

SWE 642: Assignment 1

Student class Web page

Your first assignment is to create your own class Web page, which should be password protected. Your homepage should contain at least a picture. You will submit all future homework assignments by posting links on your class web page. You can use *mason.gmu.edu* for your web page. For this class, it is **required** that your class web page be **password protected** (using a PIN). When you will post your homework solutions on this web page, the contents must be protected. You must use the username "swe642" and the same PIN that you will create with this assignment. Please provide a URL and the PIN (i.e., password) to access your *class web page* to **me** and the **TA** by the due date.

The following are instructions for creating a web page on Mason, including how to create a password protected directory.

INSTRUCTIONS TO CREATE A MASON WEB PAGE

All GMU students have an account on **mason.gmu.edu**, and can create small websites. Space is limited. Following is a simple list of commands that will help you create a simple web page. Use these commands **after** logging on to mason.gmu.edu (the same account and password as your gmU patriot web account).

For logging on you will have to use an ssh client (WinSCP for Windows/ Cyberduck for MacOS) to transfer files (SFTP) from your local computer to mason server. For further information on how to connect to mason.gmu.edu refer to <http://labs.ite.gmu.edu/index.php/FAQ/SSH> Windows users may use PuTTY to execute following commands, Macs have terminal (ssh)

Credentials to connect to mason.gmu.edu:

Hostname: netid@mason.gmu.edu // netid is your mason email id without @masonlive.gmu.edu

Port: 22

Password: Patriot Web password

- `cd` // Go to your home directory
- `chmod 711 .` (It is `chmod 711` (space) dot) // Makes your home directory readable
- `mkdir public_html` // Create the standard home page directory
- `chmod 711 public_html` // Make the directory readable
- `cd public_html` // Go to the home page directory

Your URL will be: **<http://mason.gmu.edu/~username/>**

Instructions for creating a password protected directory, in Apache:

These instructions are based on the Google's Authentication, Authorization, and Access Control tutorial: <http://httpd.apache.org/docs/1.3/howto/auth.html> You should see something like the following:

If you are not familiar with Unix commands, it is important to follow these instructions **precisely**. To password-protect a directory in the Apache web server, you must create a directory, give it the appropriate permissions, create the file *.htaccess* with the correct permissions and contents, and create a password file. We are going to name the directory *testaccess*, and the password file *users*. Start from within your *public_html* directory (or another directory in your website).

Windows users may use PuTTY to execute following commands, Macs have terminal

Before starting, find out which *disk partition* your home directory is on. After logging on to *mason.gmu.edu*,

enter the command *"pwd"* // write down the output of this command somewhere

You should see something like *"/home/u3/USERNAME"*. *"u3"* is the disk partition; yours might be *u2*, *u4*, *u5*, or something similar. Use that partition in the command below

1. `mkdir testaccess`
2. `chmod 711 testaccess`
3. `cd testaccess`
4. create *.htaccess* file (It is dot htaccess) with the following contents:

```
AuthType Basic
AuthUserFile /home/u3/USERNAME/public_html/testaccess/users
                (Replace "u3/.../public_..." with whatever you got from the pwd command)
AuthName "642 homeworks"
require user swe642
```

You can create this file using *"vi"*, *"pico"*, or any other editor on mason:

Command: `pico .htaccess`

Hit **Ctrl + O** (letter o) to save

Or you can create it on your local computer and upload it via sftp. **Make sure it is in the right place!**

5. `chmod 644 .htaccess` (It is dot htaccess)
6. Create the password file and add the user *swe642* with a password, using this command:
`/usr/apache/bin/htpasswd -c users swe642`

The option *"-c"* will create the file and the program will prompt you for a password for *"swe642"*.

7. `chmod 644 users`

8. Create an *index.html* file in the testaccess directory. You can create it with a Unix editor or create it on your computer and use sftp (WinSCP or Cyberduck to copy it up).

9. `chmod 644 index.html`

(Do `chmod 644` for all files you upload to server)

10. Test through a browser by trying to access the directory:

<http://mason.gmu.edu/~USERNAME/testaccess/>

Grading Rubric

The grading for assignment 1 will be as follows:

- (2 points) — If url is submitted
- (2 points) — If url opens correctly
- (2 points) — If we get prompt for user id/password
- (2 points) — If directory opens correctly after entering the user id/password provided
- (2 points) — If the page contains at least a picture