



**ADOBE® DREAMWEAVER® CS5**  
with PHP

**TRAINING**  
from the **SOURCE**

David Powers



<b>Lesson 4. Restyling a WordPress Site.....</b>	<b>1</b>
Understanding the Structure of a CMS.....	1
Installing WordPress.....	2
Creating a WordPress Theme.....	8
What You Have Learned.....	28

## Understanding the Structure of a CMS

Before embarking on restyling a WordPress site, it's worth spending a few moments examining how a CMS like WordPress, Drupal, or Joomla! is structured. A bare-bones Drupal installation consists of more than 460 files in 58 folders; WordPress has nearly 800 files in 79 folders; and Joomla! weighs in at a whopping 3,913 files in 711 folders. Unlike a website built with HTML, these files don't contain any of the site's content. In fact, the only page that most users ever see is `index.php`.

With the exception of images and other media files, all the content is stored in a database. The job of the army of files is to insert, update, and delete content in the database, and to serve visitors to the site with the information they want to see. If you open `index.php` in any of the CMSs, you see just a handful of PHP commands. There's nothing recognizable as a web page. Each part of the final web page is generated separately. Different scripts handle the page header, menus, main content, and footer.

This mass of files can be intimidating, even if you have a good understanding of PHP. As a result, many designers opt for using third-party themes (or templates, as Joomla! calls them) to improve the look of their CMS. There are plenty of good themes and templates available, and the default Twenty Ten theme in WordPress 3.0 is very attractive. But with the help of Dreamweaver CS5, it's not difficult to do your own customization—providing you have a strong grasp of CSS.

With a CMS, it's important to apply security fixes as soon as they're released, so you need to install your custom files in a place where they won't be overwritten. The location depends on the CMS you're using:

- **Drupal.** Create two subfolders called **modules** and **themes** in `sites/all`. The themes folder is where you install third-party themes or create your own.
- **Joomla!** Create a subfolder in the templates folder.
- **WordPress.** Create a subfolder in `wp-content/themes`.

Although the instructions in this lesson concentrate on creating a WordPress theme, the same principles of editing the CSS apply to Drupal and Joomla!

► **TIP:** There's a tutorial by David Karlins on modifying Drupal themes with Dreamweaver CS5 at [www.peachpit.com/articles/article.aspx?p=1590589](http://www.peachpit.com/articles/article.aspx?p=1590589).

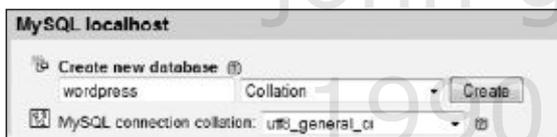
## Installing WordPress

The following instructions assume you have created a PHP local testing environment as described in Lesson 2, and that your web server and MySQL are running.

### Setting up a MySQL database and user account

Before you can install WordPress, you need to create a MySQL database and user account. Both subjects are covered in greater detail in Lesson 5, but the following steps guide you through the process of setting up a WordPress database.

- 1 Load phpMyAdmin in your browser, and log in as the root user if necessary.
- 2 In the “MySQL localhost” section in the center of the screen type **wordpress** in the “Create new database” text field. Leave all other settings at their default, and click Create.

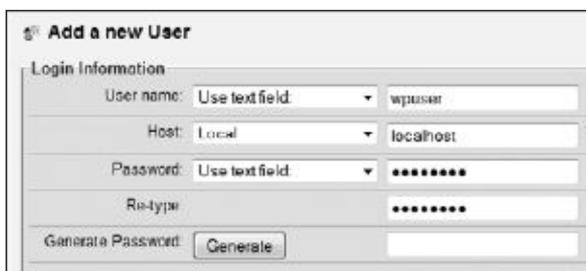


You should see a message that the database has been created. You don't need to create any tables. WordPress does it for you.

- 3 Click the Home icon  at the top left of the phpMyAdmin screen to return to the previous page. Then click the Privileges tab at the top of the screen.

▼ **CAUTION!** Don't be tempted to click the Privileges tab on the previous screen. You must return to the phpMyAdmin welcome page to access the correct screen.

- 4 Click the “Add a new User” link halfway down the screen.
- 5 In the “Add a new User” section, type **wpuser** in the “User name” field.
- 6 Select Local from the Host menu to insert localhost in the Host field.
- 7 Type **P3@chp!T** in the Password field, and again in the Re-type field.



- 8 Scroll to the bottom of the page, and click Go.

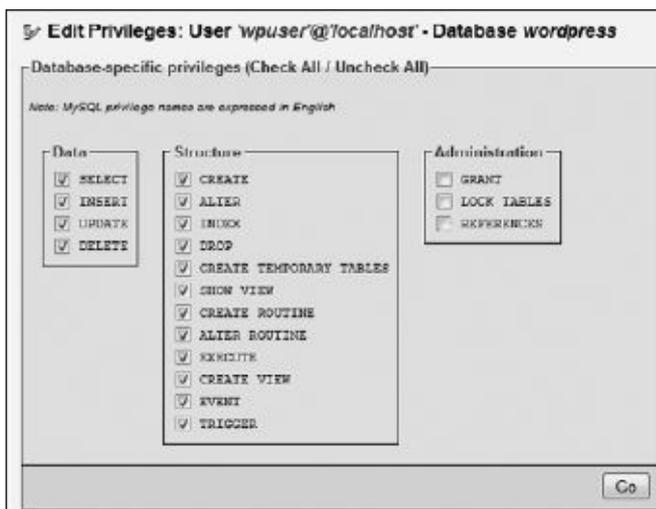
phpMyAdmin reports that it has created the user and displays a page where you can edit the user's privileges. The first section, "Global privileges," gives the user the same privileges on all databases, which is insecure.

- 9 Scroll down to "Database-specific privileges" and select **wordpress** from the menu labeled "Add privileges on the following database."



This loads a new screen where you define the database-specific privileges.

- 10 You need to select all checkboxes except the three in the Administration box. The quickest way is to click "Check all," and then deselect the three Administration checkboxes.
- 11 Click the Go button in the "Database-specific privileges" section.



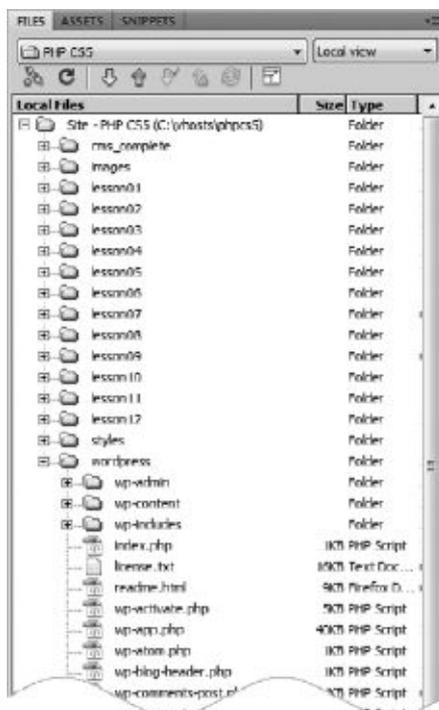
⚠ **CAUTION!** There are two Go buttons on this page. Make sure you click the top one.

You should see a message saying you have updated the privileges for 'wpuser'@'localhost'. You're now ready to install WordPress.

## Adding WordPress to the phpcs5 site

Installing WordPress involves unzipping the files into the folder where you want to locate the CMS. This can be the site root or a subfolder. For this lesson, use a subfolder of the phpcs5 site you set up in Lesson 2. After extracting the files, you need to edit a configuration file filling in the details of the MySQL database. The rest of the installation process is automated.

- 1 Use lesson04/start/wordpress-3.0.zip or download the most recent version of WordPress from <http://wordpress.org/>.
- 2 Extract the files to the phpcs5 site root. This should create a folder called wordpress inside the phpcs5 site. The folder contains about 25 files and three subfolders: wp-admin, wp-content, and wp-includes.
- 3 Click the Refresh icon  in the Dreamweaver Files panel to see the newly added folders and files.



- 4 Double-click wp-config-sample.php in the wordpress folder to open it in the Document window, and switch to Code view.

The first part of the script (around lines 18–34) defines the MySQL settings for the CMS. Replace the placeholder text in the first three lines with the name of the database, the user name, and password that you created in the previous section like this:

```
/** The name of the database for WordPress */
define('DB_NAME', 'wordpress');

/** MySQL database username */
define('DB_USER', 'wpuser');

/** MySQL database password */
define('DB_PASSWORD', 'P3@chp!T');
```

**5** Scroll down to around line 45 to the following section of code:

```
define('AUTH_KEY',          'put your unique phrase here');
define('SECURE_AUTH_KEY',  'put your unique phrase here');
define('LOGGED_IN_KEY',    'put your unique phrase here');
define('NONCE_KEY',        'put your unique phrase here');
define('AUTH_SALT',        'put your unique phrase here');
define('SECURE_AUTH_SALT', 'put your unique phrase here');
define('LOGGED_IN_SALT',   'put your unique phrase here');
define('NONCE_SALT',       'put your unique phrase here');
```

This defines a series of measures designed to make it extremely difficult, if not impossible, for anyone to reuse cookies if the security of your site is breached. When creating your own WordPress site, you can use your own imagination to create unique character sequences, or you can use the automatic key generator at <https://api.wordpress.org/secret-key/1.1/salt/>.

For this lesson, use the values in `lesson04/start/auth_keys.txt` to replace the eight lines shown here.

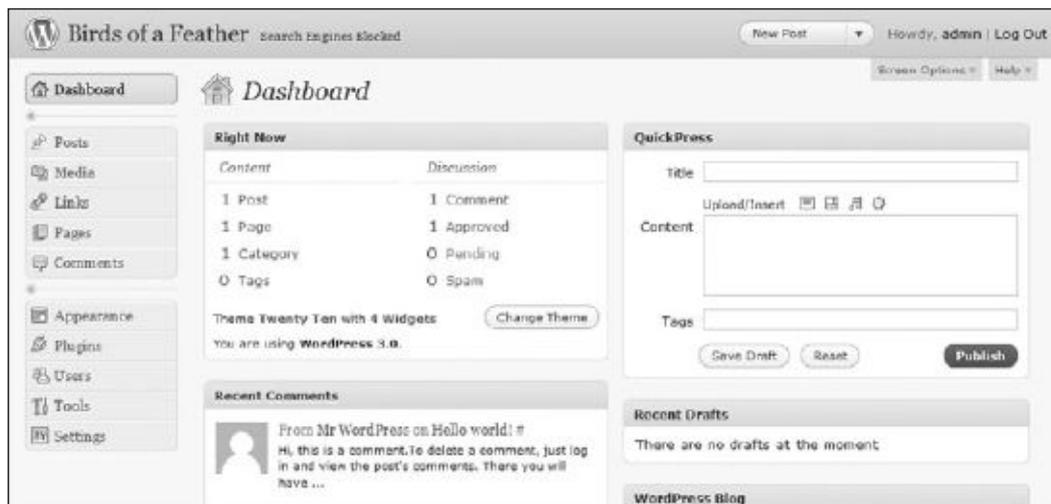
**\* NOTE:** In the event that the security of a live WordPress site is breached, you should replace these eight values and update the file on your remote server immediately.

**6** Save `wp-config-sample.php` as **`wp-config.php`**, and close both files.

**7** Launch your browser, and open `wordpress/wp-admin/install.php` in your phpcs5 site. The URL depends on how you set up your testing environment:

- **Virtual host.** <http://phpcs5/wordpress/wp-admin/install.php>
- **Localhost.** <http://localhost/phpcs5/wordpress/wp-admin/install.php>

- \* **NOTE:** If you are using the MAMP default ports on a Mac, add :8888 after phpcs5 for a virtual host, or after localhost.
- 8 The install page asks for some basic information to set up the site. Type **Birds of a Feather** in the Site Title field.
- 9 Leave username at the default admin.
- 10 Type **C0rm0R@nT** in both Password fields.
- 11 For a live site, you should use a real email address in Your E-mail, because it's used to send alerts about posts waiting for approval. It's also used if you forget your password. A dummy address is fine for testing.
- 12 Deselect the checkbox that allows your site to appear in search engines like Google and Technorati. You won't be deploying this exercise on the Internet.
- 13 Click Install WordPress. In a few moments, you'll see a screen telling you that WordPress has been installed and inviting you to log in as admin.
- 14 Click Log In to open the login screen. Type **admin** in the Username field and **C0rm0R@nT** in the Password field. It's also a good idea to select the Remember Me checkbox to avoid the need to type these details every time.
- 15 Click Log In to enter the WordPress Dashboard, the administration center for a WordPress site.



- 16** Click the name of the site (Birds of a Feather) next to the WordPress logo at the top of the page to view the front page.



### Why Can't I See the Multiscreen Button?

The screen shot on the next page shows a Multiscreen button in the Document toolbar, which isn't part of a default installation of Dreamweaver CS5. It comes from the HTML5 Pack that was released in May 2010, a month after Dreamweaver CS5 became available for purchase. Although the Multiscreen button isn't used in this book, the HTML5 Pack upgrades the version of the WebKit browser engine used in Live View to support CSS3 properties that are used later in this lesson.

If you don't see the Multiscreen button, check the status of the HTML5 Pack at <http://labs.adobe.com/technologies/html5pack/>. It's possible that during the lifetime of this book the pack's functionality will be added to Dreamweaver through the Adobe Updater. Download and install the HTML5 Pack using whichever method is available.

- 17** In Dreamweaver, double-click `index.php` in the `wordpress` folder to open it in the Document window. In Code view, there are just two lines of PHP code, together with a dozen or so lines of comments.

Switch to Design view, and click the Live View button. After a few moments, you should see the Birds of a Feather site in the Dreamweaver Document window. There are several files called `index.php` in a WordPress site. If you don't see the front page of the Birds of a Feather site in Live View, make sure you opened `index.php` in the top `wordpress` folder.



The default Twenty Ten theme in WordPress 3.0 has been designed to look good straight out of the box. But with the help of Dreamweaver CS5's new features, you'll learn how to develop your own theme to style WordPress.

## Creating a WordPress Theme

Developing a WordPress theme from scratch requires considerable knowledge of CSS, HTML, PHP, and the WordPress application programming interface (API). The good news is that you can stand on the shoulders of others to adapt an existing theme as a *child theme*.

Child themes work on a similar principle to CSS. The child theme automatically inherits all the features of the existing theme, but you can decide which elements to override. The advantage is that the original files remain intact, so you can revert to the default if you change your mind or make a mistake. Also, if the parent theme is updated, you can replace all its files without worrying about losing your customizations because they're all stored in the child theme.

Most themes can be adapted as child themes. Before doing so, check the license. Some commercial themes have restrictions on how they can be used. The Twenty Ten theme used in the following exercises is released under the GNU General Public License ([www.gnu.org/licenses/gpl.html](http://www.gnu.org/licenses/gpl.html)), which means you are free to modify and redistribute it.

## Preparing the files for a child theme

Themes consist of at least one style sheet and a number of WordPress templates. A WordPress template doesn't control a complete page. It's more like a Dreamweaver Library item in that it represents a fragment of a page. Each template is named after the part of the page it controls. For example, the Twenty Ten theme has templates called `comments.php`, `footer.php`, `header.php`, `sidebar.php`, and so on. If you open any of these files, you'll see a mixture of HTML and PHP. If you don't have any PHP experience, the code probably looks incomprehensible, but much of it is based on conditional statements. You'll gain plenty of experience with conditional statements in later lessons, so the code should be a lot easier to decipher by the time you have completed this book.

However, you don't really need to worry about the PHP code in the templates. A child theme requires only one file—a style sheet, which must be called `style.css` and reside in the child theme's top level folder. The child theme automatically uses the parent theme's templates and custom functions. In other words, at its simplest level, creating a child theme is just the WordPress way of attaching your own style sheet to an existing theme. But if you're feeling more ambitious, you can create your own templates and functions. When the active theme is a child theme, WordPress always looks first in the child theme's folder. If it finds the appropriate template or function there, it uses it. Otherwise, it uses the version in the parent theme's folder. For example, if you create your own version of `header.php`, WordPress uses it. But if you don't have your own version of `footer.php`, WordPress uses the one from the parent theme. This gives you the opportunity to experiment. You can copy a template file from the parent theme, and make some changes. If you like the result, you're on the way to developing your own theme. If it doesn't work, just delete the template file from your child theme's folder, and revert to the parent template.

Developing WordPress themes is a vast subject, so the exercises in this lesson only scratch the surface, but they demonstrate how quickly you can begin to style a WordPress site in Dreamweaver CS5.

- 1 In the Dreamweaver Files panel, expand the `wordpress` and `wp-content` folders, select the `themes` folder, right-click, and choose `New Folder`. Name the new folder **`birds_phpcs5`**. The new folder should be inside the `themes` folder at the same level as `twentyten`.



- 2 Expand the twentyten folder, and double-click style.css to open it in the Document window.
- 3 The first eight lines of style.css look like this:

```

/*
Theme Name: Twenty Ten
Theme URI: http://wordpress.org/
Description: The 2010 default theme for WordPress.
Author: the WordPress team
Version: 1.0
Tags: black, blue, white, two-columns, fixed-width, custom-header,
custom-background, theme-options, threaded-comments, sticky-post,
translation-ready, microformats, rtl-language-support, editor-style
*/

```

This tells WordPress what the theme is called, plus some basic information about the theme.

- 4 Choose File > Save As or press Ctrl+Shift+S/Shift+Cmd+S. In the Save As dialog box, navigate to the birds\_phpcs5 folder, and save the file with the same name (style.css). When asked if you want to update links, click No.
- 5 Close the original style.css, and make sure you're working in the version in the birds\_phpcs5 folder. The file path should be visible in the Browser Navigation toolbar.



Alternatively, click the Open Documents icon  at the top of the Coding toolbar to reveal the file path.

- 6 The Theme Name comment must contain a unique name, which cannot consist only of numbers (that's why it's "Twenty Ten," not "2010"). When creating a child theme, you need to specify the parent theme as the child theme's template. Without these two changes, WordPress won't recognize your child theme. Changes to the remaining comments are optional. Amend the comments at the top of style.css like this:

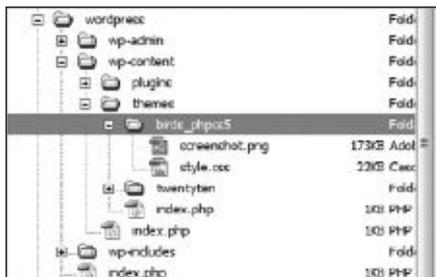
```

/*
Theme Name: Birds of a Feather
Template: twentyten
Theme URI: http://foundationphp.com/phpcs5/
Description: Adaptation of the 2010 default theme for WordPress.
Author: David Powers, but mainly the WordPress team
Version: 1.0
Tags: purple, pink, blue, white, two-columns, fixed-width, custom-header,
↳ custom-background, theme-options, threaded-comments, sticky-post,
↳ translation-ready, microformats, rtl-language-support, editor-style
*/

```

The parent is identified by `Template` followed by a colon and its folder name.

- 7 Save `style.css` and close it.
- 8 This is sufficient for WordPress to identify the new theme, but it's a good idea to add an image to distinguish it from others in your Dashboard. The image should be about 300 pixels wide and must be called `screenshot.png`. Copy `screenshot.png` from `lesson04/start/images` to the `birds_php5` folder. The child theme folder should now contain two files.



You'll add more files later, but that's sufficient for now.

- ▶ **TIP:** If you create a mockup of your final design in a graphics program, such as Fireworks or Photoshop, you can create `screenshot.png` by scaling the mockup and exporting it as a `.png` file. If it can't find `screenshot.png`, WordPress displays a text description of the theme.

## Activating the child theme

The child theme needs to be activated before you can style it in Dreamweaver.

- 1 In your browser, log into the WordPress Dashboard. Depending on how you set up your testing environment, the URL should be one of the following:
  - **Virtual host.** <http://phpcs5/wordpress/wp-admin/>
  - **Localhost.** <http://localhost/phpcs5/wordpress/wp-admin/>

- Expand the Appearance section in the column on the left of the Dashboard, and select Themes. The new Birds of a Feather theme should be displayed in the Available Themes section.



- Click the Activate link for the Birds of a Feather theme. After a few seconds, Birds of a Feather is displayed as the Current Theme and Twenty Ten moves down to the Available Themes section.
- Click the Widgets link in the Appearance menu to open the widget settings screen. The child theme inherits the default settings of the Twenty Ten theme. You can study all the options later. For now, remove the Recent Comments and Meta widgets from the Primary Widget Area by dragging them from the sidebar on the right back to the Available Widgets area.
- Drag the Categories widget to move it just below the Search widget. The Primary Widget Area should now look like this:



- 6 Click the Background link in the Appearance menu. This allows you to set a background image and color for the site. However, it does this by generating a `<style>` block in the head of the page. It's better to use `style.css` to handle this, so leave this screen unchanged.
- 7 Click the Header link in the Appearance menu. This is one of the cleverest parts of the new Twenty Ten theme. It offers a choice of eight header images for your site. You can also upload your own images. The problem is that if your image isn't exactly the same size as used by Twenty Ten (940 × 198 pixels), you're prompted to crop it. WordPress doesn't crop your original, but instead makes a copy. If your image's height is less than 198 pixels, it's stretched. The result is often unsatisfactory.

The height and width of the header images are controlled by a custom function in the Twenty Ten theme. To change the default values, you need to override that function. Leave your browser open at the current page, and return to Dreamweaver.

- 8 Custom functions for WordPress themes are stored in a file called `functions.php`. If you attempt to redefine an existing function, PHP throws a fatal error, but WordPress overcomes this problem with a simple conditional statement. All the functions in the parent theme's `functions.php` file are wrapped in a conditional statement that checks whether a function of the same name has already been defined. If it hasn't, the parent theme defines the function. Otherwise, it uses the one defined by the child theme.

Choose File > New. Set Page Type to PHP, set Layout to `<none>`, and click Create. Switch to Code view, and delete all the HTML code inserted by Dreamweaver. You should have a completely blank page.

- 9 Add an opening PHP tag at the top of the new page, and save it as **functions.php** in the `birds_phpcs5` folder.
- 10 Double-click `functions.php` in the `twentyten` folder to open it in the Document window. The file contains extensive comments that help you understand what the functions are for and how to override them.
- 11 Scroll down to around line 47 to locate the following code:

```
if ( ! isset( $content_width ) )  
    $content_width = 640;
```

This defines the width of the main content `<div>` in the Twenty Ten theme. As you can see, the conditional statement sets the value to 640 (pixels) only if `$content_width` hasn't already been defined. So, to change the width to a different value, you need to add `$content_width` to `functions.php` in the child theme. Otherwise, this value is used.

- 12** The header image for Birds of a Feather is 20 pixels wider than the Twenty Ten images, so you can expand the content by the same amount.

Switch to the empty `functions.php` file you created for the child theme, and add the following code after the opening PHP tag:

```
<?php
$content_width = 660;
```

- 13** Switch back to the Twenty Ten version of `functions.php`, and scroll down to locate the following line of code (around line 53):

```
if ( ! function_exists( 'twentyten_setup' ) ):
```

This conditional statement checks whether a function called `twentyten_setup()` has already been defined. If it hasn't, it creates the function, which—as the name suggests—defines the default settings for the Twenty Ten theme.

- \* NOTE:** This conditional statement ends with a colon rather than an opening curly brace. This is an alternative syntax for control structures. See <http://docs.php.net/manual/en/control-structures.alternative-syntax.php>.

- 14** To create your own default settings for the child theme, you need to copy the function definition to the version of `functions.php` in `birds_phpcs5`. The function definition begins like this (around line 75):

```
function twentyten_setup() {

    // This theme styles the visual editor with editor-style.css to match
    // the theme style.
    add_editor_style();
```

The final section of the function definition looks like this (around lines 171–178):

```
    'sunset' => array(
        'url' => '%s/images/headers/sunset.jpg',
        'thumbnail_url' => '%s/images/headers/sunset-thumbnail.jpg',
        /* translators: header image description */
        'description' => __( 'Sunset', 'twentyten' )
    )
) );
}
```

Select the entire function description, and copy it to your clipboard.

**15** Paste the function definition into `functions.php` in the `birds_phpcs5` folder. If you copied and pasted the code correctly, Dreamweaver should display “No syntax errors” in the Info Bar at the top of the Document window.

**16** Scroll down to locate this code (around line 35):

```
define( 'HEADER_IMAGE', '%s/images/headers/path.jpg' );
```

This defines the default header image for the Twenty Ten theme (the tree-lined path).

To display a different image, change the filename like this:

```
define( 'HEADER_IMAGE', '%s/images/headers/cormorants.jpg' );
```

You’ll add this and other images to the relevant folder shortly.

**17** The next section of code defines the width and height of the header image. Change the width from 940 to **960** and the height from 198 to **150** like this:

```
define( 'HEADER_IMAGE_WIDTH', apply_filters(
➤ 'twentyten_header_image_width', 960 ) );
define( 'HEADER_IMAGE_HEIGHT', apply_filters(
➤ 'twentyten_header_image_height', 150 ) );
```

**18** About 20 lines farther down is a long section of code that begins like this:

```
register_default_headers( array(
    'berries' => array(
        'url' => '%s/images/headers/berries.jpg',
        'thumbnail_url' => '%s/images/headers/berries-thumbnail.jpg',
        /* translators: header image description */
        'description' => __( 'Berries', 'twentyten' )
    ),
```

This passes a multidimensional array to `register_default_headers()`, a function new to WordPress 3.0, which defines the choice of header images offered by the theme. The default Twenty Ten images are all 940 pixels wide and 198 pixels high, so they won’t fit the child theme.

The media files for this lesson contain two header images called `cormorants.jpg` and `seagulls.jpg`, together with two smaller versions called `cormorants-thumbnail.jpg` and `seagulls-thumbnail.jpg`. Change all instances of `berries` in the multidimensional array to **cormorants**, and `cherryblossom(s)` to **seagulls**. There are only two header images, so you need to delete the other six subarrays. When you have finished, the final section of `functions.php` should look like this:

```
register_default_headers( array(
    'cormorants' => array(
        'url' => '%s/images/headers/cormorants.jpg',
```

```

        'thumbnail_url' => '%s/images/headers/cormorants-thumbnail.jpg',
        /* translators: header image description */
        'description' => __( 'Cormorants', 'twentyten' )
    ),
    'seagulls' => array(
        'url' => '%s/images/headers/seagulls.jpg',
        'thumbnail_url' => '%s/images/headers/seagulls-thumbnail.jpg',
        /* translators: header image description */
        'description' => __( 'Seagulls', 'twentyten' )
    )
) );
}

```

- 19** Save functions.php and copy cormorants.jpg, cormorants-thumbnail.jpg, seagulls.jpg, and seagulls-thumbnail.jpg from lesson04/start/images to twentyten/images/headers. The images must go in the parent theme's folder because that's where register\_default\_headers() expects to find them.
- 20** Return to the Header page in the WordPress administrative area. Click the Background link in the Appearance menu, and then click Header to reflect the changes you have made. The Custom Header section should now display the two Birds of a Feather header images, and the text in the Upload Image section should show the new default dimensions of 960 × 150 pixels.



If necessary, compare your code with lesson04/completed/functions.php.

## Styling the child theme

All that remains now is to adjust the styles to give the theme its own look. Most of the remaining tasks are done in Live View and the CSS Styles panel.

- 1 Close `functions.php` if it's still open, and create a new folder called **images** in the `birds_phpcs5` folder. Copy `birds_bg_gradient.jpg` from `lesson04/start/images` to the new folder. You'll use this later as a background image to the new theme.
- 2 Double-click `index.php` in the main wordpress folder to open it in the Document window. Switch to Design view if necessary, and click Live View. The Birds of a Feather site should display with the new default header and the edited sidebar.

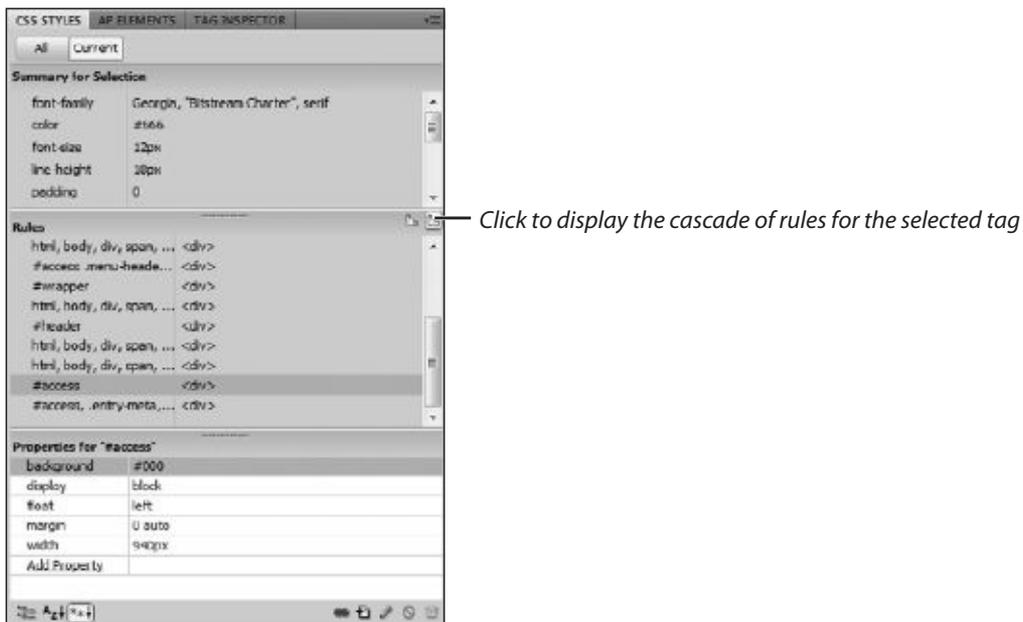


- 3 The header image is now wider than the menu bar. To fix that, click the Inspect button in the Document toolbar. As you move your pointer over Live View, you'll see different sections of the page highlighted. The content of an element is light blue or aqua, padding is mauve, and margins are yellow.

Notice that as you move from element to element, the currently highlighted element is also selected in the Tag selector at the bottom of the Document window. When your pointer is over the black menu bar below the header image, you should see `<div#access>` highlighted in the Tag selector. Click the menu bar to select it.

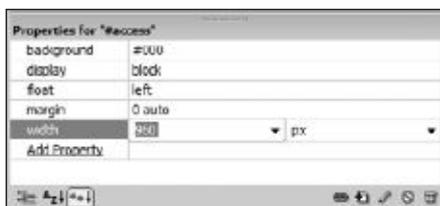
- 4 Selecting an element turns off the Inspect button, allowing you to move your pointer without highlighting other elements. Open the CSS Styles panel by clicking its tab or by choosing Window > CSS Styles. On Windows, you can also use the keyboard shortcut Shift+F11 (there is no Mac shortcut).

Make sure the Current button is selected at the top of the CSS Styles panel and that the Rules pane is visible in the middle section. If the middle section is titled About, click the Cascade icon as indicated in the following screen shot. You might need to close other panels and drag the panes inside the CSS Styles panel to see the rules and properties listed.



The Rules pane displays all the style rules that affect the current selection. Sometimes you need to examine several rules before finding the right one, but on this occasion, it should be the one selected by Dreamweaver. It's the #access rule shown in the preceding screen shot.

Select #access in the Rules pane. This reveals that the width property is set to 940px. Click the value to edit it, and change the number to **960**. The px unit is controlled by a separate menu, so you don't need to change it.



As soon as you press Enter/Return to confirm the edit, the menu bar in Live View expands to match the width of the header image.

- 5 Although the header image and menu bar are now the same length, there's a gap of about 20 pixels of white space on the left of both elements. Finding the cause of the gap is a process of elimination, but if you look farther down the page, you'll see there's a similar gap on both sides of the horizontal line above the footer.

Click the Inspect button again, position the pointer over the footer so that the full width below the horizontal line is highlighted, and click to select it.



- 6 In the Rules pane of the CSS Styles panel, `#colophon` is selected. Examining the Properties pane reveals nothing to help eliminate the gap on the left and right, so start moving up the cascade of rules in the Rules pane. The next property begins with `#access.menu-header` and has a `width` property of `940px`. Change the number to **960** as you did in step 4.

As soon as you press Enter/Return, the white background expands to create the same gap on both sides of the header image, menu bar, and the horizontal line above the footer.

This is progress, but the final design calls for the gap to be eliminated.

- 7 Click `<div.hfeed#wrapper>` in the Tag selector at the bottom of the Document window to reveal its properties in the CSS Styles panel. You'll see that the `padding` property is set to `0 20px`. This adds 20 pixels of padding to both sides of the wrapper `<div>`.

Remove the padding by selecting it in the Properties pane of the CSS Styles panel and clicking the trash can icon at the bottom right of the panel.

The left and right sides of the heading image, menu bar, and horizontal line above the footer are now flush with the white background of the wrapper.

- 8 There's a large gap between the white background and the top of the page. It's caused by the `margin-top` property, which is set to `20px`. Select `margin-top` in the Properties pane for `#wrapper` and click the trash can icon to delete it.

The entire contents of the page move up to eliminate the gap, leaving the white background flush with the top of the Document window.

- 9 With `#wrapper` still selected in the Rules pane of the CSS Styles panel, change the `background` property from `#fff` (white) to `#FAF2EF` (light pink).

► **TIP:** Hexadecimal values for colors are case insensitive. The Twenty Ten style sheet uses a mixture of uppercase and lowercase, indicating that it's almost certainly the work of more than one person. Color values can also be shortened to three characters if each even character is the same as the preceding odd one. Thus, #ffffff can be shortened to #fff, but #FAF2EF cannot be shortened.

- 10** The next step is to change the background of the whole page. Begin by selecting `<body.home blog>` in the Tag selector. The Rules pane selects the `body, input, textarea` style rule, which covers too many elements, so start moving up the list of rules. The next one, `body`, defines the background property, which is the one you need to change.

The background shorthand CSS property is difficult to define directly in the Properties pane of the CSS Styles panel, so select the property and click the Edit Rule icon at the bottom right of the panel to open the CSS Rule Definition dialog box.



- 11** The CSS Rule Definition dialog box should automatically select the Background category.

Change the value of Background-color from #f1f1f1 to #E1DFE0.

Click the Browse button next to the Background-image text box, navigate to the `birds_phpcs5/images` folder, and select `birds_bg_gradient.jpg`.

Set the Background-repeat menu to **repeat-x**.

When you click OK, the page background should change from light oatmeal to a vertical gradient that fades from light purple to a light gray.

- 12** Now comes a little bit of CSS magic—swapping the sidebar from right to left. The default style rule for the sidebar floats it to the right in a margin created by the main content. You can move the sidebar to the other side of the page by floating it left and giving it a large enough negative left margin to sit on the opposite side of the main content. But first, you need to adjust the margins of the main content.

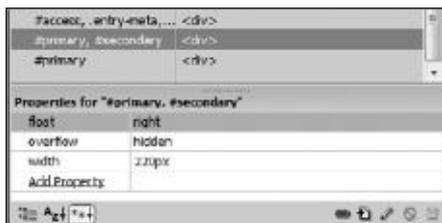
Click the Inspect button and select the main content on the left of the page. The style rule that controls its margins is applied to the container `<div>`, so click `<div#container>` in the Tag selector at the bottom of the Document window. The Properties pane of the CSS Styles panel reveals that its `margin` property is set to `0 -240px 0 0`. In other words,

a space of 240 pixels has been created on the right for the sidebar. You need to move the space to the opposite side. Change the margin property to **0 0 0 240px**. This moves the main content to the right of the page, but pushes the sidebar below it.

- **TIP:** The Twenty Ten style sheet's use of a negative right margin on the container `<div>` is rather unconventional. It's needed because the width property of the `<div>` is set to 100%. Using a negative value reduces the width and makes room for the sidebar. If you need to brush up on your knowledge of CSS, take a look at my book, *Getting StartED with CSS* (friends of ED, 2009, ISBN: 978-1-4302-2543-0).

- 13 Click the Inspect button again, and move your pointer until the whole of the sidebar is highlighted. Then select it. This selects `<ul.xoxo>` in the Tag selector. The rule that you want to edit is the next one up the page hierarchy. Click `<div.widget-area#primary>` in the Tag selector.

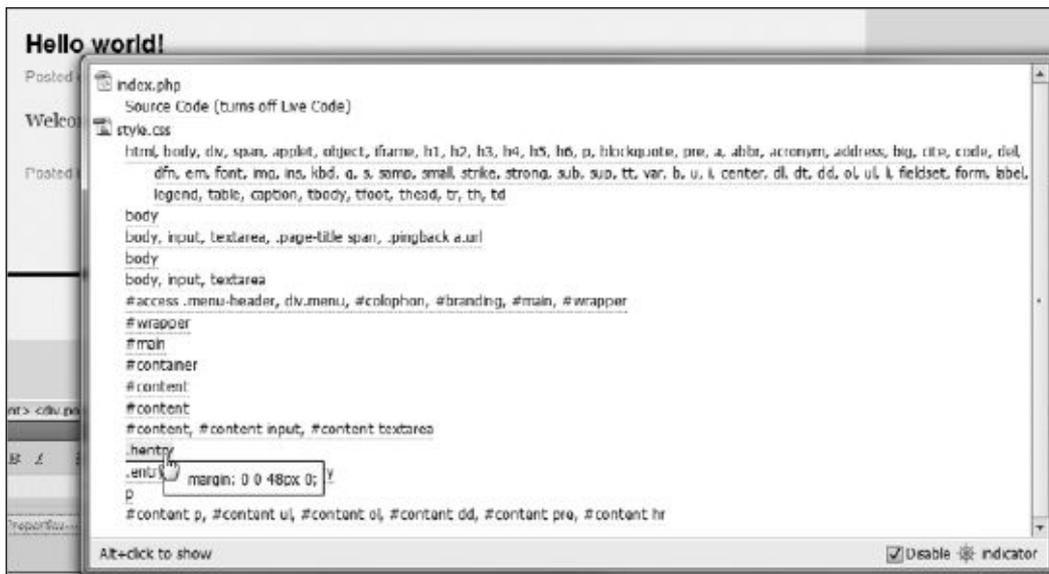
The Properties pane of the CSS Styles panel displays no styles, so move up the cascade in the Rules pane. The next one—`#primary`, `#secondary`—displays the rules that you need to change.



- 14 Change the value of `float` from `right` to **left**. The sidebar jumps to the left of the page but still below the main content.
- 15 Click Add Property, type **margin-left**, and set the value to **-1180px**. (That's *minus* 1180 pixels.) The sidebar is after the main content in the underlying HTML markup, but a combination of the left float and the large negative margin allows it to leapfrog over the main content and move into the correct position in the margin on the left.
- 16 Let's add a touch of CSS3 coolness to the main content. Click the Inspect button, move the pointer over the main content until it's highlighted, and click to select it. The Tag selector shows you have selected `<div.post-1 post type-post hentry category-uncategorized#post-1>`. Whew! That's a complex CSS selector. Fortunately, the Rules pane selects the lowest part of the cascade, the style rule for the `hentry` class, which currently sets only the `margin` property.

Although you could add the next set of CSS properties through the CSS Styles panel, it's a lot easier to work directly in the style sheet. The problem is that the style sheet contains more than 1,000 lines. A quick way to locate the correct rule is to use the Code Navigator.

Hold down the Alt key on Windows or Cmd+Opt on a Mac, and click anywhere in the “Welcome to WordPress” default post to invoke the Code Navigator, a context-sensitive tool for investigating styles that affect the area you clicked. Many rules affect this area, but you should find `.hentry` listed near the bottom of the panel, as shown in the following screen shot.



Click the `.hentry` link in the Code Navigator to open the style sheet in Split view. Using this technique positions the insertion point directly inside the `.hentry` style rule.

**17** Amend the style rule like this:

```
.hentry {
  margin: 0 0 48px 0;
  padding: 5px 5px 5px 15px;
  background-color: #FFF;
  -moz-border-radius: 20px;
  -webkit-border-radius: 20px;
  border-radius: 20px;
  -moz-box-shadow: 10px 10px 5px #888;
  -webkit-box-shadow: 10px 10px 5px #888;
  box-shadow: 10px 10px 5px #888;
  border: 1px solid #eee;
}
```

The properties beginning with `-moz` and `-webkit` are browser-specific implementations of the CSS3 `border-radius` and `box-shadow` properties. Putting the properties in this order ensures that the effects will be maintained when the official properties are implemented by browsers.

If you refresh Live View by pressing F5 or clicking anywhere in Live View, you'll see the post now has a white background with rounded corners. In the Mac version of Dreamweaver, you'll also see a drop shadow as shown in the following screen shot.



**\* NOTE:** The Windows version of Live View fails to render the drop shadow correctly. However, if you view the finished WordPress site in a recent version of Safari, Google Chrome, or Firefox, the drop shadow is rendered correctly on both Windows and Mac OS X. Internet Explorer 8 and earlier ignores the CSS3 properties and just displays a rectangular white background.

#### 18 Save style.css.

Hopefully, by now you've got the picture. You use the Inspect button or Code Navigator in Live View to identify elements on the page and inspect the style rules that govern their display. The Tag selector at the bottom of the Document window shows you where the element resides in the document hierarchy. Most CSS properties are inherited, so you often need to go back up the hierarchy to find the element where a specific rule has been applied. The CSS Styles panel in Current mode also allows you to work back up the cascade of rules affecting the selected element.

Styling a web page requires patience and skill. If you have a good command of CSS, you'll find working in Live View with these tools make styling WordPress, Joomla!, or Drupal very similar to working with a static HTML page. This lesson has concentrated on styling the front page of a WordPress site, but Live View is navigable in Dreamweaver CS5. Just hold down Ctrl/Cmd while clicking a link, and you can inspect and style all pages and views within a CMS.

To round out this lesson, let's take a look at a WordPress template and make a slight change so that the text heading can be hidden from visual browsers. When editing CMS templates it's a good idea to set up site-specific code hints.



## Editing a WordPress page template

The first time you dive into a WordPress template can be a baffling experience, but the Twenty Ten theme is well commented. If you understand the HTML structure of the template you're working with, it's not too difficult to work out where to add custom features, such as a static paragraph, or remove elements that you don't want. As long as you make the changes to a template in a child theme, you can always delete the template and use the parent theme's default version if you make a mistake.

- 1 Open `index.php` in the top-level wordpress folder and click Live View to display the front page of the Birds of a Feather site.
- 2 Click Live Code to display in Split view the underlying HTML output generated by WordPress. Adjust Split view so you can see the code and "Just another WordPress site" at the top right of the page (you might need to scroll horizontally in Live View).
- 3 Click between the words "Just" and "another" in Live View. Depending on the size of your monitor, this should scroll Code view so that the equivalent HTML output is in the center with the insertion point between the two words, as shown on line 24 in the following screen shot:

```
18 <div id="branding" role="banner">
19     <h1 id="site-title">
20         <span>
21             <a href="http://phpcs5.wordpress/" title="Birds of a
22 Feather" rel="home">Birds of a Feather</a>
23         </span>
24     </h1>
25     <div id="site-description">Just |another WordPress site</div>
26
27     <img src=
28 "http://phpcs5.wordpress/wp-content/themes/twentyten/images/headers/cormorants.
29 jpg" width="960" height="150" alt="">
30 </div><!-- #branding -->
```

You can't edit the output in Live Code, because it's dynamically generated by WordPress, but inspecting the output here gives you a good idea of what to look for when you open the WordPress template.

The text you clicked is in a `<div>` that has the ID `site-description`. You can also see on line 19 that the main heading has the ID `site-title`, and that the text is wrapped in a link that returns to the front page of the WordPress section of the site.

The final point to notice is that the `alt` attribute of the header image on line 26 is empty. The HTML specification requires all images to have alternative text (in the `alt` attribute), but it's recommended to use an empty string when the image is purely decorative. This redesign incorporates text into the image, so the same text should be inserted into the `alt` attribute in case the image is not displayed for any reason.

**4** In the Files panel, double-click `twentyten/header.php` to open it in the Document window. Save the file as **header.php** in the `birds_php5` folder, and click No when asked if you want to update the links. Close the original version of `header.php`. You want to edit the copy in the child theme.

**5** Scroll down to locate the following (it should be around line 54):

```
<div id="site-description"><?php bloginfo( 'description' ); ?></div>
```

This uses the WordPress `bloginfo()` function to display the site description (“Just another WordPress site”).

**6** Delete the entire line, and save `header.php`.

**7** Switch back to `index.php`, and press F5 or click the Refresh icon  in the Document toolbar (not the Files panel) to update Live View. After a few moments, the text disappears from the top right of the page, and the corresponding code is removed from Live Code.

**8** Switch back to `header.php`, and examine the code immediately above the line that you removed in step 6. It looks like this:

```
<?php $heading_tag = ( is_home() || is_front_page() ) ? 'h1' : 'div'; ?>
<<?php echo $heading_tag; ?> id="site-title">
  <span>
    <a href="<?php echo home_url( '/' ); ?>" title="<?php echo esc_attr(
      ↳ get_bloginfo( 'name', 'display' ) ); ?>" rel="home"><?php
      ↳ bloginfo( 'name' ); ?></a>
    </span>
  </?php echo $heading_tag; ?>>
```

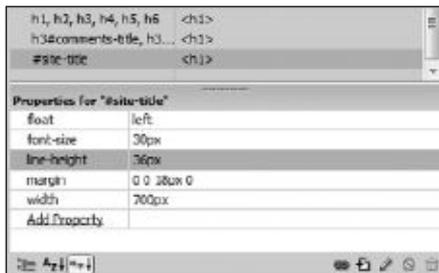
This code checks whether the current page is the site root or the front page of the WordPress section. If it is one of these, `$heading_tag` creates a pair of `<h1>` tags. Otherwise, it creates a `<div>`. It then creates a link to the front page of the WordPress site, which is wrapped around the site name.

**9** The site name is already in the header image, so you don’t want it displayed twice. However, you should leave it in the underlying code for search engines and screen readers for the blind. Edit the code like this to remove the link and `<span>` tags:

```
<?php $heading_tag = ( is_home() || is_front_page() ) ? 'h1' : 'div'; ?>
<<?php echo $heading_tag; ?> id="site-title">
  <?php bloginfo( 'name' ); ?>
</?php echo $heading_tag; ?>>
```

**10** Save `header.php`, and refresh Live View in `index.php`. The text heading is still there, but it’s no longer a link.

- 11** Click the Inspect button, select the Birds of a Feather text in Live View, and open the CSS Styles panel in Current mode. In the Rules pane, `#site-title` should be automatically selected. You know this is the style rule you want to change, because it's the ID selector for the element you just edited in `header.php`.



- 12** Select each of the properties in turn and click the trash can icon at the bottom right of the CSS Styles panel to delete them. Then click Add Property to add the `position` property, and set it to `absolute`.

Click Add Property again to add the `top` property, and set it to `-1000px` (minus 1000). The heading disappears from visual browsers but remains accessible to search engines and screen readers.

- 13** There's still a large gap at the top of the page, so click the Inspect button again, and select the area above the header image.

The `#header` rule is selected in the CSS Styles panel. Delete the `padding` property to remove the gap.

- 14** Click the header image in Live View to select the `#branding img` style rule, and delete the `border-top` property to remove the thick black border at the top of the page.

Save `style.css` to preserve the changes.

- 15** Return to `header.php`, and locate the following code, which inserts the header image (around line 63):

```
" height="<?php echo HEADER_IMAGE_HEIGHT; ?>" alt="" />
```

You could hard code the value of the `alt` attribute, but that would mean changing the template if you decide to use the same theme for different sites. It makes more sense to use the WordPress API.

Position the insertion point between the quotation marks of the `alt` attribute, type an opening PHP tag followed by a space, and then press `Ctrl+spacebar` to bring up code hints. Type `bl`. Dreamweaver should select `bloginfo()`.



Press `Enter/Return` to autocomplete the function name. Dreamweaver automatically inserts the opening parenthesis. Complete the code by typing `'name'` followed by a closing parenthesis, semicolon, and closing PHP tag. The `alt` attribute should look like this:

```
alt="<?php bloginfo('name'); ?>"
```

- 16** Save `header.php`, and refresh Live View in `index.php`. When Live Code reloads, you should see “Birds of a Feather” in the `alt` attribute.

You can check your code against `style.css` and `header.php` in `lesson04/completed`.

## What You Have Learned

### *In this lesson, you have:*

- Examined the basic structure of Drupal, Joomla!, and WordPress (page 112)
- Installed WordPress 3.0 in your local testing environment (pages 113–119)
- Created a child theme based on the default WordPress Twenty Ten theme (pages 119–127)
- Used Live View, the CSS Styles panel, and Code Navigator to style WordPress (pages 128–134)
- Enabled site-specific code hints for WordPress (page 135)
- Edited a WordPress template (pages 136–139)

# LESSON 5

## What You Will Learn

*In this lesson, you will:*

- See how a database stores information
- Understand the principles behind efficient database structure
- Explore the different data types stored in MySQL
- Define the database table for a user registration system
- Understand the effect of collation on how database records are sorted
- Pick the appropriate database engine
- Create MySQL user accounts and assign privileges
- Import existing data from an external file

## Approximate Time

This lesson takes approximately 2 hours to complete.

## Lesson Files

**Media Files:**

None

**Starting Files:**

None

**Completed Files:**

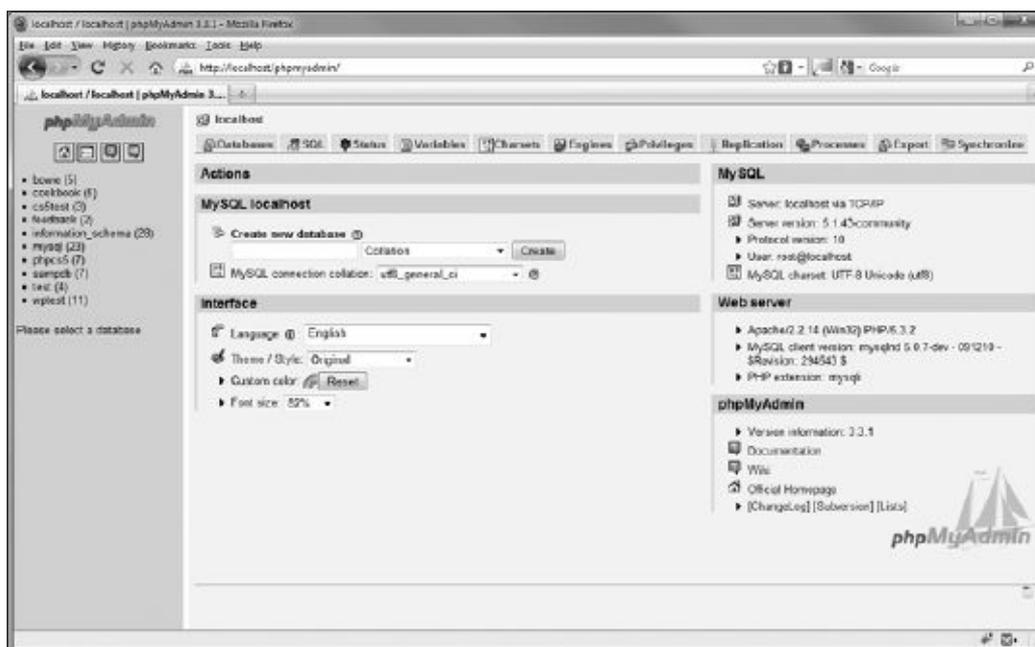
lesson05/states.sql

## LESSON 5

# Designing and Building Your Own Database

Having a content management system like WordPress build a database for you automatically is brilliant, but you're forced to use the structure your chosen CMS dictates. Often, the best solution is to create a database that suits your needs. Doing so in MySQL is remarkably easy.

What's not quite so easy is designing the database. Seemingly simple decisions can cause major headaches that are difficult to undo once the database has more than a few records. This lesson helps you avoid such mistakes and shows you how to build a database table for a user registration system, as well as how to import data from an external file.



*phpMyAdmin provides a convenient web-based interface to MySQL.*