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Welcome to Moodle as a Curriculum and Information Management System (CIMS)!

You are on your way to learn how to expand the use of the Moodle system to function as a portal for information exchange, professional collaboration, and curriculum management.

This chapter will start with the basics by introducing the concepts and helping you to get your site installed and configured. The following topics will be addressed in this chapter:

- A brief explanation of Moodle, its underlying philosophy, and design
- Introduction of the CIMS idea
- Moodle installation
- Basic setup, configuration, and customization of your Moodle site

What is Moodle?

Moodle is a web-based software package that allows you to create an environment in which an educational program can be delivered. What does that mean? Moodle allows you to create course environments where all sorts of education can take place. Moodle is now the most widely used online learning software package with over 49,000 registered Moodle sites as of the first quarter of 2010. It is used by private and public educational institutions ranging from kindergartens to universities as well as by a wide range of businesses, non-profit organizations, governmental bodies, and healthcare facilities for virtually every training and educational program imaginable.

A VLE, LMS, and CMS

There are a multitude of acronyms out there today that claim Moodle as a member of their 'group'. Moodle is categorized as a **VLE** (**Virtual Learning Environment**) or **LMS** (**Learning Management System**) due to its focus on learning and education. Additionally, Moodle is described to be a **CMS** (**Course Management System**), an **LCMS** (**Learning Content Management System**), and sometimes even a **CMS** (**Content Management System**).

Each of these categories of systems has its own unique and defining characteristics but for most of them, there are arguably more similarities than differences. Each is a software package that is installed on a server and set up to be accessed via the Internet or, in some business settings, through an intranet (an in-house network). The majority of them are designed to allow for the creation and maintenance of online learning environments. Two of the most widely used categories of systems that are used to describe Moodle, LMSs, and VLEs, are often used interchangeably, although the term LMS is generally used to describe a system of wider scope that includes the ability to perform administrative tasks involved in education such as reporting, documenting, and analyzing. Moodle's flexibility, in terms of how it can be set up and maintained, is one of the main reasons for its inclusion in virtually every category of online learning software package. In this sense, Moodle is similar to a chameleon that is capable of 'changing its color', or shifting its focus, in order to meet the needs of each institution and user.

Using Moodle as a CIMS

In most institutions, there is a need to maintain data and information related to the education taking place as well as to perform various peripheral tasks that are not directly related to, or are at a macro level to the education itself.

Some examples of this type of peripheral work are:

- Monitoring of student attendance records
- Presenting information of course offerings to students in order that they may make decisions about what courses to take
- Assigning courses to students in programs where students are not allowed to select their own courses
- Controlling which courses, and how many courses, students can register for or enroll in
- Establishing limits on how many students can enroll in a single course
- Delivering and analyzing standardized tests to students within a school or other type of educational or training program and various other educational, administrative, and collaboration-type tasks and activities

As Moodle is designed to be extremely flexible and is provided as an open source package, it is fairly easy to extend, and even stretch Moodle through imaginative uses, installation of third-party contributed plugins, and minor code manipulations to enable it to function as a system that helps to manage an educational curriculum and to support the flow and use of information that is accumulated and digested in such educational settings. As such, Moodle will function as what I call a **Curriculum and Information Management System** (**CIMS**), while simultaneously functioning as an LMS. The CIMS idea encapsulates the various tasks that surround an educational institution and includes functions that are often performed by Portals, **Student Information Systems** (**SIS**), and Content Management Systems (CMS). As a CIMS, Moodle can perform all of the tasks listed in the previous paragraph as well as a host of others that will be introduced in subsequent chapters. Get ready for an exciting adventure in setting up Moodle as your core CIMS and LMS!

Installing Moodle

Moodle installations can be roughly categorized into the following three categories:

- Installation of the XAMPP or MAMP packages
- Simple installation on a hosted web server
- Installation of a LAMP package on an in-house server

For the purpose of demonstrating how Moodle can function as a CIMS, we will walk through the installation and use of Moodle in MAMP and XAMPP packages. It is strongly recommended that you do not use a MAMP or XAMPP Moodle site as a production site (a site that is publicly accessible via the Internet). The MAMP or XAMPP environment is the ideal solution however, for being able to quickly experiment with Moodle on your own computer. If you prefer to experiment on a hosted server or dedicated LAMP installation, please make sure that your site is not available to the public and is not being used by students to ensure that you do not accidentally corrupt data or render your site inaccessible. Once you are comfortable with the methods presented in this book, you can implement them on a live production site. Additionally, the following information is provided as introductory information about preparing an environment in which Moodle can be served. Please visit the documentation area on the Moodle website (`http://docs.moodle.org/en/Main_Page`) for a wealth of information about getting a Moodle site up and running.

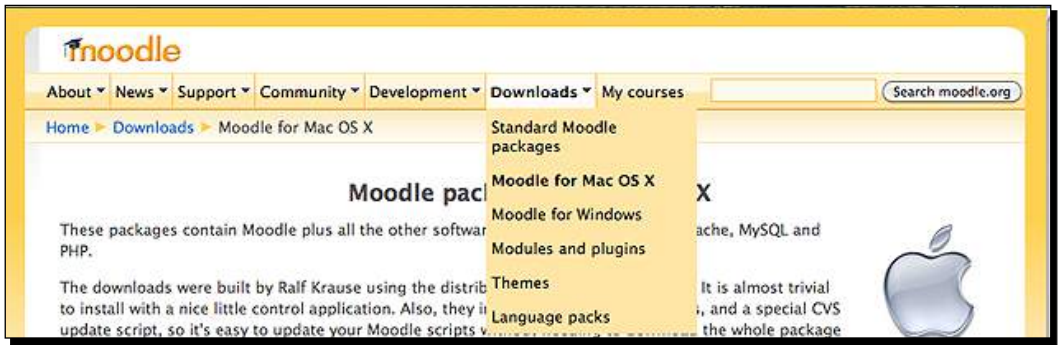
Installing MAMP and XAMPP packages

One of the quickest and easiest ways to get a Moodle site up and running for experimental purposes is to install a MAMP or XAMPP package. These packages consist of web server software (Apache), database server software (MySQL), and PHP and Perl programming language 'interpreters', that all run on your personal computer. This will allow you to run Moodle locally on your own computer. The following instructions will help you get one of these prepackaged local servers running on your desktop or laptop computer.

Time for action – installing the Mac OS X package

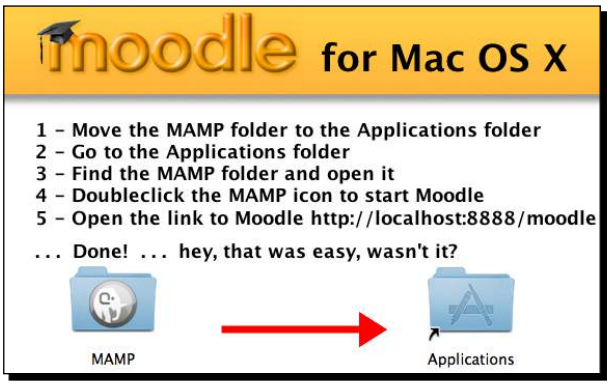
We will install the MAMP variety for Macintosh OS X because it is much more portable than the XAMPP variety. This means that once you have the MAMP folder in your **Applications** folder, all you need to do to use the MAMP package on a different computer is to copy the contents of the directory to the **Applications** folder of another machine running OS X. To install the Mac OS MAMP package, follow these steps:

1. First, go to `www.moodle.org` and move your mouse over the **Downloads** menu item.
2. Mouse over and click on the **Moodle for Mac OS X** link.
3. Then click on the **MAMP package** to start the download as shown in the following screenshot:



4. Once the download has completed, you will have a `Moodle4Mac-MAMP-19.dmg` file to work with. Double-click the file to decompress it. The following screenshot is of the window that will open when the dmg file has been mounted as a folder on your desktop.

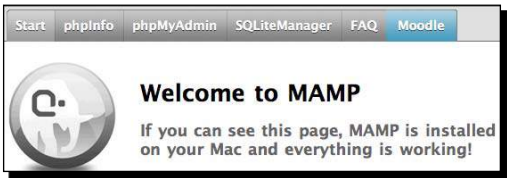
5. Copy the contents of the MAMP package to your **Applications** folder, as instructed in the window.



6. Once all of the contents of the MAMP folder have been copied to your **Applications** folder, double-click on the **MAMP** application, shown in the following screenshot to launch the server control tool:

7. Click the **Start Servers** button to start the servers on your local computer. The Moodle instance contained in the MAMP package is preconfigured to use these servers.

8. The red light, to the left of the server name, will turn green signifying that it is running. The MAMP control tool will automatically open the MAMP startup page in your browser. Click on the **Moodle** tab, shown in the following screenshot, to open your Moodle site in a new page:



What just happened?

You have now installed all of the components necessary to turn your computer into an experimental server for your Moodle site. You also have a prepackaged instance of Moodle that is ready to use the servers you have installed and turned on. You can now jump forward to the *Basic setup and customization of your Moodle site* section in this chapter.

Time for action – installing the Windows package

If you want to install a local instance of Moodle and the required server on a Windows machine, the XAMPP package is the only prepackaged variety available. The installation involves a few more steps than the Mac version but it is a straightforward process. To download and install the Windows version, follow these steps:

1. Click on **Moodle for Windows** from the **Downloads** drop-down menu from `Moodle.org`, and download the latest version.

2. Expand the contents of the package that is downloaded, to the location where you want your Moodle package. You will see a total of four items from the expanded package, as shown in the following screenshot. There will be a **Stop Moodle** icon, a **Start Moodle** icon, a **README** file, and a **server** folder. Detailed instructions can be found in the **README** file.

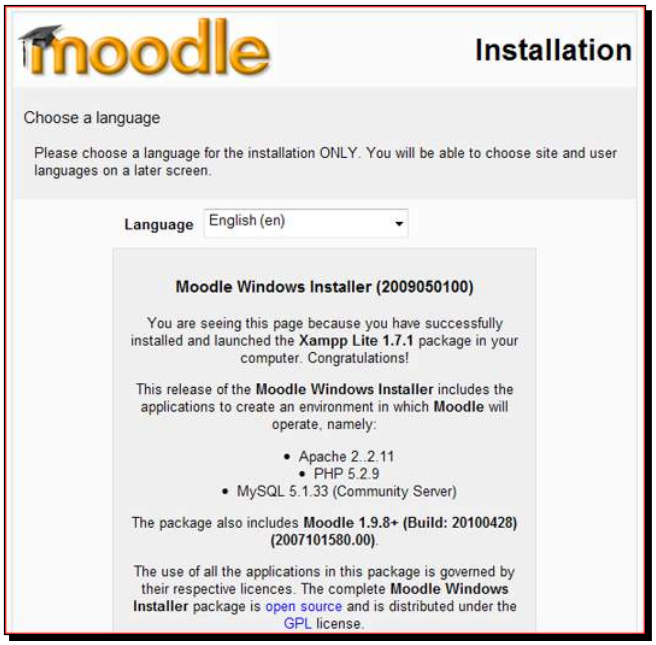
3. Double-click on the **Start Moodle** icon to start the Apache and database servers. A command prompt window with the message "Starting XAMPP" will appear and then after a few seconds the window will disappear. This means the servers are now running. Then proceed to the next step.

4. Navigate to your Moodle site by entering `http://localhost/` into your browser address window.

5. After having started the servers by clicking on **Start Moodle** and typing the local host address into your browser address window, you may get a warning from Windows depending on the browser you are using and how the operating system is configured, about firewall protection. Go ahead and allow the content and bypass any warnings in order to access the site. You have installed the site and are the only one accessing it, so there is no need to worry about it containing possibly malicious content.

6. You will now be taken to the Moodle installer script. This installation process is the biggest difference between the Mac OS and Windows XAMPP package installations for Moodle. In Windows, you will go through the exact same installation process that you would go through if you were setting up a Moodle site on a hosted or dedicated server. The first screen will prompt you to select a language and provide information about the XAMPP package being used.

7. Select your language and click on the **Next** button found at the bottom of the screen.



8. The next screen, shown in the following screenshot, will display the results of a PHP settings check. Everything should be OK as evidenced by the **Pass** message in green text to the right of each check item. If you get a **Fail** message in red text, you will need to determine the cause of the problem and fix it before you may proceed.

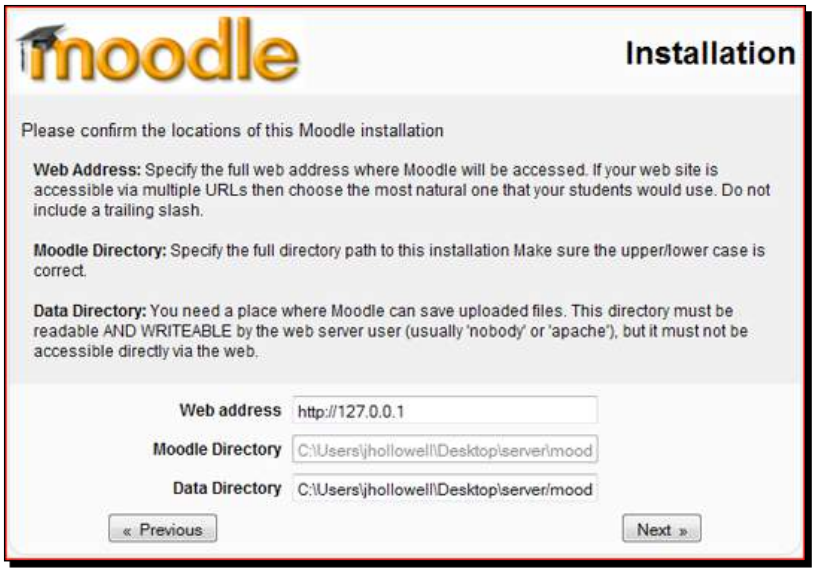
9. Click on the **Next** button to proceed with the installation.

10. The next screen, shown in the following screenshot, will ask you to confirm the locations of the Moodle installation. These will include:

- The web address
- The Moodle directory (where Moodle files are contained)
- The data directory (where Moodle will store data files)

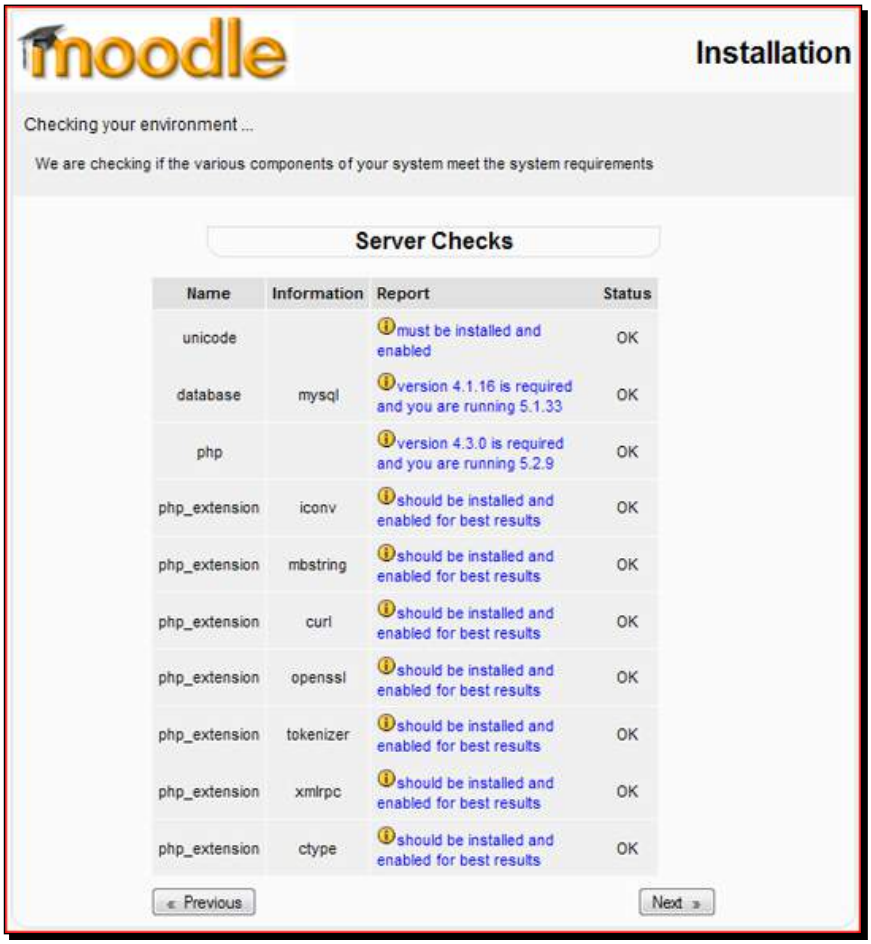
These should be automatically filled in and it is not recommended to change the locations of the two directories unless you know what you are doing

11. If you are using Windows Vista, change the web address setting however, to `http://127.0.0.1`. While localhost and 127.0.0.1 are the same, there is an issue in Windows Vista that sometimes prevents localhost from working properly. As an additional note, once you have these locations set you should not move the Moodle directory or data directory. Doing so will make your site inaccessible until you move the directories back or change the paths in the `config.php` file, which contains directory paths and other fundamental settings for Moodle and is found in the Moodle directory.



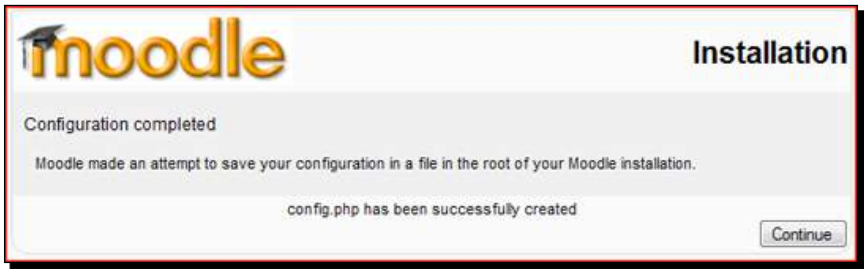
12. The screen that will appear after the locations have been correctly entered is a screen that allows you to enter settings for the database. The only field that should be altered on this screen is the password for the database. Even though this site is only going to be used for experimental purposes, it is a good idea to establish the habit of always selecting a password for your database. Enter a password and click on the **Next** button.

13. The next screen you will be presented with is a **Server Checks** screen informing you of the results of a check that was performed to ensure that the environment necessary for hosting Moodle is complete. These should all pass with a status of **OK** in the case of a XAMPP installation, as shown in the following screenshot:



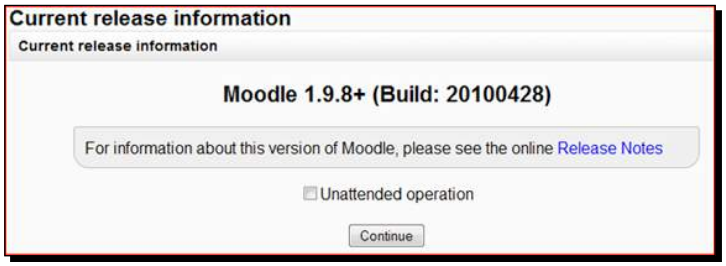
14. Click on the **Next** button to proceed to the next screen, which is a language pack download message screen. There is nothing to be done at this screen aside from reading the information presented.

15. Click on the **Next** button and you will be presented with a **Configuration completed** message informing you that the `config.php` file was successfully created.



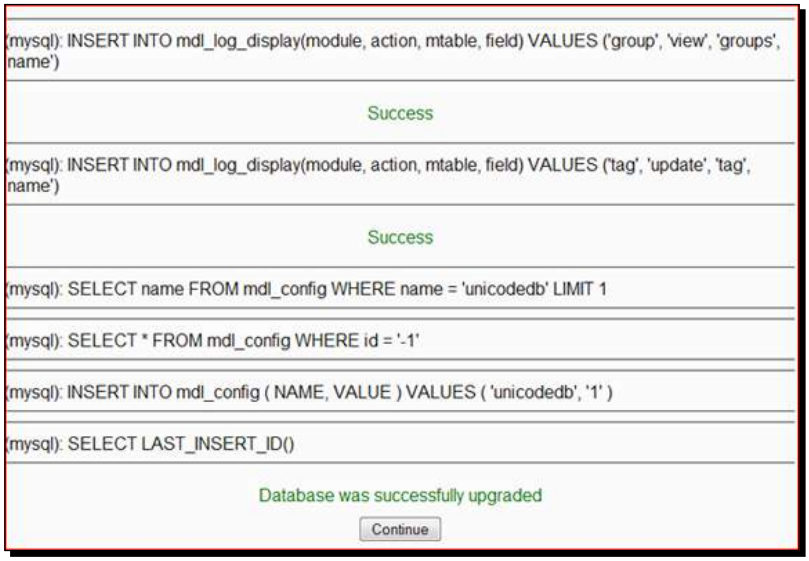
16. Click on the **Continue** button, which will display the copyright notice. Read quickly through the open source GNU public license message and then acknowledge that you understand, by clicking on the **Yes** button.

17. The final screen is a current release screen, which provides information about the Moodle version you have installed. Leave the **Unattended operation** tick box unticked and click on the **Continue** button.



18. Click on the **Continue** button found at the bottom of this screen to start the database table creation process. This may take several minutes as all of the tables, in which Moodle stores data, are created in the database.

19. Scroll down in your browser window to watch as the tables are created and then click on the **Continue** button found at the bottom of the page when the creation process is completed. You will see tables being created again, this time for the various activities that come prepackaged in Moodle. Click **Continue** at the bottom of the page when the table creation process is finished. This process will be repeated multiple times before the database table creation portion of the installation is complete. Click on **Continue** at the bottom of the screen each time the option appears.

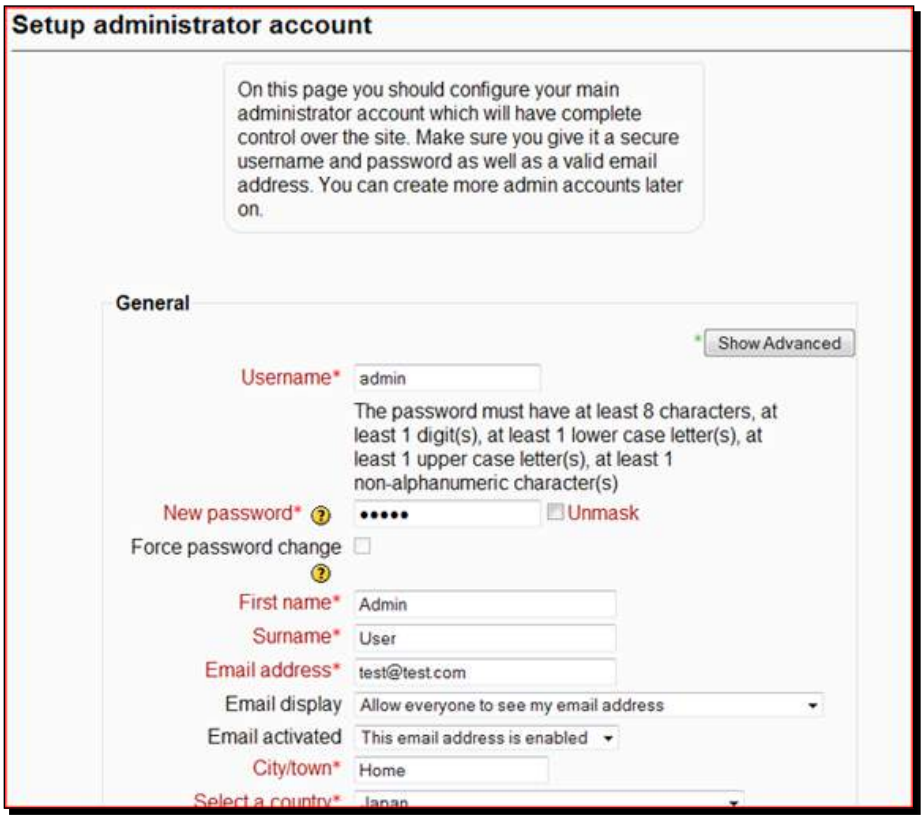


20. When the database table creation process has been completed you will be presented with a screen, shown in the following screenshot, that allows you to set the password and other profile settings for the administrator account. For our experimental server, leave the username **admin** and enter a password. The default on the Mac OS version is a very simple `12345` but you will need to create a more complicated password for this Windows install as the Moodle password policy is turned on by default in a standard Moodle Windows XAMPP install. Your password should:

- be eight characters long
- have one lower case letter and one upper case letter
- have at least one non-alphanumeric character (a symbol)

21. You can change the password settings once you have finished the installation process, if you want to use a simpler password. You will also need to enter the required fields for creating Moodle user accounts, which are:

- an e-mail address
- a city/town
- a country



22. After entering information in the required fields, click on the **Update Profile** button found at the bottom of the page.

23. After setting up the admin account, the final page you will see before being taken to your Moodle site's front page is a page that allows you to enter information about the site. Enter some temporary information here, we'll change it later in this chapter, and click on the **Save Changes** button found at the bottom of the page. You have completed the installation process and will be taken to the front page of your site and logged in as the admin.

What just happened?

You have successfully installed and configured your XAMPP package to run on your Windows machine. By following the process that has been explained here, you have:

- Set the default language for your Moodle site
- Confirmed that your version of PHP is up-to-date
- Set the site address and locations for Moodle and its data
- Specified settings for the database
- Checked to make sure your server environment is sufficient to run Moodle
- Created all of the primary tables in the database required by Moodle
- Set up login information for the admin account
- Entered preliminary front page information for your site

Basic setup and customization of your Moodle site

Once you've managed to get your site up and running, you are ready to log in to your Moodle site and begin the initial customization process. As stated earlier, we'll be using the XAMPP package in Mac OS with Moodle 1.9.8+ installed for screenshots and explanation. So if you are using a Windows version, a hosted server, or have installed on your own server, the screen you see may be slightly different. The process however, will be identical as long as you are using the same version of Moodle. The latest 1.9 version is recommended and will look the same.

The first screen you will see after navigating to the front page of your Moodle site will look something like this:

In the MAMP package for the Mac, you will see the **Username** and **Password** for the administrator account on the front page of Moodle. This is only acceptable because this site is not being served to the public and is only accessible by the user of the machine it is installed on. If you install Moodle on a hosted server, or on your own server, you will select a user name and password for the admin account when installing the system. In all public server situations, make sure you protect the privacy of your administrator login information. Access to the admin account is one of the easiest ways for an individual with malicious intent to abuse your site.

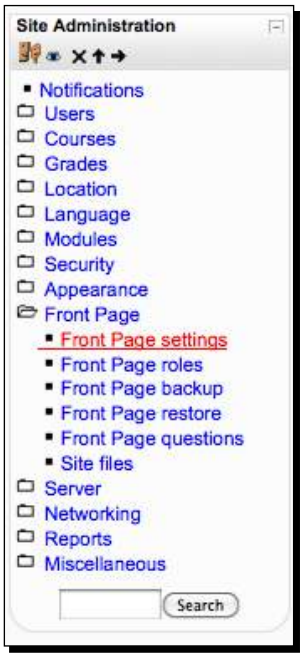
Time for action – basic customization

We'll start with some basic customization by changing some settings on and adding some of our own content to the front page. One of the uses we are proposing for Moodle is as a curriculum management system, so we should start by customizing the front page of Moodle so that it can better function as an "entry way" for students and teachers who will be interacting with our curriculum. To change the appearance of the front page follow these steps:

1. Assuming you have logged in to your site as the administrator, click on the **Turn editing on** button. This reveals various editing tools that allow you to create much of the content displayed on the page as well as allowing you to add activities and other resources such as web pages via drop-down menus. At the bottom of blocks that have content areas, which can be edited, you will see a small icon that looks like a hand holding a pencil. The **editing** icon found at the bottom-left of the center block below the Moodle logo picture has been enlarged and circled in the following screenshot:

2. There are actually two ways to customize much of the content you see from the front page. The first is by turning on editing, as we have just done, and then by clicking on the editing icon mentioned earlier. The second method we are going to use is to click on the **Front Page** link found in the **Site Administration** block located on the left side of the screen when you log in as admin.

3. Next, click on the **Front Page settings** link as shown in the following screenshot:

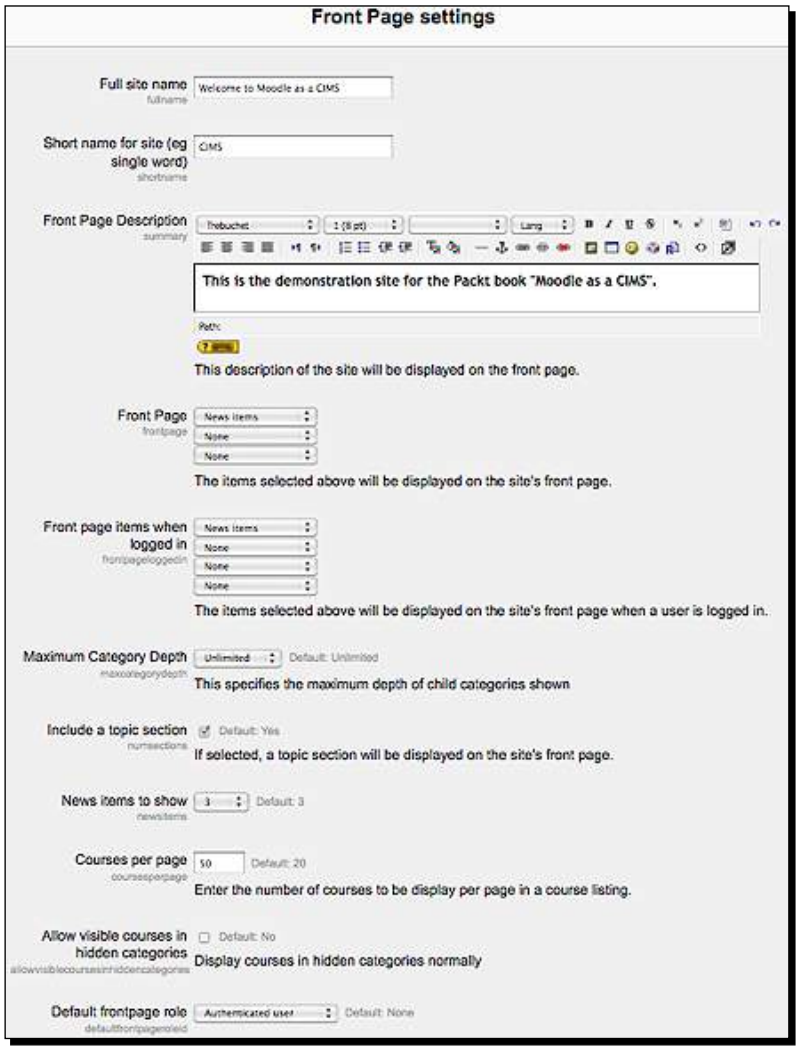


4. This will take you to a page that allows you to modify various settings that govern how the front page looks and also allows you to change content that is presented on the front page. A description of the settings, followed by a screenshot of the **Front Page settings** window, is as follows:

   - **Full site name** is the name that appears at the top-left of the front page of your Moodle site. Enter `Welcome to Moodle as a CIMS` for our test site.
   - **Short name** is the name that is used as the leftmost breadcrumb when navigating away from the front page. This should be kept as short as possible so as not to clutter the breadcrumb path. Use `CIMS` for our site.

- **Front Page Description** is what is displayed in the **Course/Site Description** block that is installed by default and displayed at the top-left of the front page. This information can be edited by clicking on the editing icon after turning editing on from the front page but we are editing it here from the **Front Page settings** in order to show the other settings that can be modified. We'll use, **This is the demonstration site for the Packt book "Moodle as a CIMS".**
- **Front Page** is for selecting items that are to be displayed to individuals who are not logged in to your Moodle site. There are four different items to choose from and thus four drop-down menus. The display order from top to bottom is determined by the order you place them in using the drop-down menus.
- **Front page items when logged in** is, just as it is written, for selecting items that you want to be displayed to the users after they have logged into the site. This allows you to customize how information will be displayed based upon whether an individual is logged into Moodle or not. We are going to use our Moodle front page to post news that is relevant to our curriculum and thus, have set **News Items** to be visible to both users who are logged in and to those who are not.
- **Maximum Category Depth** allows you to set how much category depth will be displayed on the front page. If you have many categories embedded within categories you may want to consider limiting this to keep your front page's appearance clean. Notice that I have not opted to have courses displayed via the front page, so this unlimited setting will have no impact on the appearance of the front page.
- **Include a topic section** provides us with a block at the top of the front page that can be used for posting a picture, logo, or textual information. In the MAMP package, there is a large picture of the Moodle logo, which was made from many small user pictures, in this topic section. We'll remove that and replace it with our own custom logo later.
- **News items to show** can also be selected here. This controls how many news items will be displayed on the front page. News items will be displayed in the order of posting, from the most recent one. Items beyond the number chosen here can be easily accessed by, for example, adding a **Main Menu** block to your front page, which we will do shortly.
- **Courses per page** allows you to set the number of courses that will be displayed on one page within a category. This is nice if you want to be able to allow students to see all courses on one page by simply scrolling down. Alternatively, you may want to reduce the number if your course list is extremely long so as to distribute the course list across several pages.

- **Allow visible courses in hidden categories** allows you to force courses that are inside categories that have been hidden, to show up on the front page, if you have opted to have courses displayed. The default here is **No** because it is assumed that the reason for hiding a category is to hide courses contained in that category but, as was stated earlier, Moodle is a very flexible tool and as there may be cases where you want courses contained in a hidden category to be displayed, you have the option here.
- **Default frontpage role** changes the default role setting for the front page and has an impact on how users will be able to interact with content made available on the front page. We have changed this to **Authenticated user** in order to allow students to access activities added to the front page.



5. Once you have made all the desired changes, click on the **Save Changes** button at the bottom of the page and then navigate back to your front page using the leftmost breadcrumb at the top of the page. In the following screenshot this would be **CIMS**:

6. You should notice that the breadcrumb has changed to the short name you entered in the **Short name for site** field and, once back to your front page, that the changes you just made have been updated on the front page.

What just happened?

You have just successfully changed the appearance of your front page by simply changing some of the content via the front page settings. We have just started to scrape the surface and will continue to customize our site with our own content and appearance.

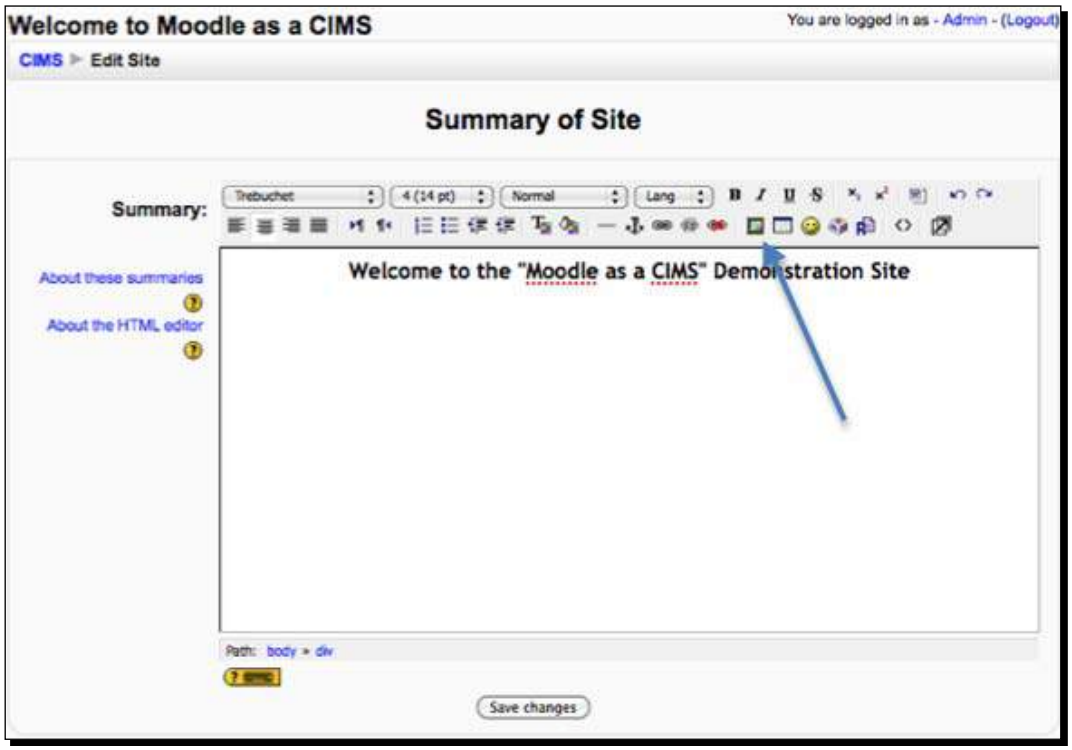
Time for action – customizing the label area of the front page

Next, let's get rid of that big Moodle logo and replace it with a different graphic. Follow these steps to edit the image that appears on the front page:

1. Click on the editing icon located at the bottom-left of the picture we want to remove and before clicking, notice that hovering your mouse over this icon makes the message **Edit summary** appear.

2. After clicking you will see a screen titled **Summary of Site** with an HTML editor window that contains the information you saw on the front page. The image will probably not be visible but you can delete the text and image by selecting everything and deleting it.

3. Next, enter the information you want to display on the front page. Use `Welcome to the "Moodle as a CIMS" Demonstration Site` for our test site.

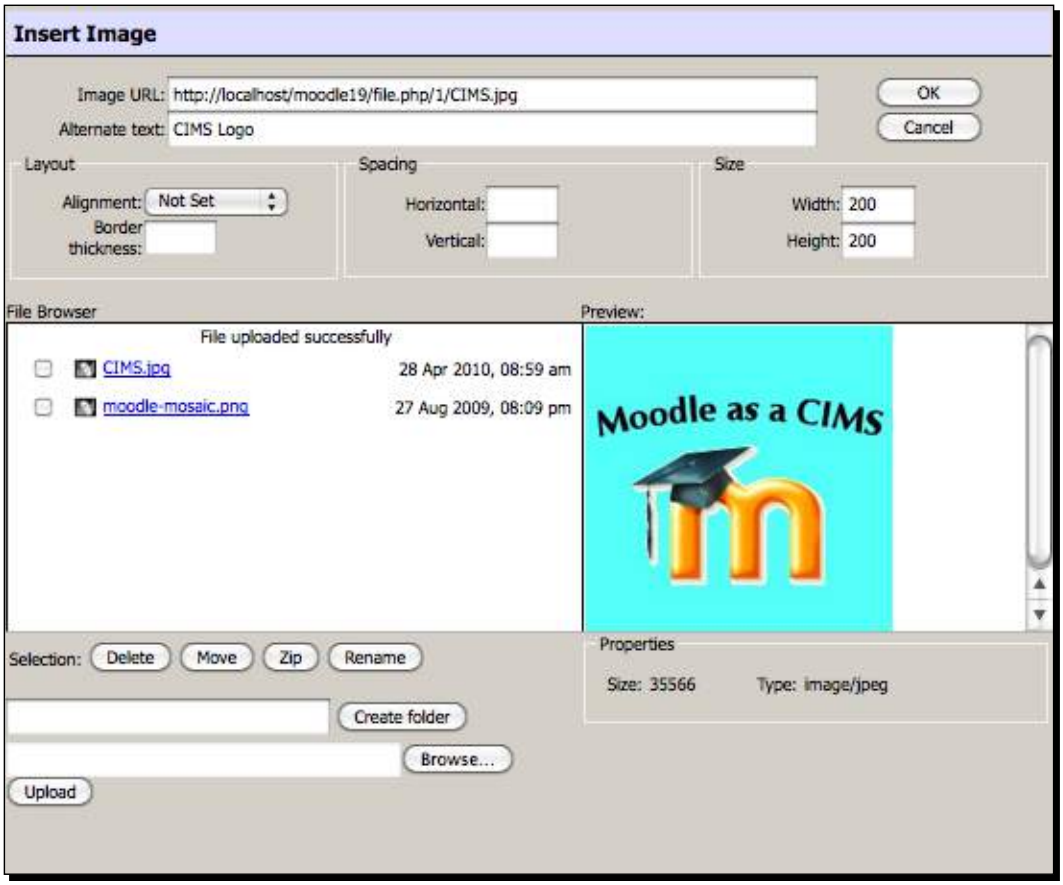


4. To add an image, click on the picture frame icon located in the menu bar of the HTML editor. The blue arrow is pointing to the insert image icon in the preceding screenshot. Hovering over this icon will make the **Insert Image** message appear. Clicking on the picture icon will make the **Insert Image** tool appear. You can provide an URL for the image you want to appear here but, unless you have a repository of images already up on the Internet, the easiest way to use this tool is to click on the **Browse...** button located at the bottom of the window and then locate and select an image from your computer.

5. After selecting the image, click on the **Upload** button. The image file name will now be displayed in the **File Browser** list and clicking on the file name will make the image appear in the **Preview** pane on the right.

6. Clicking on the file name will also automatically enter the URL. Below the URL enter alternative text to be displayed when hovering over the image.

7. Finally, click on **OK** and the image will appear in the HTML editor window as shown in the following screenshot. Click on the **Save changes** button and you will be redirected back to the front page of your site and will be able to see the new description and image.



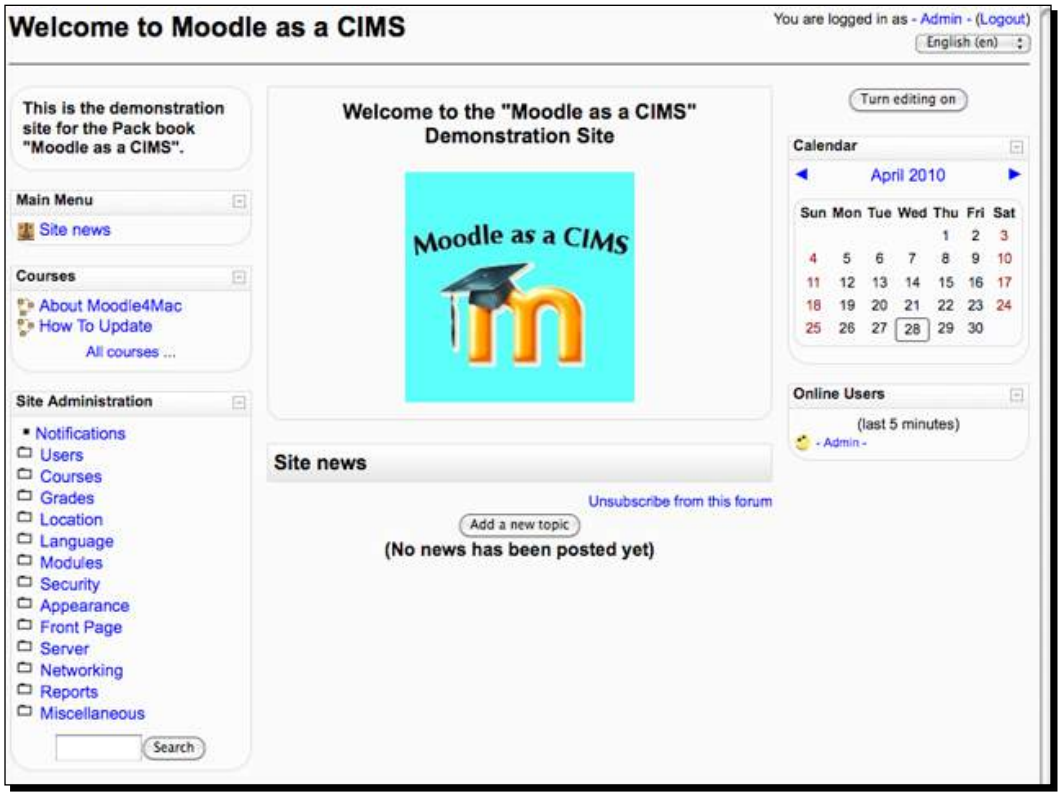
What just happened?

You just changed the image that appears in the top-center section of your Moodle site by deleting the old image and uploading a new image in its place. We did this by accessing the **Summary of Site** page and it also gave us a chance to use the **Insert Image** tool.

Time for action – adding the Main Menu block

We'll finish out this very basic customization of the front page by adding a block that provides access to activities that appear on the front page. This will allow you easy access, via HTML links, to all of the activities and resources that appear on the page. To add the **Main Menu** block to your Moodle front page, follow these steps:

1. Turn editing on and on the lower right side of the page a drop-down menu titled **Blocks** will appear.
2. Click on the **Add...** drop-down menu and select **Main Menu**.
3. The **Main Menu** block will be installed on the lower right side of the page so now click on the arrows at the top of the block just below the Main Menu title to move the block over to the left side of the page below the **Course/Site Description** block. Now the front page that we saw earlier looks like this:



What just happened?

You have just added the **Main Menu** block to the front page of your Moodle site. As you add activities to the front page, they will be easily accessible via the **Main Menu** block. News items, for example, can all be viewed by clicking on the **Site News** link from within the **Main Menu**. Therefore, if you set your front page to display only three news items and regularly post news items, all past news items will be accessible from the **Main Menu** block.

Installing third party contributions

As mentioned earlier, one of Moodle's strengths is the ease with which you can install and use third party add-ons. There are a multitude of blocks, modules, and other plugins available from the `Moodle.org` download area that you can use to enable Moodle to perform all sorts of tasks. One word of caution on third-party blocks, modules, and other plugins; they are not maintained by Moodle headquarters and as such you should check the forums on `Moodle.org` for any known issues the plugin you are planning to install might have. Likewise, it is a good idea to install these types of plugins on a test site, like the one we've set up in this chapter, to experiment with them and make sure they function as desired. Once you are confident in using the features offered by a plugin and assured that it is what you want, you can install it on your production site.

Blocks and modules

As mentioned at the beginning of this chapter, blocks and modules comprise the majority of feature add-ons available for Moodle. They are also almost always very easy to install provided that you have the necessary level of access to the system that your Moodle site is being served from. Installation on a local XAMPP or MAMP package is extremely easy as it simply involves downloading the add-on from `Moodle.org`, decompressing it, and placing the folder of components into the appropriate folder/directory within the Moodle directory.

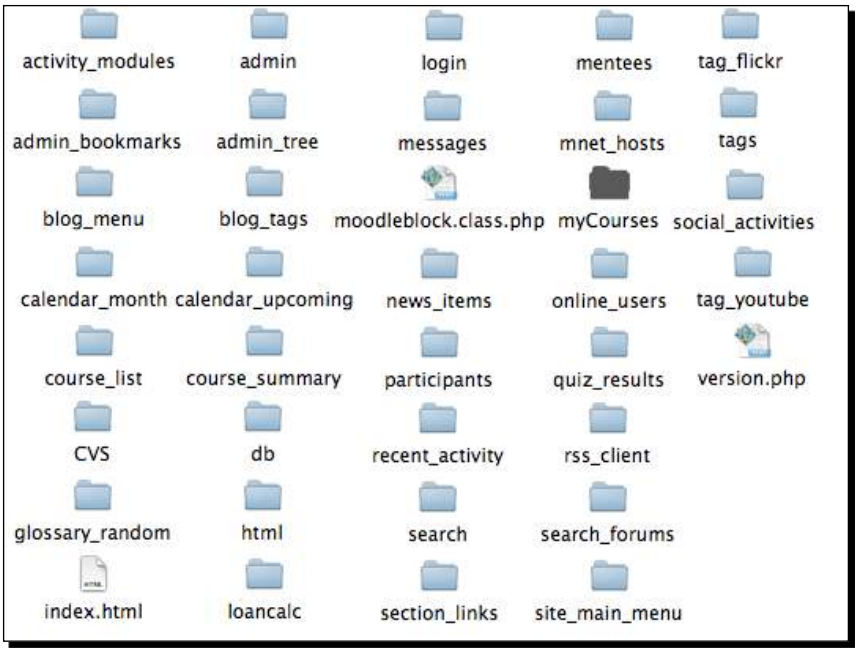
We will install the following block and module to continue to build our CIMS and to demonstrate the installation process:

- **My Courses block**: This provides students with an easy way to navigate to courses in which they are enrolled, and more importantly from the CIMS perspective, it provides an administrator with easy access to all of the courses on the site.
- **Attendance package**: This package actually consists of both a block and a module. The module is the main component, especially from the CIMS perspective and the block is used primarily to present personal attendance data to students in a block that appears in the course area.

Time for action – installing the My Courses block

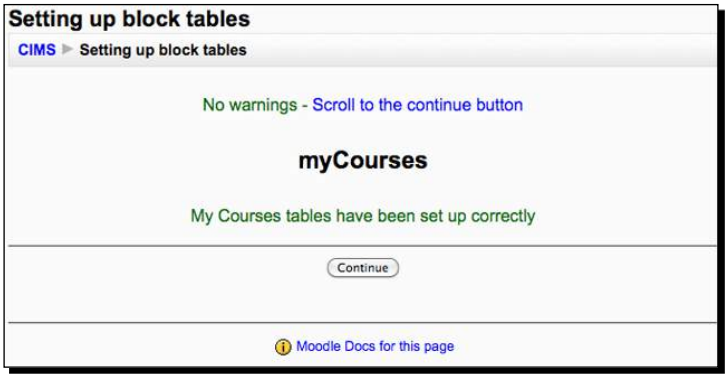
To install the **My Courses** block, which is a block that allows users and the site administrator to access the courses they are enrolled in or are permitted to access, follow these steps:

1. First go to **Modules and plugins** in the **Downloads** tab of `Moodle.org` and search for **My Courses**.
2. If the search does not return an entry for *My Courses* and instead only lists *My Courses 2* and other similar items, navigate to the forum found at the following link and download the block from the forums. A packaged version will appear towards the bottom of the forum dated sometime in October 2010.
    - Forum thread title: New myCourses block released
    - Link: `http://moodle.org/mod/forum/discuss.php?d=67494`
3. If the **My Courses** block, contributed by *Rosario Carcò*, is listed in the **Modules and plugins** area, proceed to step 4. (Note—The **MyCourses** block is scheduled to appear in the Modules and plugins database on `Moodle.org` sometime in December 2010).
4. Click on **My Courses** and then click on the **Download latest version** link to download the block files.
5. This will download a compressed package containing all of the files for the block called `myCourses.zip`. To install the block on your local MAMP package, expand the package with a compression/expansion tool.
6. Expanding the package will create a folder titled `myCourses` that must be placed in the `blocks` folder located in your Moodle directory. For a MAMP package on the Mac OS, you can find the appropriate folder by opening the folder that contains your MAMP directory and then navigating to the `blocks` folder. The path is as follows: `Applications/MAMP/htdocs/moodle19/blocks`.
7. Drag-and-drop or copy the `myCourses` folder into the `blocks` folder.
8. After copying the contents to the `blocks` folder in your Moodle directory, your blocks folder will contain folders for the standard blocks plus the newly installed `myCourses` folder, as shown in the following screenshot:



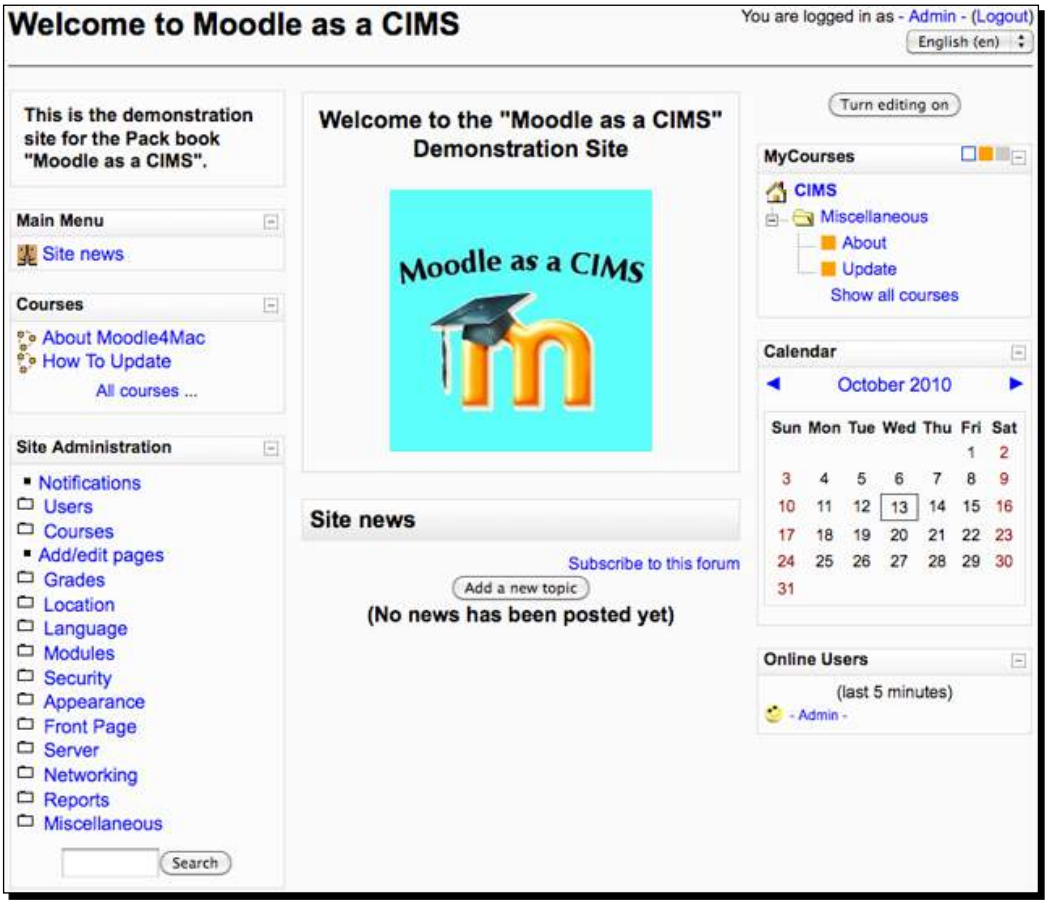
9. Next you must log in to your site as admin and click on the **Notifications** link found in the **Site Administration** block. This will start the installation of the block components and create tables in the database that will be used by the block.

10. You will see a message informing you that the tables have been set up correctly. Click the **Continue** button, shown in the following screenshot, to proceed:



11. The next screen will be the main **Notifications** page. From this point, you can get back to the front page by clicking on the leftmost breadcrumb on the top-left side of the browser window.

12. Now that the **My Courses** block has been installed it can be inserted into the front page by turning on editing and selecting it from the drop-down **Blocks** menu. Our front page, with the **My Courses** added and moved to the top-left of the page, now looks like the following screenshot:



13. Finally, we can access the configuration settings for the **My Courses** block by clicking on the **Modules** link found in the **Site Administration** block.

14. Next, click on **Blocks** and then on the **MyCourses** link. The various configuration settings are modifiable from this screen. You can toggle these settings at any time to see how they affect the appearance of the **My Courses** block by returning to this page. Use the following settings for our test site:

- **Show scrollbars**: Untick this because we will set up the site with the categories that house our courses and won't need them.

- **Show all courses**: Tick this to provide a link at the bottom of the block for easy access to all of the courses on the site.
- **Show long names**: Leave unticked to keep long course names from cluttering the block.
- **Show category links**: Tick to make each category title a link that will take you to the list of courses offered in that category.
- **Show flat list**: Untick this or your courses will not be displayed in their categories.
- **Show course search box**: Leave this unticked as we won't use the **Course Search** box.
- **Toggle own courses**: Tick this to allow the admin to toggle between his or her own courses and all courses.
- **Toggle active courses**: Tick this to allow the admin to toggle active course visibility off and on.
- **Toggle inactive courses**: Tick this to allow the admin to toggle inactive course visibility off and on.

15. Return to the front page of your site to view the block. Note however, it will not fill with categories and courses until we have them, which we will work on in *Chapter 2*, *Building the Foundation—Creating Categories and Courses* and *Chapter 3*, *Student Account Creation and Enrollment*.

What just happened?

We have just installed the **My Courses** block and modified the settings that control how it will display categories and courses to the site administrator. As we fill our site with both categories and courses in subsequent chapters, the convenience of this block will become more and more obvious as we'll be using it regularly to access specific courses in the site.

Time for action – installing the Attendance package

Module installation is basically the same process as that for blocks with the obvious difference being in where the package contents are installed. In the case of modules, the package contents are placed in the `mod` folder. Next, we will install the `Attendance` package, which is actually a combination of both a module and a block so we'll be placing items in both of these folders. To install the package, follow these steps:

1. Using the same process that was explained for the **My Courses** block, from the **Modules and plugins** download page on `Moodle.org`, search for **Attendance**.
2. Click on the item with the one word title, **Attendance**.

3. From the detailed explanation menu click on the **Download for Moodle 1.9** link to download the package. The resulting download will be a zipped package titled `attendance_package.zip`.

4. Decompress this package and note that there are both `blocks` and `mod` folders contained in the package. This is because, as previously mentioned, this package contains both a block and a module.

5. Place the `Attendance` folder found in the `blocks` folder of your Moodle instance the same way you did with the `My Menu` package.

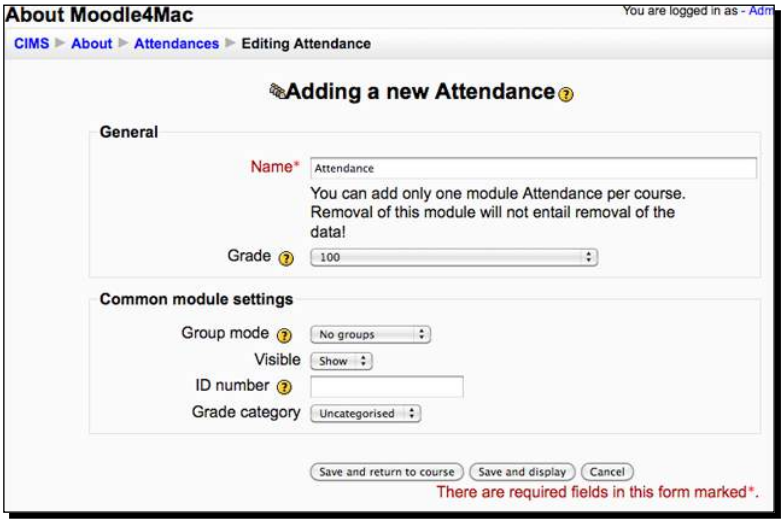
6. In the same manner, place the **attforblock** folder in the **mod** folder in your Moodle directory. The paths for installing the two components on the Mac OS MAMP are as follows:

   `attendance` goes to `MAMP/htdocs/blocks`.

   `attforblock` goes to `MAMP/htdocs/mod`.

7. Log in to your site as admin after placing the two folders in their appropriate places and click on the **Notifications** link. You will receive a series of **Success** messages and should click on **Continue** after everything is successfully installed.

8. Navigate to a course and turn editing on to add an Attendance activity to the course area. Add the Attendance activity by using the **Add an activity** drop-down menu. You will be presented with a screen that allows you to customize some of the settings for the Attendance activity, as shown in the following screenshot. Unless you want to change the name, the maximum grade, or some of the other settings, it is easiest to click **Save and display**.



9. The subsequent screen is the **Sessions** display and will indicate that there are no sessions for the course. You can add sessions one at a time or in bulk by clicking on the **Add** tab. Other features of the **Attendance** module can be accessed by clicking on the corresponding tabs.

What just happened?

We have just installed the **Attendance** package, which includes both a module and a block. This tool, along with the **My Courses** block, will be utilized as we position our Moodle as a CIMS. Detailed explanation of the use of these tools in this context will be presented in *Chapter 4*, *Incorporating Educational Standards* (Attendance module) and *Chapter 6*, *Customized Roles* (My Courses block).

Installing other plugins (themes)

The process for installing themes is basically the same as for modules and blocks with, again, the difference being in the location that the package is installed. In the case of some plugins, there may be a need to make minor, or in the case of some contributed plugins, even major modifications to files in the Moodle directory. If the changes are minor and you are comfortable experimenting, then give it a try. This is why you are using a test site right! Some plugins however, require a patch, which is a modification to a core Moodle file or files. In addition to being undesirable, because it makes upgrading to a new version of Moodle more difficult, it can also be technically demanding. You can determine whether a plugin is a patch or not and also determine the installation requirements by viewing its entry in the Modules and plugins database found on the `Moodle.org` website. If the plugin requires a major patch or some other type of manual modification of code, and you are not a professional programmer, please proceed with caution. Make sure you have tested everything thoroughly on your experimental site before moving it over to your live server.

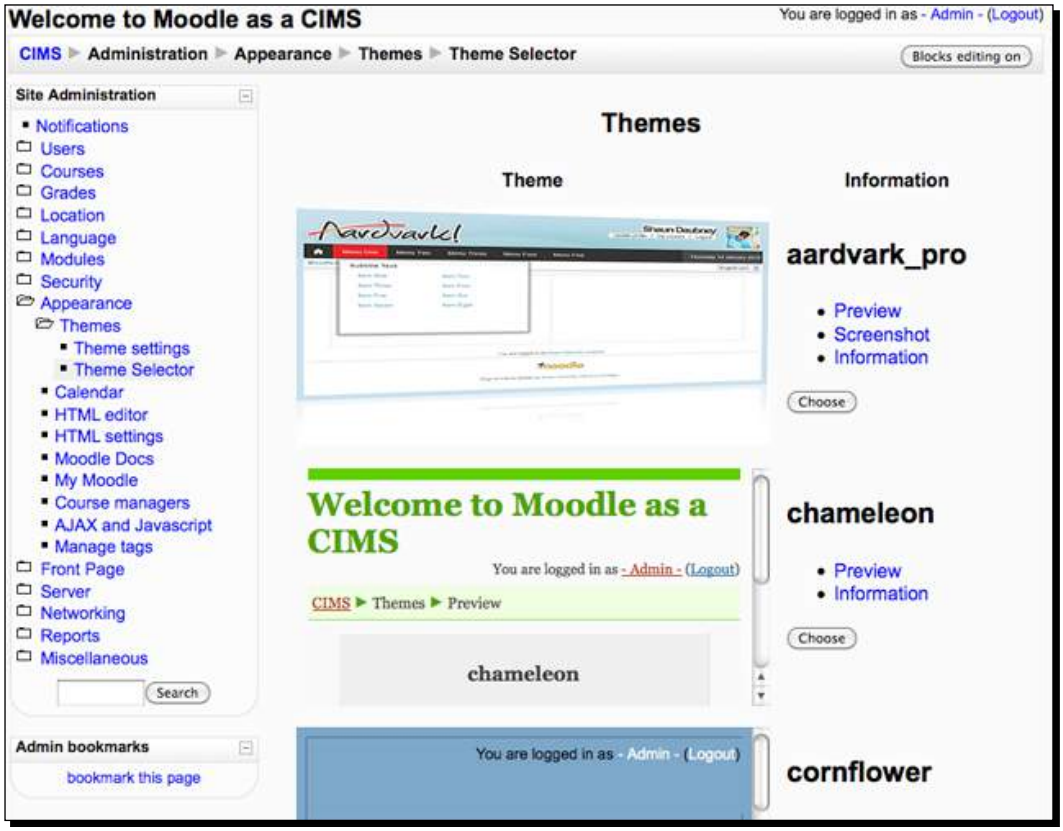
Time for action – installing the Aardvark Pro original theme

Now let's walk through the installation of a theme before bringing this introductory chapter to a close. Themes allow you to customize the look and feel of your Moodle site to an almost endless degree. In order to effectively utilize Moodle as a CIMS, we will need to install a theme that provides us with more content display capabilities. There are several themes that use a menu bar at the top of the screen that can include links to all sorts of content on your site. The current `Moodle.org` theme is a good example of one such theme. For our experimental site, we are going to download a flashy theme available from the **Themes** download area on `Moodle.org` called the "Aardvark Pro Original". It is a theme created by *Shaun Daubney* of Newbury College in the U.K. Follow these steps to download and install the theme:

1. Access `www.Moodle.org` from your browser and navigate to the **Themes** area of the **Download** section using the menu bar.
2. From the **Themes** section, the easiest way to find the theme we are looking for is to use the search string **Shaun Daubney**. This search will return several themes. Find the **Aardvark Pro Original** theme and download it to your computer. This will download a zipped package called `aardvar_pro1_2.zip`. Note that the version may be different by the time this book goes to print.
3. Decompress the package to get the `aardvark_pro` folder.
4. Place the `aardvark_pro` theme folder in the **Theme** folder found inside your Moodle directory.

5. After moving the theme into your theme folder, visit your site as admin and click on the **Appearance** link found in the **Site Administration** block.

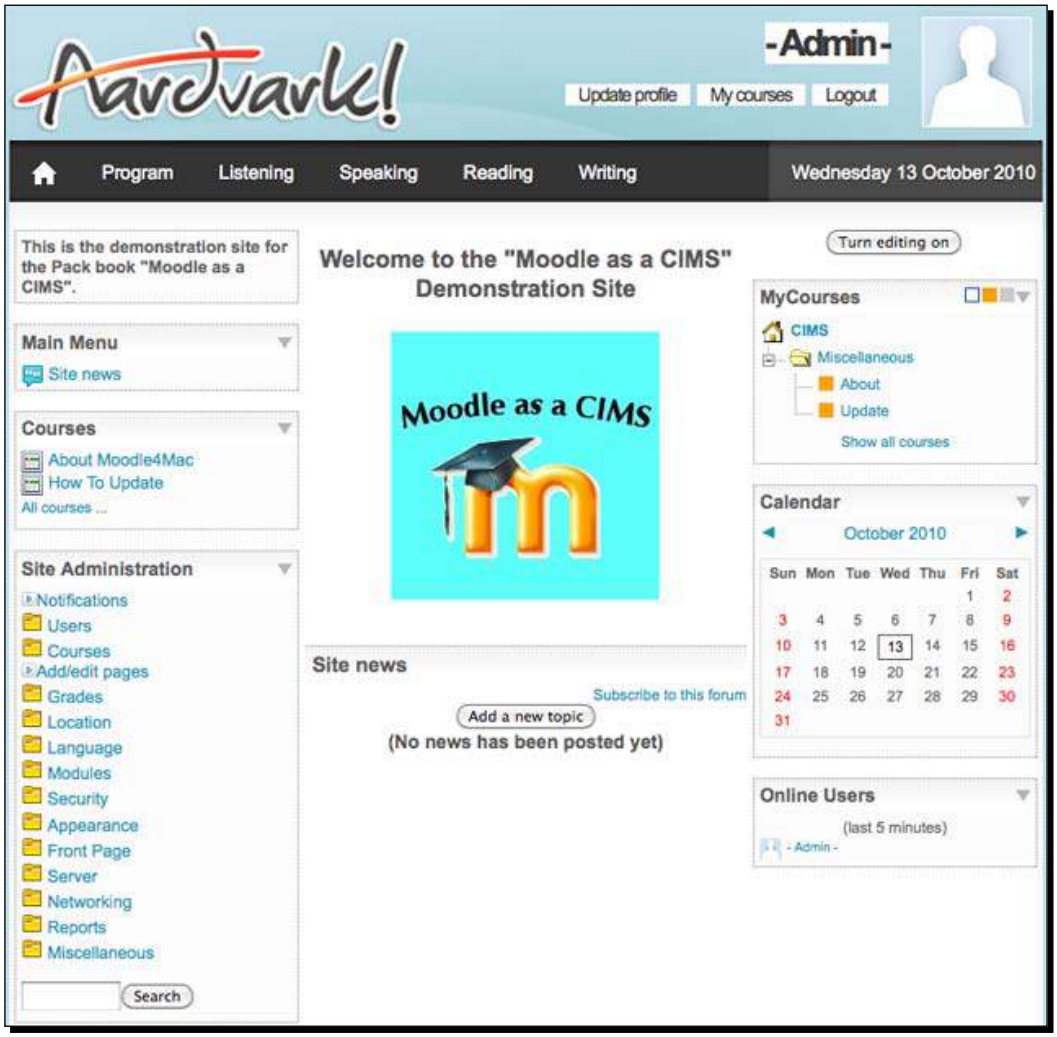
6. Next click on **Themes** and then **Theme Selector**. The path can be seen in the **Site Administration** block and in the breadcrumb trail as shown in the following screenshot:



7. You are now viewing the theme selector window. It allows you to scroll through all of the themes that have been installed in the **Theme** folder in your Moodle main directory. You can click on the **Preview** link found beside each theme prior to selecting it if you want to see what it is going to look like before making changes.

8. The themes are in alphabetical order so the `aardvark_pro` theme should appear at the top of the list. Click on the **Choose** button found to the right of the small theme preview.

9. You will see some information about the theme's creator and notes about changes that have been made as the theme has progressed from version to version. Scroll down and click on **Continue** to return to the front page of your site that should now look something like the following screenshot:



What just happened?

We have just installed and selected the Aardvark theme for our Moodle site and as a result you can now see the menu bar located at the top of the screen just below the Aardvark theme title. Through the use of this menu bar, this theme will allow us to provide quick access to much more information than was possible with the standard default theme. We will explore all the possibilities of this and other information portal capabilities in *Chapter 5*, *Enabling your Moodle Site to Function as an Information Portal*, so if you cannot wait to continue polishing the appearance and more importantly the informational value of the front page, then take a quick peek ahead.

Summary

In this chapter, you have learned the basics about how Moodle is most commonly used and about the underlying constructivist ideology upon which Moodle is founded. The idea of structuring a Moodle site with the goal of enabling it to function as a Curriculum and Information Management System (CIMS), while also performing its core Learning Management System (LMS) role, was presented and we began to work on setting up an experimental site to demonstrate this idea. You learned the basics for getting a default site up and running and started the process of expanding that site via the addition of third party contribution plugins such as blocks, modules, and themes. In the following chapters of this book, I will continue to explain and demonstrate how you can use your Moodle site as a Curriculum and Information Management System.