Lab 1 – Introduction and Getting Started

Abstract

To view and test our web pages, you need a web server. Mercury (mercury.swin.edu.au) is a server provided by Swinburne that runs the Apache web server. Mercury is the web server we will be using to host all our web pages for your labs and assignments in this unit. In this lab, we are going to setup your user account and then create and test our first web page on Mercury.

Aims:

- To set up your user account on 'Mercury' - the University's Apache webserver
- To develop an understanding of the client-server environment and the processes we will be using throughout the semester - loading pages to the Apache web server and viewing them through a client browser
- To create a simple HTML page using a text editor and
- To learn about some browser features used in web development

Task 1: Set up and test your user account on mercury (10 marks)

Step 1: Log onto the Mercury web server and set up your account.

A web account is needed to load, test and run your web pages (HTML, CSS, JS). For this purpose, every student is assigned an account on the Mercury web server.

1.1 Use '**PuTTY**', a SSH (Secure Shell) client, (available on most lab computers under *Start>Programs>Network*), to log in to the Mercury web server. Its host name is *mercury.swin.edu.au*, as presented in Figure 1.

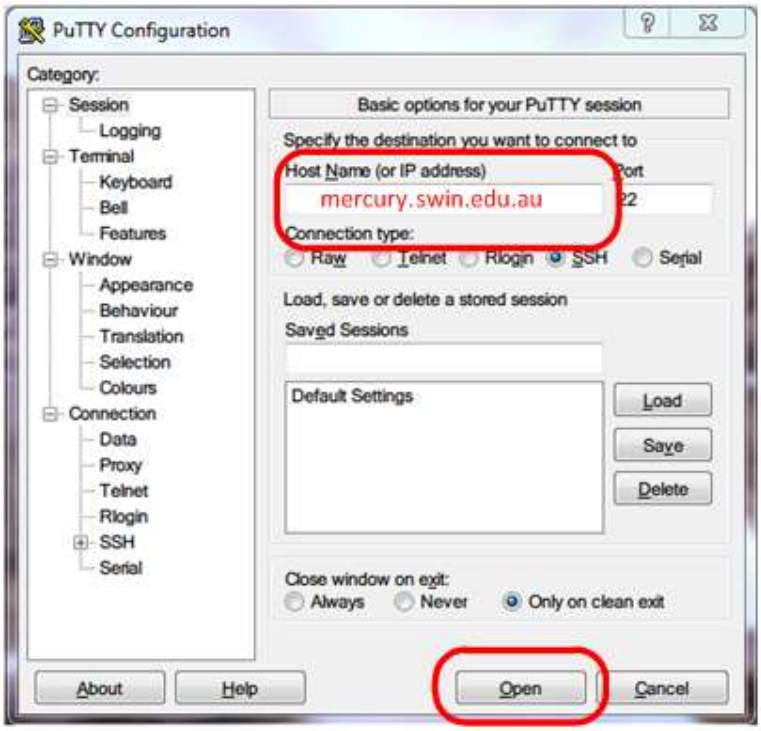


Figure 1. Accessing the Mercury Web Server

Note: If you are using a MAC or Linux machine, you do not need putty, just open a terminal and use the built in ssh client like this:

ssh <username>@mercury.swin.edu.au"

1.2 If the dialog presented in Figure 2 pops up, click on Yes.

Figure 2. PuTTY Security Alert

1.3 Now enter your Mercury username: **s<*your Swinburne ID*>, (for example, s1234567)** and your SIMS password, as presented in Figure 3. **In PuTTY, the password you type would not be visible.**

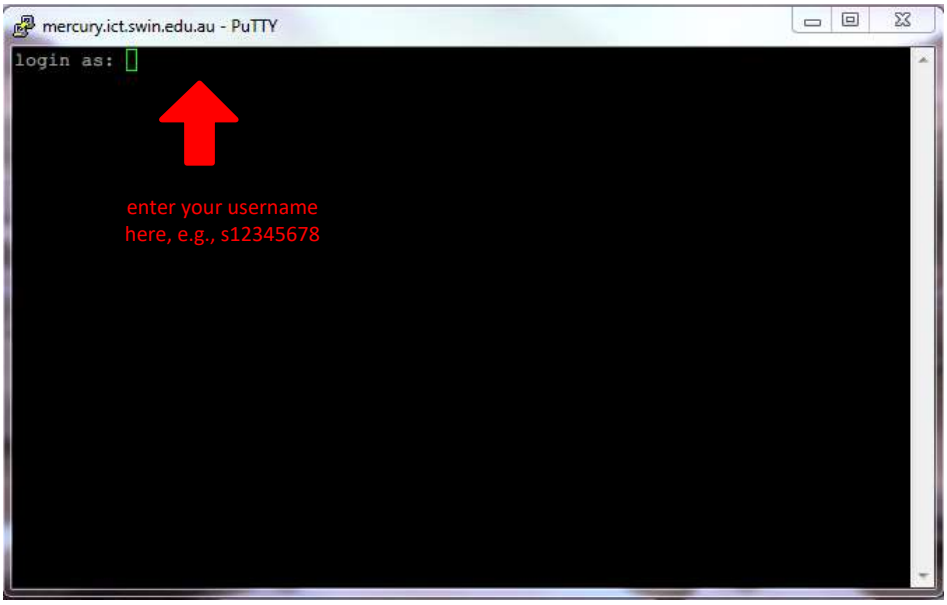


Figure 3. Entering Username

Step 2: Create a web page for testing.

Use a text editor on your local computer (e.g. NotePad++ for Windows users and Sublime Text for Mac users), create a file named "`myhtml.html`" and encode the following:

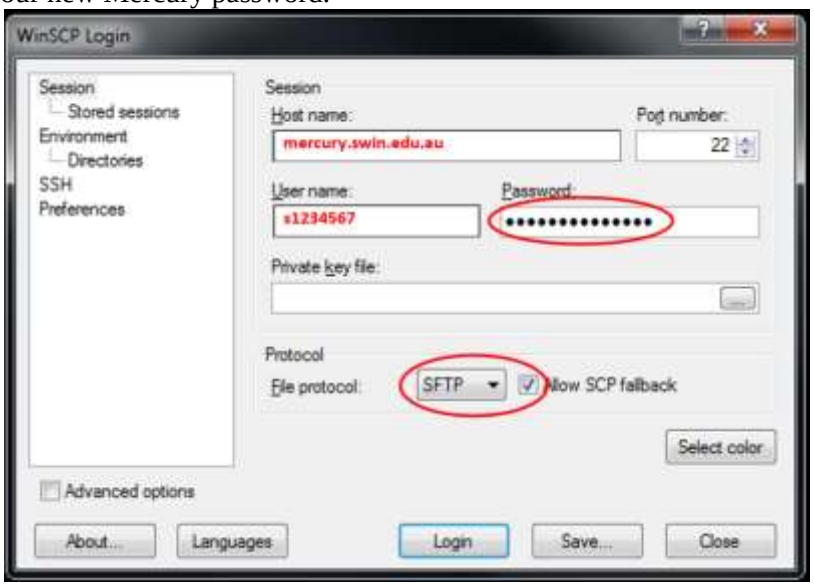
```
<!DOCTYPE html>
<html lang="en">
<head>
      <title>My First HTML 5 webpage</title>
      <meta charset="utf-8">
      <meta name="description" content="Web development">
      <meta name="keywords"    content="HTML, CSS, JavaScript">
      <meta name="author"      content="your name">
</head>
<body>
      <!-- First HTML5 Example -->
      <h1>Web Development Lab01</h1>
      <h2>THIS IS MY FIRST WEB PAGE!</h2>
      <h2>I DID IT!<h2>
      <h2>I DID IT!</h2>
      <p>Wait. Can I use .htm instead of .html as my file extension?</p>
      <p><em>Give it a shot!</em></p>
</body>
</html>
```

Note: We strongly suggest that you use NotePad++ or Sublime Text to create and edit web pages. Notepad++ is available on all PCs in the labs and free for download at http://notepad-plus-plus.org/ for your own PCs. Sublime Text is also free for download on Macs. These text editors will make coding webpage much less painful. Trust me. ☺

Step 3: Access Mercury using WinSCP (or FileZilla for Mac users).

To view and test a web page, you need to place it on Mercury properly.

Use '**WinSCP',** a SCP (Secure Copy and Paste) file copy/transfer client, (available on most lab PCs under *Start>Programs>Network),* to log in to Mercury, with the host name "*mercury.swin.edu.au*", user name ***s****<your Swinburne ID>* and your new Mercury password.



Note: Mac uses can use Filezilla instead of WinSCP, available at https://filezilla-project.org/.

After a successful log in, you will the folder system of your local computer on the left the folder system of the Mercury server on the right. On the right, you will be able to see the unit folder "cos10005".

Step 4: Create a folder (directory) to contain your web page files.

It is strongly recommended that you create a folder for each lab and assignment.
Use WinSCP to access Mercury, create a folder/directory named "**lab01"** under ~/<*your unit code*>*/www/htdocs* folder on Mercury.

Note: Apache web servers are case sensitive. It is recommended that when naming files or folders you always use lower case and avoid non-alphanumeric characters, such as a space.

Step 5: Transfer your web pages to the web server.

To view and test your web pages, you must place the web page files into `~/cos10005/www/htdocs` folder on mercury or any of its subfolders.

Using WinSCP, drag and drop (or copy and paste) your file '`myhtml.html`' from your local computer to the ~/<your unit code>/www/*htdocs/lab01* folder on the server.

Note: Refer to the examples in Step 6 below to make sure your web pages are in the right place.

Step 6: Test and view web pages through a browser.

To view your web page, use any web browser and type in the following address,

http://mercury.swin.edu.au/<your unit code>/***s***<*your Swinburne ID*> /<folder>/<filename>

Please refer to the following examples to identify the URLs of your web pages.

Folder on Mercury Web Server	URL
~/cos10005/www/htdocs	http://mercury.swin.edu.au/cos10005/s1234567
~/cos10005/www/htdocs/index.html	http://mercury.swin.edu.au/cos10005/s1234567/index.html
~/cos10005/www/htdocs/lab01/myhtml.html	http://mercury.swin.edu.au/cos10005/s1234567/lab01/myhtml.html

Note: You can copy the URLs in the table, but remember to replace the unit codes and student id in the above examples with yours to obtain the URLs of your web pages on Mercury.

[IMPORTANT] When the browser authorization request dialog pops up, use your **SIMS username** *and* **password** to confirm access, **NOT** your mercury username and password.

Notes:

- Step 1 is only done once. This is to setup your Mercury account and password.
- Steps 2 and 3 are performed every time you start a HTML/CSS/JavaScript development session.
- Steps 4 to 6 are performed repeatedly in sequence when creating, testing and debugging your HTML/CSS/JavaScript codes.

Problems:

- For password problem, such as forgotten password or invalid account, call ITS Service Desk on 9214 5000 and inform them of your situation.