



EN 605.681 Principles of Enterprise Web Development

Homework for HTML/CSS

Assignment:

Create HTML and CSS pages that are accessible from your home directory on the class computer (see [Class Resources](#)). Your HTML page should be comprised of the HTML 5.0 tags provided in the lecture material in conjunction with those required in the assignment below. Your page should also have a link to another page that contains CSS content. That CSS content should dictate all of the styling on your HTML page.

Our Bryce Canyon Hiking Company (BHC) would like a basic web page that illustrates some of their services and a few photos. In case you haven't figured it out by now, we will be developing for BHC for most of the remainder of the semester.

They'd like you, the expert HTML designer, to come up with something. The web page should use HTML 5 and include **all** of the following:

- A link to another document, in this case the National Park Service website with more information on the area. The URL is <https://www.nps.gov/brca/index.htm>
- At least one embedded html image. Some images are found at the bottom of this page, you can save the images and then use them in your web page.
- An HTML list. The list should show four hiking tours. It should include Navajo Loop, Rim, Fairyland Loop and Mossy Cave.
- An HTML table showing tour options to the above destinations shown in the list. Navajo Loop Hikes can be 3 or 5 days, and is intermediate in level, with a cost of \$40/day. The Rim Trail Hikes are 2, 3, or 4 days and are \$35/day and all are easy hikes. The Fairyland Loop Hike is 5 or 7 days and is \$45/day and is difficult. Finally, Mossy Cave Hike is 4, 5 or 6 days and is \$30/day and is intermediate. All hikes have a 50% surcharge for Sat/Sun hikes.
- A link to an external page containing CSS styling for your HTML. Note that all CSS must be in the external page and not included in the HTML page in any way.

The linked CSS page can have any styling that you wish on any tags. You can use tag types or class/title names to designate styles. The only requirement is that you **MUST** satisfy the following requirements in your styling of the HTML page:

- All of your table headers (Hike, Hike Lengths, Hike Level, Cost) must be in bold white letters with the background (of just that table header row) being a dark contrasting color of your choice.
- The text in your Hike column must be the same color as the background used in your header row
- The text in your level column must be italicized
- The text in your Hike list must be bold and italicized

Once you have completed your HTML/CSS pages you must validate the HTML (not the CSS) from the W3C validation pages at this [link](#). There are many validators available on the web and available as desktop applications and plugins, but I am requiring that your validation be at the W3C page for consistency across the class and for my grading. Your page must come back with ZERO errors or warnings. That means you should make changes to fix any feedback and then revalidate it before submission.

Submission:

The following three items must be collected in a single zipped up file and submitted to Canvas using the naming convention indicated in the class [Syllabus](#). You must also provide the URL for me to view your pages on the class web server (see below) in the comments area of the Canvas submission area.

- Your source for the HTML page
- Your source for the CSS page
- A screenshot of your validation with no errors/warnings from the W3C online validator

In addition to your Canvas submission, you must also upload your source files to the Tomcat web server on [web3.jhuep.com](#). There are instructions on how to do this and how to determine the resulting URL in the class notes for HTML Fundamentals. To upload them to the course computer you should use [sftp/scp/pscp](#).

You can use SFTP (FTP is not secure and is not enabled on web3) to upload your HTML/CSS files to the public_html directory on your account on the class computer. Remember, SFTP/SCP uses port 22 to connect. If you haven't used sftp before, you would do something like:

1. sftp <your JHU username>@<the class computer>
2. <enter your password>
3. if you started the sftp process other than in the directory that contains the files, use the "lcd" command to change "local" directory to where the files are located
4. use the "put" command to now upload the files

To use SCP,

Open a shell window and then cd to the directory that contains the files, then

```
1. scp SourceFile.ext <your JHU username>@<the course computer>:public_html/TargetFile.ext
```

To use Putty SCP (pscp.exe)

```
1. pscp SourceFile.ext <your JHU username>@<the course computer>:public_html/TargetFile.ext
```

You can also use FileZilla, which is a GUI based file transfer application.

Don't forget to include the URL to your homework in your Canvas comments. There will be a penalty for not doing so.

File Permissions

One issue that students have had problems with before is file permissions on the Linux host.

When you upload, you can see file permissions on files in a directory by typing

```
ls -la
```

All of your directories should be at least drwxr-xr-x, your files should be -rw-r--r--.

If they aren't you can change directory permissions with

```
chmod 755 <directory name>
```

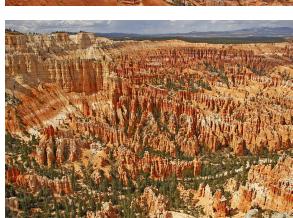
And you can change file permissions with

```
chmod 644 <file names>
```

You can use wildcards as part of the file/directory names.

Images

Here are some images you can use.



Grading:

The grading for this homework is based on

1. Submission of a W3C validated web page with zero warnings or errors.
2. Submission of a web page that satisfies (at a minimum) the requirements stated above for HTML and CSS
3. Successful deployment of your pages to the class server. I should be able to go to your stated URL and view the HTML page in a browser. The page should be visible with the styling from the linked CSS page

Here is a general breakdown of the grading:

- HTML/CSS Content Visible from the class server via a Firefox or Chrome browser - 20%
- A screenshot from the W3C HTML validator showing that your HTML/CSS is valid - 5%
- A Canvas submitted HTML page with the following elements (total 55%):
 - Link to your external CSS page - 10%
 - A working link to an external page - 10%
 - At least one embedded image - 10%
 - An HTML List of all the hikes - 10%
 - A table that satisfies the stated requirements above - 15%
- A Canvas submitted CSS page with the following elements (total 20%):
 - Table header styling - 5%
 - Table Hike column styling - 5%
 - Table Hike Level column styling - 5%
 - Hiking List styling - 5%

Failure to provide an external CSS page will result in no credit for the CSS portion of the assignment; even if you have CSS styling embedded in your HTML page (which you should not).