cis20.2-spring2010-sklar, lab III.2
content management systems

A **content management system** or **CMS** is a handy type of front-end to a web site that (typically) uses a PHP-based administration interface and provides an easy way for multiple people to administer a web site. There are different types of CMS's, tailored to different types of functionalities:

- "CMS Made Simple" (`http://www.cmsmadesimple.org/`) is a general-purpose CMS.

- "WordPress" (`http://wordpress.org/`) is a CMS designed for blogging, but people have used it a lot as a general-purpose CMS.

- Mambo (`http://www.mamboserver.com/`) is a more intricate CMS which can do lots of fancy things.

- Zen Cart (`http://www.zen-cart.com/`) is designed to support e-commerce sites.

All of these CMSs are free and are designed to work on "LAMP" machines. Most of them interface to a MySQL database. The database is used to store the web site content and some of the configurable aspects.

In this lab, you will learn how to install a CMS. You can choose between WordPress and CMS Made Simple. Or you can try them both :-)

You should find many aspects of the installation processes to be similar to what you did when installing phpMyAdmin. Note that most packages like this come with some type of "read me" file. This could be called `README` or `readme.html`, or some variation thereof. Usually, once you unpack the `.tar.gz` file that you have downloaded (as below), you should go into that package's directory and type `ls` (at the Unix prompt) to see a list of the files in the package. Look for a "read me" file and ... read it! (for instructions on what to do next — I have provided instructions below, but this is how I figured out what to do.)

A. WordPress

I have already downloaded the wordpress package and put it on mingus, so you don't need to download it.
(If you want to use it at home or elsewhere, then download from the URL listed above).
To perform your installation, follow these steps:

1. Log onto mingus (146.245.250.181).

2. Go to your `public_html` directory and copy the file that I downloaded into your directory:

    ```
    sh$ cd public_html
    sh$ cp /home/sklar/public_html/download/wordpress-2.9.2.tar.gz .
    ```

3. Unpack the Wordpress package by entering the following command:

    ```
    sh$ tar xzvf wordpress-2.9.2.tar.gz
    ```

4. Now the contents of the package will be in a directory called `public_html/wordpress`

5. Wordpress comes with easy installation instructions. You can look at those by entering the following in your browser (replacing my last name with your username):

    ```
    http://146.245.250.181/~sklar/wordpress/readme.html
    ```

    Note the section called "Famous 5-minute install". I've modified the instructions slightly, below.

6. On the server, open up the file `wp-config-sample.php` with a text editor like Nano or emacs or vi. Fill in your database connection details. These are the values you need to edit:

   ```
   define('DB_NAME', 'putyourdbnamehere');
   define('DB_USER', 'usernamehere');
   define('DB_PASSWORD', 'yourpasswordhere');
   ```

7. Save the file as wp-config.php

8. Open `/wp-admin/install.php` in your browser. This means that you enter the following URL (with your username instead of mine):
   `http://146.245.250.181/~sklar/wordpress/wp-admin/install.php`

   Follow the instructions on the page displayed:

   Enter a Title for your Blog. (Call it anything you want.)

   Enter your E-mail address. (ENTER YOUR REAL ADDRESS because the system will send you information via email.)

   MAKE SURE THAT YOU DO NOT CHECK the "allow my blog to appear in search engines" box.

   This should create the tables needed for your blog. If there is an error, double check your `wp-config.php` file, and try again. If it fails again, ASK ME FOR HELP!

   NOTE THE PASSWORD GIVEN TO YOU.
   The install script should then send you to the login page (when you click on "Log In"). Sign in with the username admin and the password generated during the installation. You can then click on "Profile" to change the password.

9. You're done!!

10. Now you can explore WordPress. Try creating users. Try customizing the Blog. Try entering posts. This installation is all yours. For you to explore and play with. Don't worry about messing it up. You can fix it or re-install it.

B. CMS Made Simple

I have already downloaded the cmsmadesimple package and put it on mingus, so you don't need to download it.
(If you want to use it at home or elsewhere, then download from the URL listed above).
To perform your installation, follow these steps:

1. Log onto mingus (146.245.250.181).

2. Go to your `public_html` directory and copy the file that I downloaded into your directory:

   ```
   sh$ cd public_html
   sh$ mkdir cmsmadesimple
   sh$ cd cmsmadesimple
   sh$ cp /home/sklar/public_html/download/cmsmadesimple-1.7.tar.gz .
   ```

3. Unpack the cmsmadesimple package in the subdirectory you just created (`public_html/cmsmadesimple`)
   by entering the following command:

   ```
   sh$ tar xzvf cmsmadesimple-1.7.tar.gz
   ```

4. Now the contents of the package will be in that subdirectory called `public_html/cmsmadesimple`. The
   "read me" file is in the `doc` subdirectory and is called `doc/README.txt`. That file refers you to `doc/INSTALL.txt`
   for installation instructions. The installation steps are repeated below.

5. Make sure you are in the `public_html/cmsmadesimple` directory. Create an empty `config.php` file and
   make it writable by your webserver's user:

   ```
   sh$ touch config.php
   sh$ chmod 666 config.php
   ```

6. The next step in the installation instructions is to create the cms database in MySQL and grant user rights
   to access it. However, you need to have "root" (system administrator) privileges in MySQL to do that,
   which you don't. So I have created this for you. Your CMS database is called `sklar_cms`, substituting your
   4-letter username in place of my name. You should be able to access this from your MySQL account.

7. Fix the permissions on the following directories so the web server has access to them:

   ```
   sh$ chmod -R 777 tmp
   sh$ chmod -R 777 uploads
   sh$ chmod -R 777 modules
   ```

8. Open up your new CMS site in your web browser and you will be guided through a short install:
   `http://146.245.250.181/~sklar/cmsmadesimple/install/`
   (replacing my name with your username)

   - You can skip the Checksum test.
   - You will probably get some warnings when it runs the "Checking permissions and PHP settings" tests.
     That's okay. Just click on "continue".
   - You can try the "Test File Creation Mask" or skip it.
   - On the "Admin Account Information" page, enter your MySQL username, your real email address,
     and your MySQL password.

3

- On the "Database Information" page, enter the name of the database that I have created for you, which is your username followed by _cms (e.g., mine is `sklar_cms`). Then enter your MySQL username and password. You can leave the "database port" blank. You can leave the table prefix set to `cms_`.

- On the next two pages, you should have **Success!**

- Finally, click on "go to the Admin Panel".

9. Finally, for security, set your `config.php` file back to a read-only state:

```
sh$ chmod 444 config.php
```

10. You're done!!!

11. Now you can explore CMS Made Simple.

    To reach the site, go to:
    `http://146.245.250.181/~sklar/cmsmadesimple/`
    (replace my name with your username)

    To reach the administration console, go to:
    `http://146.245.250.181/~sklar/cmsmadesimple/admin/`
    (replace my name with your username)