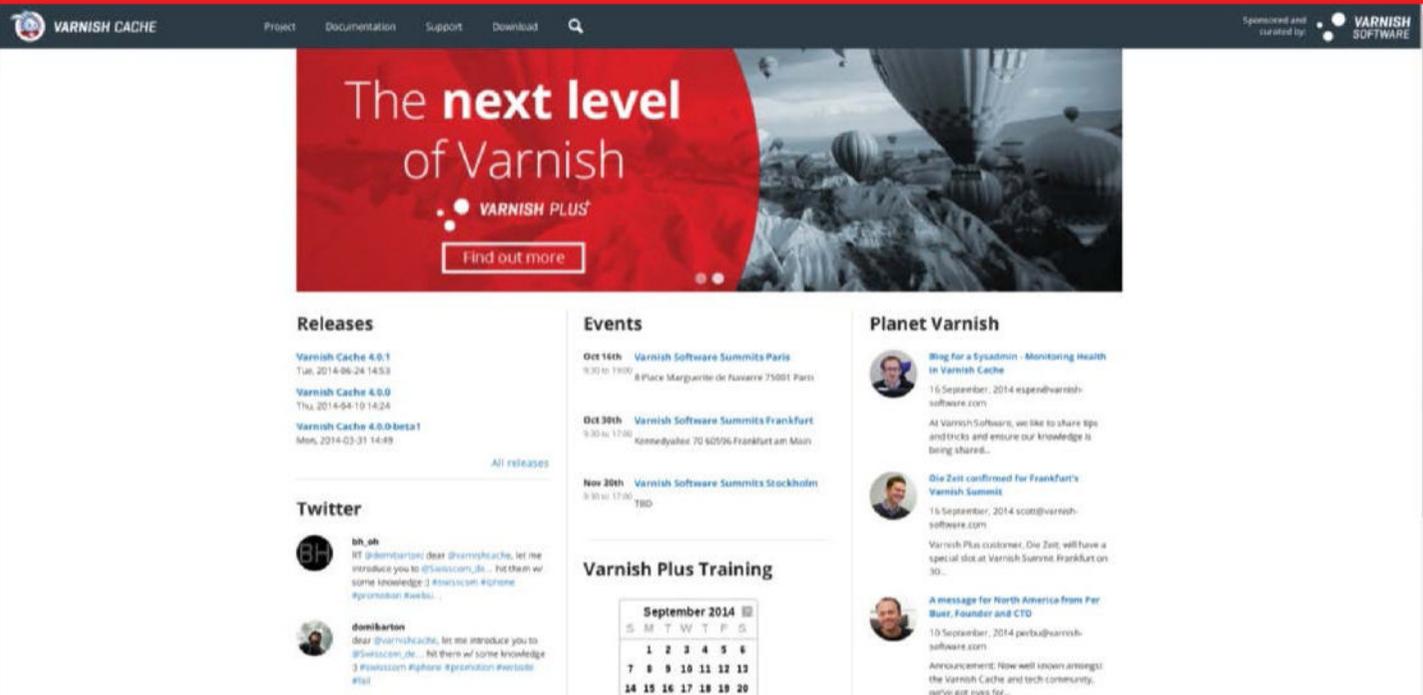
Varnish has also released an entire PDF document detailing how to utilise the software to its full potential, including sections on HTTP protocols, VCL basics and threading parameters. Check it out at bit.ly/1z1aIPK

```
003         ban("req.url ~ " + req.url + " && req.  
http.host ~ " + req.http.host);  
004         return (synth(200, "Banned."));  
005     } else {  
006         return (purge);  
007     }  
008 }  
009
```

12 Secure purge

In the previous step we added the necessary code to handle purge requests but we have left it open for anyone to do just that. Let's add some code to restrict it. Edit `/etc/varnish/default.vcl` and after the backend add the `acl` below using your server IP address or hostname. Then modify the code in the previous step to use it.

```
001 acl purge {  
002     "localhost";
```



<Above>

- Documentation, information about the project and more is available online at the Varnish website

```
003     "<server ip address or hostname>";
004 }
005 ..
006 if (req.method == "PURGE") {
007     if (client.ip !~ purge) {
008         return (synth(405));
009     }
010 }
```

13 Reload the configuration

Before our changes to /etc/varnish/default.vcl take effect, Varnish needs to be told to reread its configuration. To avoid any potential downtime, Varnish can be instructed to reload the configuration while it keeps serving requests. Open the command prompt again and type the following as root.

```
001
002 service varnish reload
003
```

14 Empty the cache

Chances are that as we worked our way through the configuration, some content found its way into the cache even if it wasn't supposed to. In this situation we can use the Varnish HTTP Plugin to empty the cache and then we can start afresh. Go to the WordPress dashboard and click on Purge Varnish at the very top.

15 Examine the traffic

Everything is working; browse some pages, login, logout, pages are loading fast. Or are they? Varnish come with a set of tools that will help you understand what's going on behind the scenes and debug any potential problems. To see the requests as they are passing through Varnish run the following on a command prompt:

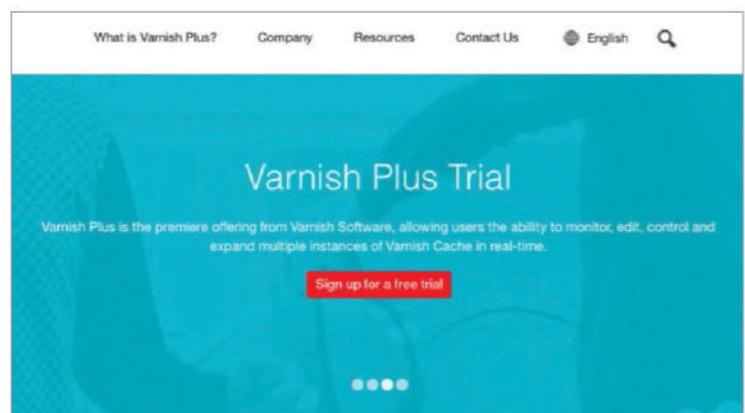
```
001
002 varnishlog
003
```

16 Volume matcher/measure

Varnish is very powerful but can be daunting at first. Luckily for us there are many resources online and has an active community behind ready to help. If you are stuck or want to know more you can visit the Varnish website at varnish-cache.org.

17 Go further

If you are interested in Varnish, you can always give Varnish Plus a go. There's a free trial available on the Varnish website (bit.ly/12hJpx8) and you can capture real-time traffic statistics, create a paywall for premium content, simultaneously work on administration across all Varnish cache servers, record relationships between web pages for easy content maintenance, detect devices used for browsing and accelerate API.



Code an input form in 3D with CSS

IF YOU HAVE LIMITED SPACE BUT WANT TO CAPTURE INPUT WITH MAXIMUM STYLE, THIS IS THE TECHNIQUE FOR YOU

TUTORIAL OBJECTIVE

Add an input form to your website with CSS

TIME REQUIRED

1 hour



ONE OF THE most common and useful online interactions that web designers and developers can do is devote time to encouraging visitors to subscribe to a

newsletter or blog. Once signed up, visitors can then be included in online promotional activities and hopefully be converted into paying customers in due course.

To part with an email address, however, visitors need to trust the website and be sufficiently interested in the product, service or blog - even so, this by itself might not be enough. Then again, if your website looks the part and has an original-looking and slick method for encouraging signup, this could provide the extra nudge some visitors need in order for you to secure those all-important email addresses.

The technique demonstrated in this tutorial makes ingenious use of CSS and JavaScript to create a 3D box providing all of the required functionality, user prompts and confirmation within the space of a single input field. If you want to increase the number of subscribers to your website, for example, this could be just the solution you are looking for. Let's give it a go.

01 HTML first

This technique works in all modern and even not-so-modern browsers. Please do check the functionality if you need to ensure compatibility with older browsers like IE8. The HTML starts with the now familiar HTML5 declaration. The customary 'utf-8' character set is declared, assuming you use this character set, the page title is put in place and the link to the stylesheet established.

```
001 <!DOCTYPE html>
002 <html>
003 <head>
004 <meta charset="utf-8">
005 <title>Be the first to know</title>
006 <link rel="stylesheet" href="css/
007 screen.css">
008 </head>
009 </html>
```

02 Decoration and heading

This technique uses Font Awesome icons as part of the styling. Here, the envelope class is applied to a <div>. The class is used to increase the size of the icon to be displayed and to knock back its opacity. The #cuboid <div> is the container for the main action and each of the four faces of the cuboid are set starting with the invitation to 'Subscribe'.

```
001 <div class="envelope">
002 <i class="fa fa-envelope"></i></div>
003 <h1>Be the first to know</h1>
004 <!-- heirarchy: #cuboid > form >
```

```
div*4(cuboid faces) -->
004 <div id="cuboid">
005 <form>
006 <!-- #1 hover button -->
007 <div>
008 <p class="cuboid-text">Subscribe</p>
009 </div>
```

03 Fill the form

The text input face has several more elements to it, as a submit icon is required. The autocomplete property is set to 'off' as you don't want the field pre-filling with someone else's email address and inadvertently sending it to you. Forms will generally require a Submit button, but since this is being handled within the field, the #submit <div> sets the display of the Submit button to 'none'.

```
001 <!-- #2 text input -->
002 <div>
003 <!-- Label to trigger #submit -->
004 <label for="submit" class="submit-icon">
005 <i class="fa fa-chevron-right"></i>
006 </label>
007 <input type="text" id="email" class=
008 "cuboid-text" placeholder=
009 "Your Email" autocomplete="off"/>
010 <!-- hidden submit button -->
011 <input type="submit" id="submit" />
012 </div>
```

04 Complete the cuboid

While the form is being submitted, a short

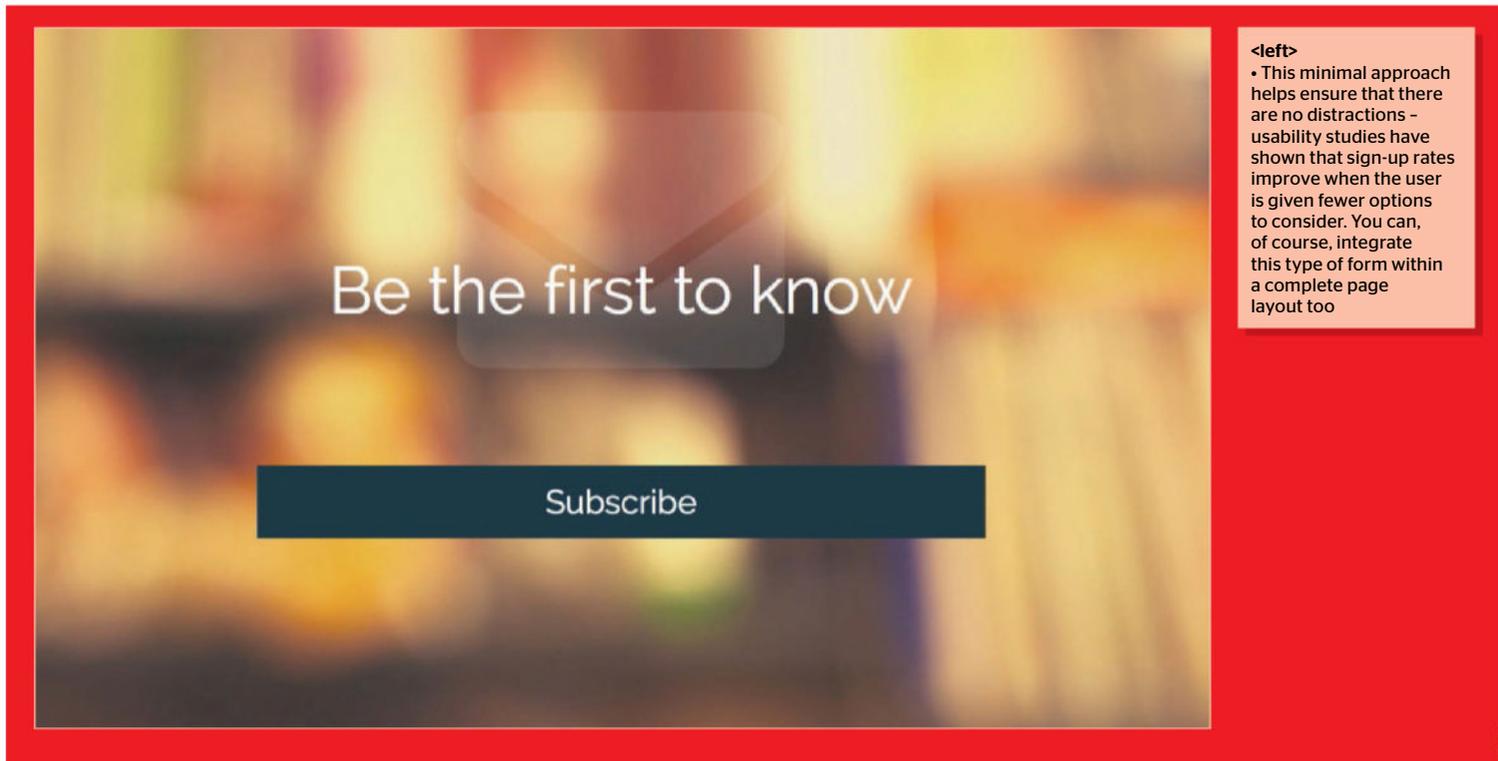
message is displayed. The final face of the cuboid (on the long side of the cuboid, that is) is used for displaying the success message and an icon to enable the form to be refreshed and therefore reused.

```
001 <!-- #3 loading message -->
002 <div>
003 <p class="cuboid-text loader">
004 We're submitting your request</p>
005 </div>
006 <!-- #4 success message -->
007 <div>
008 <!-- reset/retry button -->
009 <span class="reset-icon">
010 <i class="fa fa-refresh"></i></span>
011 <p class="cuboid-text"> Thankyou.
012 You're all signed up! </p>
013 </div>
014 </form>
015 </div>
```

05 Join the JavaScript

Finally, jQuery and small JavaScript are loaded. You could use a CDN for the jQuery. Remember to load a minified version. Occasionally links to an uncompressed version at nearly 300kb are found in source code. Do your users a favour, use a minified version and save about 200kb. The '3dform.js' weighs in at only 34 lines and is less than 1kb.

```
001 <!-- jQuery -->
002 <script src="js/jquery-1.11.0.min.js">
003 </script>
```



<left>
 • This minimal approach helps ensure that there are no distractions – usability studies have shown that sign-up rates improve when the user is given fewer options to consider. You can, of course, integrate this type of form within a complete page layout too

```
003 <script src="js/3dform.js"></script>
004 </body>
005 </html>
```

06 Coding the CSS

The two custom fonts used are imported first. The font used for the text is imported from Google's content delivery network but the minified Font Awesome file is linked locally. You'll also need local versions of the Font Awesome EOT, SVG, TTF, WOFF and OTF files all saved in a fonts folder, which is where the font-awesome.min.css expect to find them.

```
001 /*Custom fonts - Raleway and FontAwesome*/
002 @import url(http://fonts.googleapis.com/
css?family=Raleway);
003 @import url('font-awesome.min.css');
004 * {margin: 0; padding: 0;}
005 body {
006 background: url(../img/bg.jpg)
no-repeat center center fixed;
007 -webkit-background-size: cover;
008 -moz-background-size: cover;
009 -o-background-size: cover;
010 background-size: cover;
011 padding-top: 150px;
012 font: normal 18px Raleway; color:
white; text-align: center;
013 }
```

07 Start the styling

Raleway has already been set in 'body' as the font to be used everywhere on the page, so it's not

necessary to keep setting this font for each of the page elements. The ghostly envelope shape is created by increasing a Font Awesome icon's size tenfold and then reducing its opacity to 0.1 (where 1 is completely opaque). The container for the form is created here.

```
001 /*general styles*/
002 h1 {font-weight: normal; font-size:
36px; margin-bottom: 75px;}
003 .envelope i {-webkit-transform: scale(10);-
ms-transform: scale(10);transform: scale
(10); opacity: 0.1;}
004 #cuboid {
005 width: 400px; margin: 0 auto;
006 /*this also makes #cuboid a container
for absolutely positioned descendants*/
007 -webkit-perspective: 1000px;
008 perspective: 1000px;
009 }
```

08 Set the space

'Preserve-3d' is set to enable the elements to be positioned in 3D space. As the height of the input field is 40px, the elements are translated half that height to create the illusion of the cuboid being rotated through its centre. Feel free to experiment with the transition speed to suit your own requirements.

```
001 #cuboid form {
002 /*counter translate*/
003 -webkit-transform: translateZ(-20px);
004 -ms-transform: translateZ(-20px);
005 transform: translateZ(-20px);
```

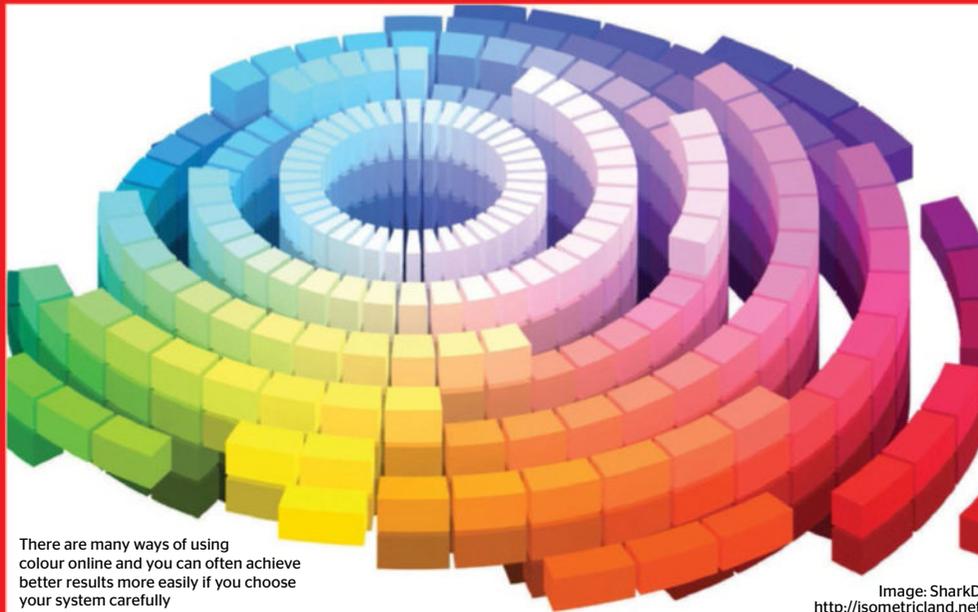
Top tip
 This tutorial is based on the walkthrough published by thecodeplayer.com/walkthrough/single-input-3d-form. Be sure to check out their other walkthroughs too.

```
006 /*propogate 3d space for children*/
007 -webkit-transform-style: preserve-3d;
008 transform-style: preserve-3d;
009 /*prevent height collapse as children
are absolutely positioned*/
010 height: 40px;
011 /*for smooth animations*/
012 -webkit-transition: all 0.35s;
013 transition: all 0.35s;
014 }
```

09 Form the faces

Height sets the height of the text area and line-height sets the distance between each line of text (also known as 'leading'). A line-height of 40px positions the single line of text in exactly the right place within a 40px space. The colour of the loader face is set here together with the animation that is to be used.

```
001 /*faces*/
002 .cuboid-text {
003 /*each face will be 40px high*/
004 line-height: 40px; height: 40px;
005 background: hsl(200, 40%, 20%);
006 }
007 .loader {
```



There are many ways of using colour online and you can often achieve better results more easily if you choose your system carefully

Image: SharkD
<http://isometricland.net>

Choose your colour model

Every designer must surely be familiar with the hexadecimal system for setting colours, which in many cases this is the perfectly good 'go to' system for defining your colours. You've probably also used the three-digit short form at some point as well (eg #09C in place of #0099CC). But, did you know 140 different color names are defined in HTML and CSS? You've probably seen color: 'gray' or 'red' but aren't 'palegoldenrod' and 'papayawhip' worth exploring too?

There are other systems available that have their own uses. RGB and HSL and their more advanced counterparts RGBa and HSLa (that includes an alpha channel) can certainly make things easier for you depending on the colour job at hand. If you need transparency you'll certainly need to use of these systems, but they can also be useful when managing groups of colours as a palette or making more intuitive selective changes (like the pulsing effect in this tutorial).

Top tip

When influencing online behaviour, it's important to get the balance right between giving people enough reasons to sign up and not distracting them so much that they forget to actually do it.

```
008 background: hsl(200, 40%, 30%);
009 -webkit-animation: phase 1s infinite;
010 animation: phase 1s infinite;
011 }
```

10 Hue, saturation, luminance

As HSL colour is specified it's easy to create a pulsing effect by animating a colour between different saturation values - in this case between 40% and 70%. The styling for the email input field is set including the white background and the coloured text. Border-box is used here in order to ensure that the whole box appears within the space allocated.

```
001 /*Lets create a pulsating animation for
the loader face*/
002 @-webkit-keyframes phase {
003 50% {background: hsl(200, 70%, 30%);}
004 }
005 @keyframes phase {
006 50% {background: hsl(200, 70%, 30%);}
007 }
008 #email {
009 background: white; outline: none;
```

```
border: 0 none;
010 font: inherit; text-align: left; color:
hsl(200, 40%, 30%);
011 display: block; width: 100%; padding:
0 10px;
012 -webkit-box-sizing: border-box;
013 -moz-box-sizing: border-box;
014 box-sizing: border-box;
015 }
```

11 Styled into submission

The default Submit button is rendered invisible using display: none. Again, 40px line-height is used to ensure the correct vertical positioning of the icons. One of the many benefits of using icons from a font file is that you can apply all of the font properties to them. Here, HSLa colour is used to change the opacity of the icons to 25%.

```
001 #submit {display: none;}
002 .submit-icon, .reset-icon {
003 position: absolute; top: 0; right: 0;
004 color: hsla(30, 50%, 30%, 0.25);
005 line-height: 40px; padding: 0 10px;
006 /*smooth transitions when user activates
input and types something*/
007 -webkit-transition: all 0.5s;
008 transition: all 0.5s;
009 /*to make the icons feel like buttons*/
010 cursor: pointer;
011 }
```

12 Recognise the input

The Submit icon is made more prominent once content has been entered into this field. The JS shown in the Code Library is responsible for adding the 'active' class when content has been added to the field. The

cuboid <div> is defined, positioned absolutely and completely fills the container.

```
001 /*.active = when the user is typing
something*/
002 .submit-icon.active {color: hsl
(30, 70%, 70%);}
003 .reset-icon {color: hsla
(0, 100%, 100%, 0.25); font-size: 14px;}
004 #cuboid div {position: absolute; top: 0;
left: 0; width: 100%;}
```

13 Rotate the result

Watch out here as the vendor prefixes have been removed from this step for brevity - make sure you check the tutorial files for the full code. Rotating each face 90 degrees in the X dimension and moving each face in and out by 40px (20px from -20px) completes the cuboid illusion.

```
001 /*3D transforms. Each face will be rotated
in multiples of -90deg and moved 20px(half
of their 40px height) out*/
002 #cuboid div:nth-child(1) {transform:
rotateX(0deg) translateZ(20px);}
003 #cuboid div:nth-child(2) {transform:
rotateX(-90deg) translateZ(20px);}
004 #cuboid div:nth-child(3) {transform:
rotateX(-180deg) translateZ(20px);}
005 #cuboid div:nth-child(4) { transform:
rotateX(-270deg) translateZ(20px);}
006 /*the form will have 4 states/classes
(default+3) for rotation*/
007 #cuboid form:hover,
008 #cuboid form.ready {transform: translateZ
(-20px) rotateX(90deg);}
```

```
009 #cuboid form.loading {transform:
    translateZ(-20px) rotateX(180deg);}
010 #cuboid form.complete {transform:
    translateZ(-20px) rotateX(270deg);}
```

14 Take it further

This technique really suits an ultra-minimal 'Coming soon' page layout - no distractions, just sign up please. You could adapt it by creating extra <div>s and classes but it would soon become tiresome for the user - a little like being forced to open one advent calendar door after another but without the reward of chocolate!



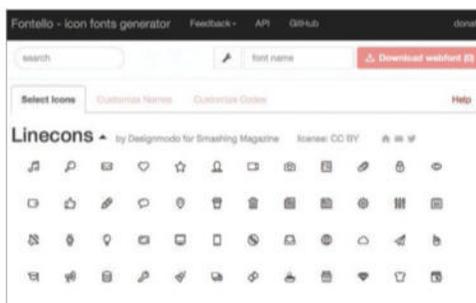
15 Other solutions

Having your labels jump out of the way when you enter the field has a similar space-saving quality and surprise appeal as the single 3D input field, but lends itself better to multiple fields. TheCodePlayer also has a great solution for this, check it out at thecodeplayer.com/walkthrough/animating-float-labels-jquery-css3.



16 Icons as fonts

Font Awesome, used here, is one of the most popular icon font solutions but it is by no means the only way to go. Fontello provides an incredibly useful online tool for creating your own custom icon fonts, so you can choose just what you need from a wide range of sets and keep the file size down to an absolute minimum.



Code library

Understanding the JavaScript

While CSS can deliver most of the solution, a sprinkling of JavaScript is needed to bring it all together

When the mouse passes into the input field, the 'ready' class is added to the #cuboid form <div>. This initiates a 90-degree rotation and 20px translation to expose the first face of the input form

If the user subsequently mouses away, the cuboid is returned to the default hover state - but only if nothing has been typed into the input field

More visual feedback is provided to the user by changing the colour of the arrow once content has been typed into the field

The loading class is added to the #cuboid form for three seconds after the form is submitted. If you're switching between classes in this way, remember that when adding a new class you need to remove any classes that have been added previously

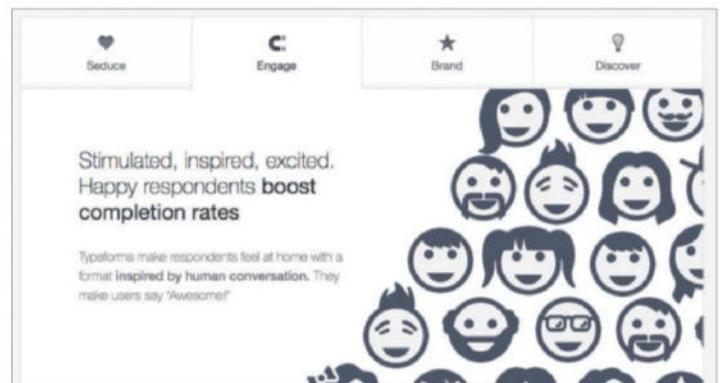
```
001 //add '.ready' to form when user focuses on it
002 $("#email").focus(function(){
003     $("#cuboid form").addClass("ready");
004 })
005 //remove '.ready' when user blurs away but only if there
    is no content
006 $("#email").blur(function(){
007     if($(this).val() == "")
008         $("#cuboid form").removeClass("ready");
009 })

010 //If the user is typing something change the arrow colour/
    .active
011 $("#email").keyup(function(){
012     //this adds .active class only if the input has some text
013     $(".submit-icon").toggleClass("active", $(this).val(
        ).length > 0);
014 })

015 //on form submit remove .ready and add .loading to the form
016 $("#cuboid form").submit(function(){
017     $(this).removeClass("ready").addClass("loading");
018     //finish loading in 3s
019     setTimeout(complete, 3000);
020     //prevent default form submission
021     return false;
022 })
023 function complete()
024 {
025     $("#cuboid form").removeClass("loading").addClass(
        "complete");
026 }
027 //reset/refresh functionality
028 $(".reset-icon").click(function(){
029     $("#cuboid form").removeClass("complete");
030 })
```

17 Do you DIY?

If you have the time, skill and inclination, often it will be better to create your own bespoke forms. However, sometimes the smart thing to do is to reach for a solution that already exists. One relative newcomer to the forms party is the Barcelona-based Typeform - you should definitely check out how their forms look and work.



Design layered backgrounds in Photoshop

USE PHOTOSHOP CS6 TO MAKE A STUNNING PARTIAL-SUBMERSION OCEAN SCENE AND SHOW WHAT LIES IN THE DEEP

TUTORIAL OBJECTIVE

Create a layered background for your WordPress site in Photoshop

TIME REQUIRED

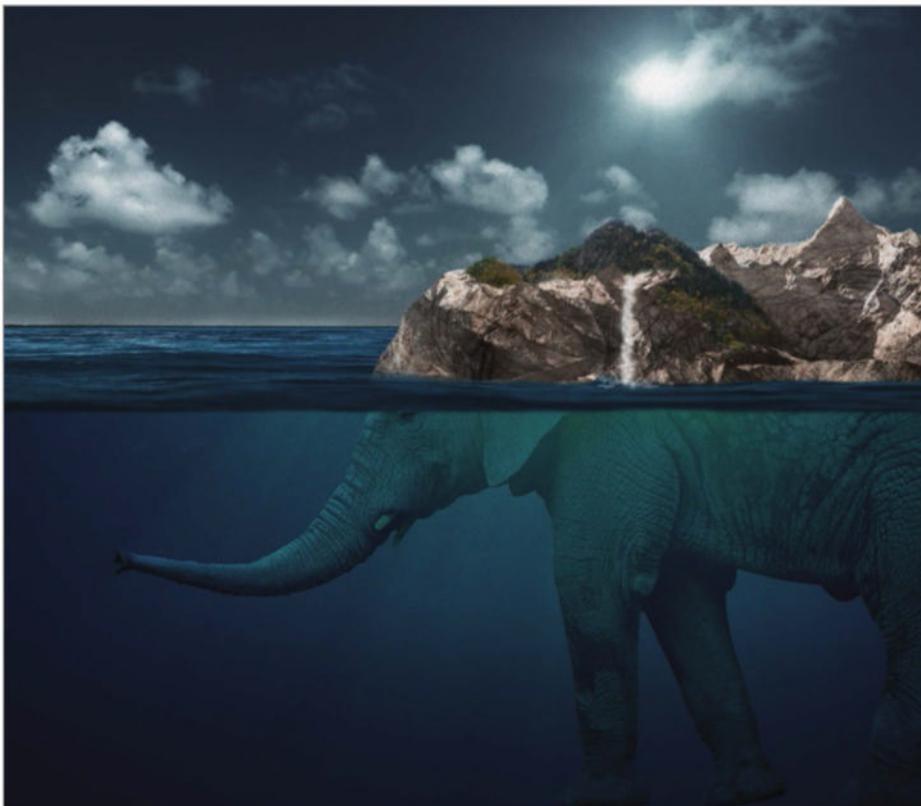
45 minutes



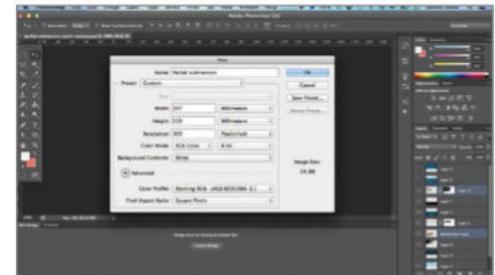
IT'S OFTEN SAID that we know more about the moon than we do about the depths of our own oceans. Wouldn't it be incredible if

we could see what it is that lives beneath the waves? Over the next four pages, you'll learn the various techniques required for creating a partial-submersion scene; a cross section of the ocean, revealing what might be hiding in the depths.

We'll be using some beautiful stock imagery, Photoshop's blending modes and some masking magic to create our submersion effect. In this tutorial we'll also touch on the blur tools and using colour to set the mood of your image. You'll need an image of an elephant or large animal, an image of the ocean, an underwater shot and a mountain range. We'll be producing a surreal scene but you can use these same techniques to create more realistic images.



Wouldn't it be incredible if we could see what lives beneath the waves? Here you'll learn the techniques required



01 Set up your document

To get going, open a landscape A4 (210mm x 297mm) canvas in Photoshop. Make sure your resolution is set to 300 dpi and Color Mode is set to RGB. This will be the base for producing your partial submersion scene. Place your elephant (or main element) into the canvas and resize to fit.

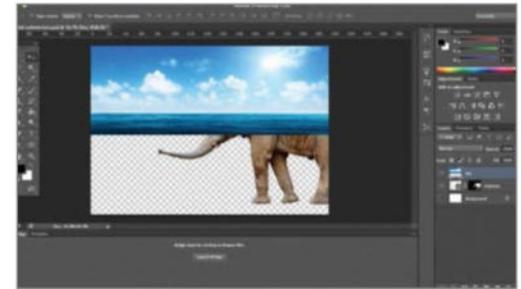
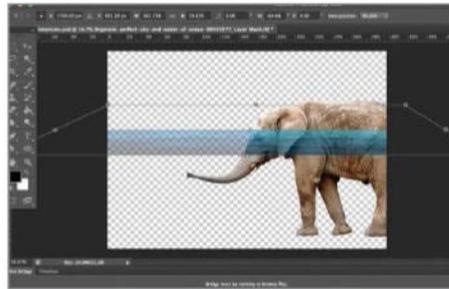
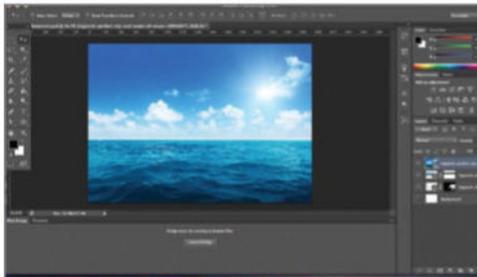


02 Cut it out

Use the Pen or Lasso tool to draw around the shape of your elephant. Once you have a selection, go to Layer>Layer Mask>Reveal Selection. This should mask out any white or background colour and leave you with just your elephant. Position the elephant at the right side of the canvas, facing left.

03 Add some ocean

Next, place an image of the ocean onto your canvas. A relatively calm, ocean scene with a few waves should be perfect. Resize the image until it fills your whole canvas and covers the whole of your elephant. We're only going to need the bottom part of this picture to create the surface of our ocean.



04 Crop the waves

Lower the Opacity of your ocean picture and position it so that the horizon line sits just above the elephant's eye. Use the rectangle Marquee tool to select the sky section of the waves and use Layer Mask>Hide Selection to crop it out. Use the Distort tool and drag out the bottom corners of this layer.

05 Sky's the limit

Increase the Opacity of the water to 100%. Then, paste in the same image as before. This time, using the Marquee tool, select the sky and crop the image. Reposition the sky so it's sitting on your newly created horizon. Now you should have some great-looking sky above your water layer. Merge the sky and ocean layers.

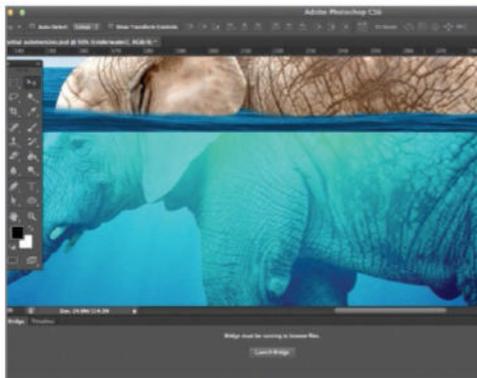


06 Reveal elephant

Create a clipping mask on your sky and ocean layer. Cmd/Ctrl+click on the elephant layer mask to select the elephant's outline. Click on the sky and ocean clipping mask and select a black brush. Use this to erase the sky and ocean so your elephant looks submerged.

07 Deep blue sea

Now, add the image you've chosen for the underwater section of your scene. Crop the image using a layer mask and position underneath the surface of the ocean. Use Hue and Saturation to match the colour more closely to the water's surface. Copy this layer and place it just below the elephant layer.



08 Underwater effect

The water will now look a little intense. To fix this, Cmd/Ctrl+click on the elephant layer mask in the layers palette, inverse the selection and select the ocean layer that's on top. Using a soft brush at 50% Opacity, erase the ocean around the elephant before setting the blending mode to Hard Light. The elephant should now look more like it's underwater.

09 Blurring the lines

Next we want to add a bit of perspective to the image. Copy your sky and ocean layer and select a small section at the bottom. Crop this section and select Blur>Gaussian Blur and change the radius to 5px. Move it down 1 or 2px from its original position. The front of the water should now look out of focus.

Top tip

For projects such as this, image quality really matters. If you can afford it, stock sites are the best option. Flickr and Stock Xchng are great free options though. Just make sure you've read the smallprint!

Trees and waterfalls



01: Add the trees

Find a tree picture that suits the shape of your mountains. Place it into your document, lower the opacity and position it in place somewhere on your mountains.



02: Mask the trees

Add a layer mask to the trees layer, using Layer>Layer Mask>Hide All. Then, with a 50% hardness brush, paint in trees along ridges and valleys of your mountains.



03: Falling water

Create a scatter brush with 80% scatter and create a new layer. Using white, draw waterfalls rushing down the mountains. Adjust opacity for a more realistic look.

10 Getting rocky

Now we're going to create the more surreal aspects of our partial-submersion scene. Place your mountain image on the canvas. Lower the opacity and line it up with your elephant. We're going to make it look like the elephant's back is made of mountains on an island rising out of the sea.



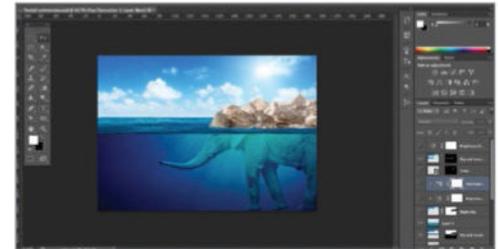
11 Mask the mountains

Using the Pen or Marquee tool, select just the mountains imaged. Create a layer mask on this layer and, using a black brush, erase everything except for the parts you want to keep. You may find that you need to sculpt the mountains so that they come down to meet the water where the elephant's head does.



12 Elephant texture

Create a copy of your elephant layer, then Cmd/Ctrl+click on the mountains layer mask to make a selection. Crop the elephant to this selection so you now have an elephant skin texture in the shape of the mountain range. Use the clone tool to fill in any gaps between the elephant and the top of the mountain.



13 Merge mountain and elephant

Set the blending mode of this texture layer to Soft Light. Copy this layer and set the blending mode of the new layer to Colour. Change the Opacity to 85%. The first texture should give the mountains the elephant skin texture and the second one should give you a more elephant-like colour, so the two blend together seamlessly.



14 Add some atmosphere

Now that our partial submersion image is coming together, we want to make it a little more moody. The bright sunny day doesn't quite suit the surreal feel that we're going for with this image, so we need to create a night-time feel using adjustment layers.



Use adjustment layers in Photoshop CS6

Photoshop's adjustment layers are a fantastic tool for making reversible changes to elements such as brightness, contrast and saturation. Although users can change all of these properties through the Image option in the toolbar, this only allows the user to make permanent changes where the image information is discarded. Using adjustment layers allows users to go back and edit properties again and again, to get the effect that suits the final work.

It is also possible to turn them on and off like any normal layer to see what has been changed and which layers are affecting each other. Adjustment layers are a must for any kind of photo manipulation work, in case users go overboard or need to back and fix something that went wrong. They can also let users achieve some pretty cool effects by editing multiple layers all at once.

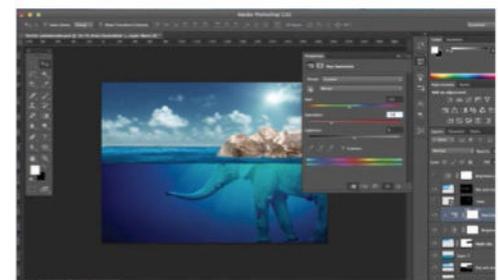
15 Adjustment layers

Create a copy of your sky in a new layer, using the Marquee tool. In the Adjustments panel, click on Brightness and Contrast to add an adjustment layer. Make sure you click on the Clip to Layer at the bottom of the Options panel. Set Contrast to 100 and Brightness to -92. This will give the image a slightly darker sky.



16 More adjustment layers

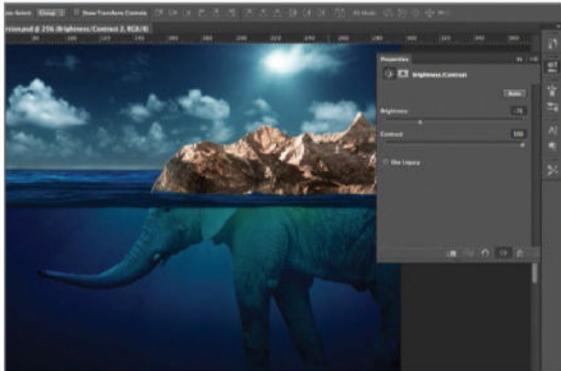
Create a Hue and Saturation adjustment layer on top of the same sky layer we're working on. Make sure to click Clip to Layer, then set the Saturation to -50 and play with the Hue to make it a little greener. You can play with these options to get the effect you want.



Top tip
The techniques here could come in handy when building a quirky parallax website with a scrolling land or seascape in the background. See www.pojeta.cz for a great example.

17 The murky depths

We still want to make the water feel a little darker to give the impression that the elephant's swimming through the depths of the ocean. To do this, use the Marquee tool to select the water. Choose a deep, sea green and another similar but darker tone and create a gradient. Set the blending mode to Multiply and the Opacity to 50%.



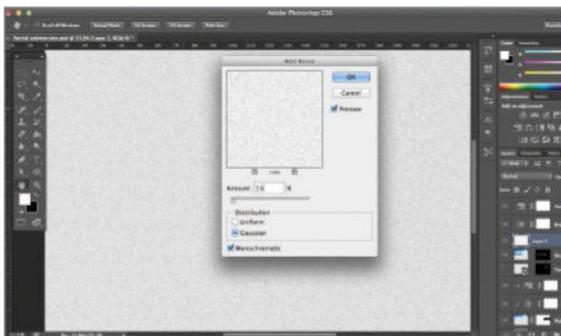
19 Hue and Saturation

Our partial-submersion image is nearly complete. Now that it's nice and dark, we need to tone down some of those very saturated colours. Add another adjustment layer, this time for Hue and Saturation. Make sure it's affecting all layers and set the Preset option to Old Style. This will tone down the mountains and sea for a more subtle look.



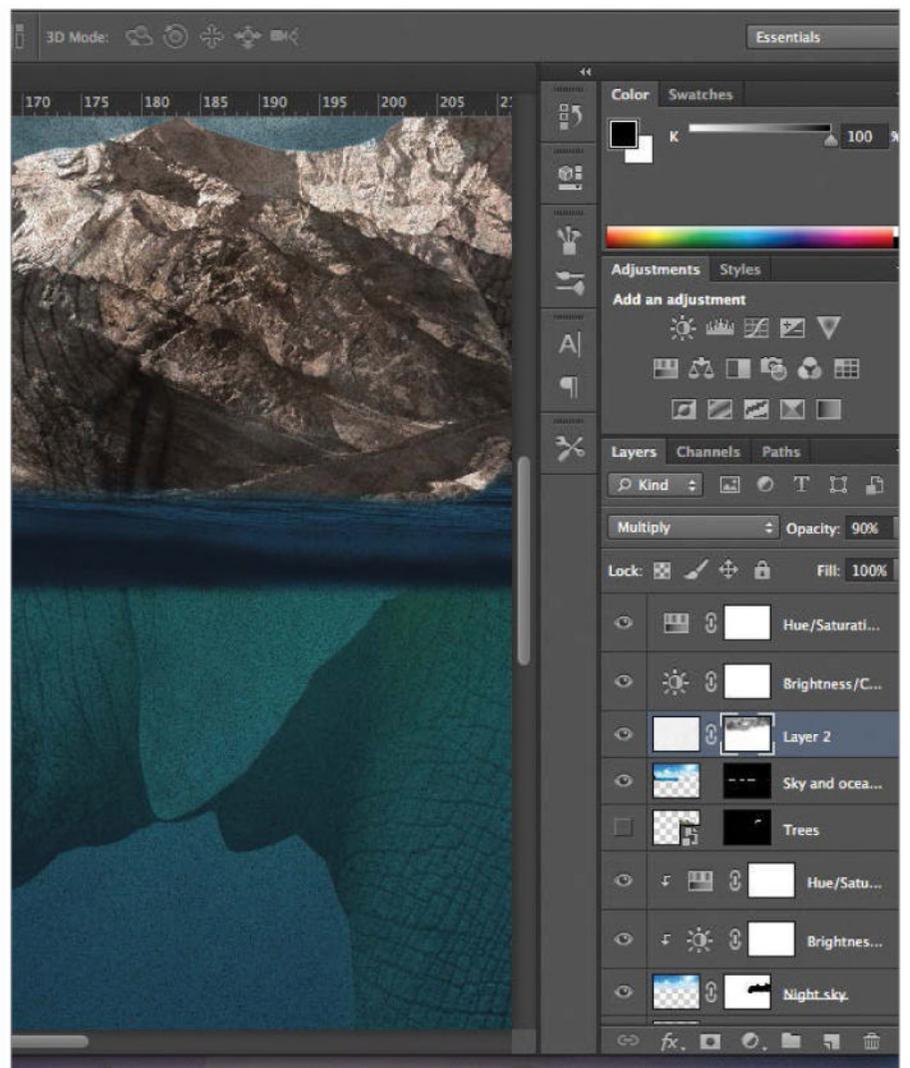
20 Add Noise

To finish off our partial-submersion image, we want to add some nice noise. This will make the image pop and add to the surreal feel. Create a new layer, under your top two adjustment layers, and fill it with white. Go to Filter>Noise>Add Noise. Set the amount to 15% and choose Gaussian and Monochromatic.



18 Make it dark

The image is definitely looking darker but it's not quite moody enough yet. Add another Brightness and Contrast adjustment layer, this time making sure it affects all the layers below it. Set the Brightness at -75 and Contrast to 100. As you'll see, this will darken the tone of the whole image.



21 Finishing touches

Select your noise layer and change the blending mode to Multiply. Some areas of the image might look a little too noisy. If this is the case, go to Layer>Layer Mask>Reveal All and with a soft, 50% Opacity, black brush, go over any areas that need toning down.

 Adjustment layers are a must for any kind of photo manipulation work 

Add an eCommerce web element with CSS3

USING CSS3, CREATE A SIMPLE AND APPEALING SHOPPING CART WEB ELEMENT THAT WOULD BE USEFUL ON AN ECOMMERCE WEBSITE

TUTORIAL OBJECTIVE

Get selling online with a CSS3 web element

TIME REQUIRED

1 hour



SELLING ONLINE PROVIDES the opportunity for many businesses to reach out to huge, untapped markets.

When your store can be open 24 hours a day and you can reach a global market without the costs of mailings and call centres, it can provide a huge boost to your business. But there are plenty of things to consider when designing an eCommerce site. It's not as simple as throwing up some shopping cart software and plopping products into a database. With the power of CSS3, it is possible to create some very cool and effective web elements that can just slot into place on any eCommerce website.

The products that you or your client are selling need to stand out and the all-important buttons such as 'Add to Cart' need to be prominent and stylish. It is essential to think about the presentation of customer reviews, the price and product description. All of these things need to be easy to accomplish, and with CSS3, those things just got a whole lot easier. So in this tutorial, we will look at how we can create a fictional product and turn it into an appealing and interactive web element using the power of CSS3 - let's get started!

01 Set everything up

First thing we need to do is create a new HTML5 document with a link to your stylesheet within the head. Then within the <body> tag, we can create two <div>s with a class name of 'container' and then 'block', making sure we comment the closing tags for better readability.

```
001 <body>
002
003   <div class="container">
004
005     <div class="block">
006
007     </div><!-- END block -->
008
009 </div><!-- END container -->
010
011 </body>
```

02 Product image and buttons

Next we're going to add in an image and some buttons for our product. Firstly we create a <div> with a class name of 'product'. We then pull in our product image and then add in two buttons. One of the buttons is a 'Add to Cart' button with a class name of 'buy' and the other is a 'View Item' button with a class name of 'preview'.

```
001 <div class="product">
002   
003   <div class="buttons">
004     <a class="buy" href="#">Add to cart</a>
005     <a class="preview" href="#">View item</a>
```

```
006 </div>
007
008 </div><!-- END product -->
009
```

03 Product information

Now let's add in some information about our product. Firstly create a <div> with a class name of 'info' and then add in the product title, wrapped within a <h4> header element. We then add in a little text describing our product and then finish off with the price and a 'Buy now' button.

04 Star ratings

In the final bit of HTML, we're going to add in a star rating section that will be positioned at the very bottom of our product block. We just simply add a <div> with a class name of 'details' and create an unordered list with a class called 'rating'. In a later step, we're going to use a CSS sprite to show a different-coloured star.

```
001 <div class="details">
002   <span class="time">12 hours ago</span>
003   <ul class="rating">
004     <li class="rated"></li>
005     <li class="rated"></li>
006     <li class="rated"></li>
007     <li class="rated"></li>
008     <li></li>
009     <li></li>
010   </ul>
011 </div><!-- END details -->
012
```

05 The CSS

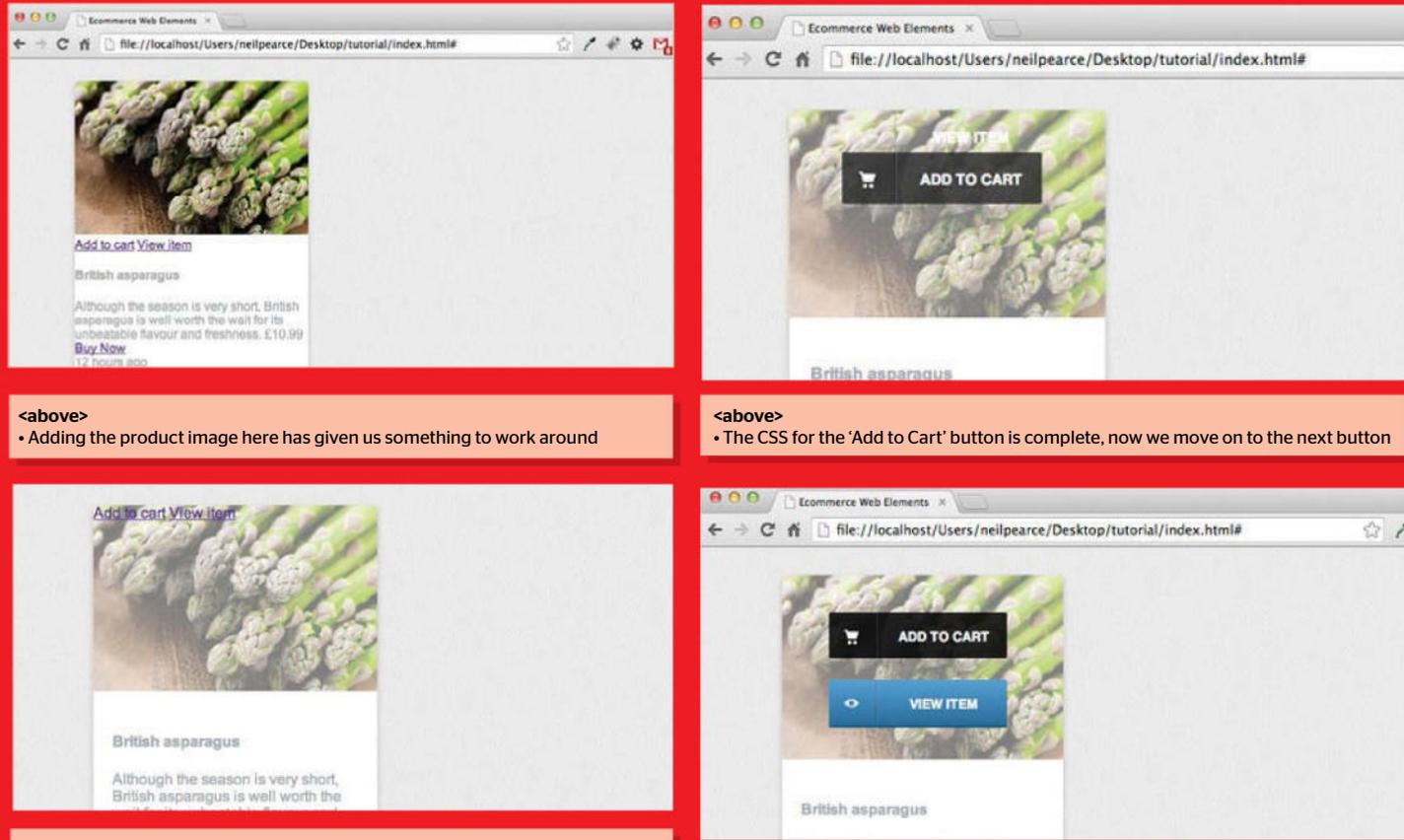
Open up a CSS file and start adding some styles. First add in some default styles within the body selector. We've set our font to Arial and given it a light grey colour, and we'll use a patterned background for the page. Finish off by giving our 'container' <div> some width and margin.

```
001 body {
002   font-family: Arial, sans-serif;
003   color: #aaaeb2;
004   background: #f1f1f1 url("../images/bg.png");
005 }
006
007 .container {
008
009   width: 900px;
010   margin: 0 auto;
011 }
```

06 Style the block

Things are not looking that great, so let's start shaping it all up. By targeting the 'block' class, we can give the body of our product information some shape and some nice subtle effects by using the 'border-radius' and 'box-shadow' properties. We do want to make sure that the position is set to relative, as this will allow us to absolutely position other elements within - such as the buttons.

```
001 .block {
002   margin: 30px 0;
003   display: block;
```



<above>

- Adding the product image here has given us something to work around

<above>

- The CSS for the 'Add to Cart' button is complete, now we move on to the next button

<above>

- Some of the basic styling added to the main buttons ('Add to Cart' and 'View Item') will be viewable once the product image is moused over

<above>

- In this step, we're just adding a simple active state on the 'View Item' button

```
004 position: relative;
005 width: 300px;
006 border-radius: 5px;
007 background: #fff;
008 box-shadow: 0 3px 8px rgba(0, 0, 0,
009 .2);
}
```

07 Product image

Now let's set some styles for our product image. Ensure the image is set to block and position is set to relative. Then we can set the width to 100% so it drops into the main product block. After that, we finish off by giving the top corners the same radius as the block.

```
001 .product {
002   display: block;
003   position: relative;
004 }
005
006 .product img {
007   width: 100%;
008   border-top-left-radius: 5px;
009   border-top-right-radius: 5px;
010 }
```

08 Info and details

Next we will give our product text and other information some shape. Firstly let's target the 'info' class, which holds the product title and description. We then separate the 'details' section - which is the star ratings - by adding a top border and then finish this off by giving it some padding all around.

```
001 .info {
002   display: block;
003   position: relative;
004   padding: 20px;
005 }
006
007 .details {
008   border-top: 1px solid #e5e5e5;
009   padding: 18px 20px;
010 }
```

09 The large buttons

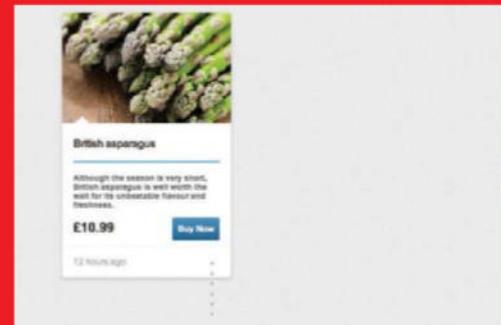
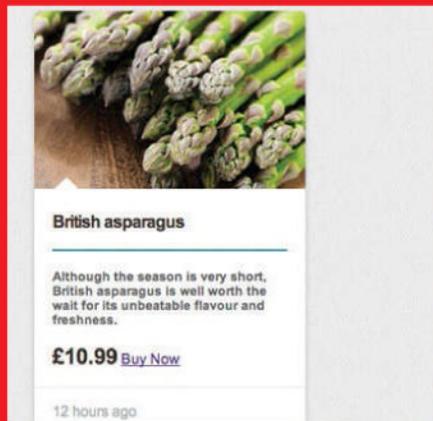
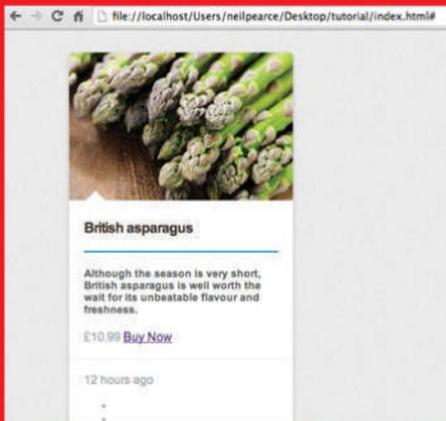
The buttons we are talking about here are the 'Add to Cart' and 'View Item' buttons that we will position at the centre of the product image. We then hide them until the user mouses over the product image. We won't see much in the way of buttons yet, but we'll tackle that soon.

10 Button styles

This is where we will start giving the buttons some basic styling. Because we set the 'product' class to relative, we can easily use absolute positioning to give ourselves complete control of exactly where these buttons should be. We can then give them some nice, rounded corners and hide them by using 'opacity: 0'.

```
001 .buttons a {
002   display: block;
003   position: absolute;
004   left: 50px;
005   width: 115px;
006   border-radius: 2px;
007   padding: 18px 10px 15px 65px;
008   font-family: Helvetica, sans-serif;
009   font-size: 14px;
010   font-weight: bold;
011   text-transform: uppercase;
012   color: #fff;
013   text-decoration: none;
014   opacity: 0;
015   text-align: center;
016 }
017
```

Beyond WordPress



<above left>

• Things are starting to take shape quite nicely now that some styling has been added to the product description

<above right>

• Things are really starting to take shape now we have added some styles to our product price

<top right>

• The 'Buy Now' button is the last step to finish off the product description section

<bottom right>

• The final element is the star rating section. It is here that the list elements are transformed into stars

11 Icon styling

Here we set some styling for the icons that will be added in the next step to both of the large buttons. Make sure the content is empty and then set a height and width. Then, divide the area where the icon will be by adding a 1px border to the right. Then add a subtle drop shadow.

```
001 .buttons a::after
002 {
003     content: "";
004     display: block;
005     position: absolute;
006     height: 48px;
007     width: 50px;
008     border-right: 1px solid rgba(0, 0, 0,
009     .25);
010     box-shadow: 1px 0 0 rgba(255, 255, 255,
011     .17);
012     top: 0;
013     left: 0;
014     z-index: 1;
015 }
```

12 'Add to Cart' button

In this step, we're going to just focus on the 'Add to Cart' button. After positioning it 20% from the top, we can give it a dark background colour. Then we can give it a subtle transition and lower its opacity for when we hover over it. Lastly, we will add in our icon that will be positioned to the left.

```
001 a.buy {
002     top: 20%;
```

```
003     background: #414141;
004     background: rgba(0, 0, 0, .85);
005     transition: background .2s ease-in;
006 }
007 .buy:hover {
008     background: #515151;
009     background: rgba(45, 45, 45, .85);
010 }
011
012 .buy::after {
013     background: url("../images/cart.png");
014     background-repeat: no-repeat;
015     background-position: 16px 18px;
016 }
```

13 'View Item' button

Next up will be to add the styles to our 'View Item' button that will sit underneath the 'Add to Cart' button. We are going to give this a blue colour and also give it a linear gradient. Then, let's give it a subtle drop shadow and finish up by giving it a two-second transition on hover.

```
001 a.preview {
002     bottom: 20%;
003     text-shadow: 0 -1px 1px rgba(0, 0, 0,
004     .4);
005     background: #286398;
006     background: -webkit-linear-
007     gradient(bottom, #1d4970, #639ed3);
008     background: -moz-linear-
009     gradient(bottom, #286398, #639ed3);
010     background-position: 0 -15px;
```

```
009     background-size: 400px 80px;
010     background-repeat: no-repeat;
011     box-shadow: 0 2px 0 #165181;
012     transition: background-position .2s
013     ease-in;
014 }
015 .preview:hover, .buy_now:hover {
016     background-position: 0 0;
```

14 Finish the buttons

In this step, we'll add a simple active state on the 'View Item' button. All we are going to do is move the button down by two pixels using the 'translateY' value of the transform property when we click the button. In the next rule, we add in the icon like we did previously.

```
001 .preview:active, .buy_now:active {
002     transform: translateY(2px);
003     box-shadow: none;
004 }
005
006 .preview::after {
007     background: url("../images/eye-icon.
008     png");
009     background-repeat: no-repeat;
010     background-position: 16px 17px;
```

15 Information arrow

Let's create the small arrow that we see pointing up to the product image just above the product's title. This is going to be very simple. All we need to do is create a

white 25 x 25px square, position it absolutely and rotate it by 45 degrees. Then we move it down using 'top -12px' so all we can see is one of the corners.

```
001 .info::after
{
002   display: block;
003   position: absolute;
004   top: -12px;
005   left: 23px;
006   content: "";
007   height: 25px;
008   background: #fff;
009   transform: rotate(45deg);
010   transform: rotate(45deg);
011 }
```

16 Product title

In this simple step, we will apply some styles to the product title to give our product description some shape. Start by setting the position to relative and giving it some padding and margin. Then set the font family, font weight and size. Finish up by pulling all the letters in slightly, using a negative value to the letter spacing.

17 Product description

Everything is taking shape quite nicely now and the next step is to think about the product description. First, let's add a two-pixel blue line just underneath the title. The good thing about doing lines like this is the ease at which you can change the height. Then we give the product description some styling.

```
001 .info h4::after {
002   display: block;
003   position: absolute;
004   bottom: 0px;
005   content: "";
006   width: 40px;
007   height: 2px;
008   background: #3b86c4;
009 }
010
011 .info .description {
012   display: block;
013   padding-bottom: 20px;
014   font-family: Arial, sans-serif;
015   font-size: 14px;
016   font-weight: 600;
017   color: #5f5f5f;
018 }
019 }
```

18 The price

Having now got a lot of the product description done, there are only two things left to do, one of which is simple: give the product price a little bit of much-needed styling. Ensure that you have a play around with this; sometimes a bigger font would look better, or perhaps even a different colour would work well.

19 'Buy Now' button

The 'Buy Now' button is the last step to finish off the product description section. We're going to float this right and use relative positioning in order to position it right where we want it. We're then going to continue to give it the same styling as our 'View Item' button - finishing up with a nice transition and drop shadow.

```
001 .buy_now {
002   float: right;
003   position: relative;
004   top: -5px;
005   display: block;
006   padding: 10px 10px;
007   border-radius: 3px;
008
009   font-family: "Helvetica Neue",
Helvetica, Arial, sans-serif;
010   color: #fff;
011   font-weight: bold;
012   text-decoration: none;
013   font-size: 15px;
014   text-shadow: 0 -1px 1px rgba(0, 0, 0,
.4);
015
016   background: #286398;
017   background: -webkit-linear-
gradient(bottom, #1d4970, #639ed3);
018   background: -moz-linear-
gradient(bottom, #286398, #639ed3);
019   background-position: 0 -15px;
020   background-size: 400px 80px;
021   background-repeat: no-repeat;
022   transition: background-position .2s
ease-in;
023
024   box-shadow: 0 2px 0 #165181;
025 }
```

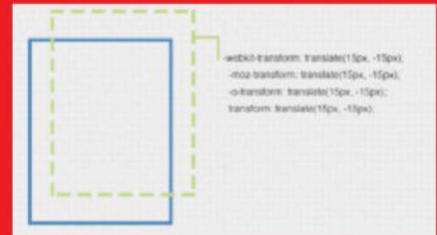
20 The rating section

Here we deal with the star rating section. We position the unordered list over to the right and zero out any default margin or padding. Once we do this, the block will become shorter and our bullet points will be overflowing. Let's sort that out next.

```
001 .rating {
002   position: relative;
003   top: 2px;
004   float: right;
005   margin: 0;
006   padding: 0;
007 }
```

21 Seeing stars

On this final CSS rule, we are going to add in our stars. We have included a PNG file called 'stars.png' on the resource disc that you can use. We're going to use this as a CSS sprite and first position the green stars that have the class name of "rated" added to the item.



The CSS transform property allows you to visually manipulate an element, transforming its appearance. There are many functions to the transform property and one we used in this tutorial (Step 14, for example) is called "translate".

```
transform: translateY(2px);
```

The translate(x, y) function is similar to relative positioning, translating, or relocating an element by x from the left, and y from the top. It's a handy way to move elements as it gives you full control of its positioning from using only one line of code.

```
transform: translate(2px, 10px);
```

To give us greater control, we can also use negative values on either the x or y values. The line of code below, for example, allows us to move an element horizontally by 20 pixels.

```
transform: translateX(-20px)
```

Top tip
Icons are a highly important part of designing elements for eCommerce sites, so make sure that you use them effectively.

```
001 .rating li {
002   float: left;
003   display: block;
004   height: 16px;
005   width: 16px;
006   margin-left: 5px;
007   background: url("../images/stars.png")
no-repeat 0 0;
008 }
009
010 .rating li.rated {
011   background-position: 0px -16px;
012 }
013 }
```

22 Final thoughts

eCommerce is forever growing on the web, and the need to design cool and functional web elements is becoming more and more achievable when using CSS3. So, experiment with what you've learned throughout this tutorial and see what you can produce!

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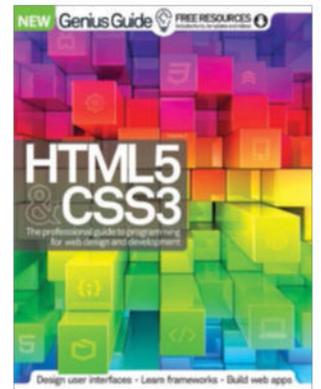
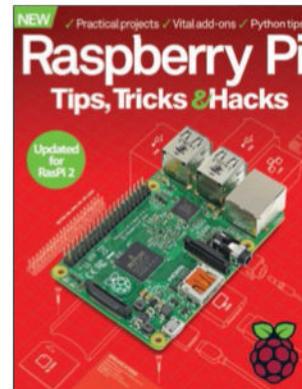
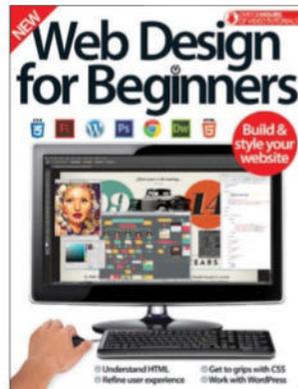
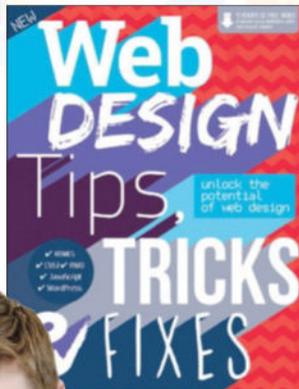
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