

Introduction & Overview

Web sites are collections of web pages and are hosted on web servers. Their file structure and directory paths are usually different than those of the development systems we use to create the HTML, CSS, JavaScript, and other files. Other subtle differences like case sensitive path name can, and do, cause differences between what we see on our own systems, and what users might see when viewing them over an HTTP connection.

Reviewing and expanding on the content of COMP CO710 HTML and CSS, you will create a mobile-friendly, multi-page web site using the Bootstrap CSS Library. The web site will be hosted on a real server and will be evaluated both for its construction (coding) and how well it meets the design (artistic) requirements.

You will be creating a CSS animation and using Bootstrap CSS to create a responsive design. Both elements can really “up our game” in the visual appeal department, though they can seem intimidating at first. With a little practice they are well within our capabilities. Having experienced flexboxes and their use in responsive design, you may even prefer using Bootstrap.

All elements in your submission must be styled to some degree but it is not expected that you try to create a work of art. We all have different talent levels with artistic expression and a simple but effective, professional presentation will be very satisfactory. Finding cute elements on external sites and incorporating them is not as good an approach to learning these techniques and is forbidden. Create your own simple designs so that you can understand the syntax and interactions.

JavaScript is not permitted in this assignment. There is flexibility to be creative, if you are uncertain about a creative choice, please post a question in the discussions area or email your professor.

Learning Objectives

The goals of this assignment are to:

1. review and practice the HTML and CSS instructed in first semester course
2. learn the course’s documentation standards
3. learn to validate that your HTML and CSS files are standard compliant
4. learn to host web files on a real web platform using sftp
5. learn to create a CSS animation and integrate it to your page
6. learn to use Bootstrap CSS to create responsive design

Requirements

As part of “upping our game” you will be expected to improve upon any aspects that were not achieved in COMP CO710. This will include correcting some bad habits and moving towards a more professional development style.

1. You will create a web site that consists of 2 different HTML files and 1 CSS file. The files will be named **index.html**, **page2.html**, and **assign1.css**. Please note the case of these files, Index.html is not the same as index.html, and while a Windows working environment will be forgiving of these kinds of mistakes, the Linux hosting environment will not.
2. You will create a header, navbar, main, and footer elements on each HTML page you create. You may further divide these elements with containers as needed, and the use of semantic elements is highly encouraged¹.
3. Except where noted, the header, navbar, and footer should be the same on each page. This structure will be expanded on in the Server-Side Programming course in semester 3, which is why we are adopting it now.
4. All CSS must be contained within your assign1.css file – **no inline CSS or style block is permitted**.
5. Your HTML and CSS files must validate to current standards. Penalties will also be assigned for the use of the
 or
 tag to move containers – it is only to be used to break lines of text within a container. Instead of break tags you should use the **display** CSS element.²
6. Each page of the website must contain at least one img tag linking to an external file (a jpg/png/etc)
7. Each page of the website must contain a responsive design using the Bootstrap CSS Library targeting at least 2 views – one that is representative of a desktop computer and one that is representative of a mobile phone.
8. Only Bootstrap 5 may be used. No other versions are permitted.

Content

Header

Your header must include the following elements:

- An original CSS Animation that lasts at least 20 seconds, or preferably repeats infinitely.
 - The animation must modify at least 3 different CSS properties.
 - It could be used for a decorative, instead of a functional purpose.
- The title of the page
- Your name and student number

¹ See https://www.w3schools.com/html/html5_semantic_elements.asp

² See https://www.w3schools.com/cssref/pr_class_display.php

Navbar

Your navbar must include the following elements:

- Links to the index page and to page2
- The link of the current page we are on must be disabled but visible on each page, i.e., if we are on the index page the link to the index page should be greyed out, and only the page2 link should be available.
- Your **anchor tags** must be **styled** to look like buttons, but not be buttons
- An original CSS animation that activates on hover or focus of the links

Main

Use one of the following themes for your web site:

- A reflection on your goals in coming to college on the index page, and an analysis of what skills you developed in first semester on page2.
- A brief description or overview of an interest or hobby that you have on the index page, and a specific example of your involvement with that interest or hobby.
- An original short story about your character going on a field trip to a Hamilton area museum on the index page, and what happens when one exhibit suddenly comes to life on page2.
- Present a poem on the index page, and a short article about your interpretation of the poem on page2. The poem may be copied from the Internet but must be sourced in a comment.
- A faux landing page for a blog introducing yourself on the index page, and a faux blog entry about what you hope to do for a living after college on page2.

Do not copy content from an existing web site or from Wikipedia to flesh out your page. Note that although the specific content of your selection will not be evaluated from grammar, et cetera, the presentation, design, and layout of your page will be. It should not simply be presented as two large blocks of unformatted text.

The Footer

The footer must contain a copyright notice like: "© 2023, Stephen Adams, Mohawk College". Use your name and the current year.

Hints and Notes

- Server like CSUNIX often run some version of Unix which has its own rules about file names. The rule that most often trips up learners is case sensitivity. When preparing your work, be very careful to notice the difference between path names like **"a2"** and **"A2"**, Unix will treat them differently.
- The web server, often a program called Apache, reads the directories on the CS Unix machine in a special way. Your directories inside of the `public_html` folder are available on the web. When Apache reads the file and directory names, spaces in the names will be translated into `"%20"`. A directory name like **"assignment 2"** will become **"assignment%202"** when accessed through your browser. Some other special characters are also translated into these codes. For these reasons you should try to avoid capital letters, spaces, and special characters in your file names. This often comes up, even when students are very careful, on **images** named with spaces and uppercase letters.

Some other common mistakes include:

- Do not use the
 or
 tags to move HTML elements, use CSS.
- All CSS must be contained in external CSS files – no inline or embedded styles in your HTML file.
- Don't forget the comment with your name, student number, and the file's purpose.

Handing In

To eligible for grading **both** of the following steps must be done:

1) Submit to CS Unix

Upload your completed assignment to CSUNIX in your public_html/private/10259/a1 directory. You may need to create this directory. Verify that your upload worked by viewing your web page in an incognito window in your browser (does not use the cache).

2) Submit to Canvas

Make copies of your HTML and CSS files that you uploaded to CS Unix and add ".txt" to the end of each file name. For example, "index.html" should become "index.html.txt" and "styles.css" would become "styles.css.txt"

Upload these renamed HTML and CSS files to the Canvas drop box for assignment 1. Do not archive your files (no renamed zip files). Do not upload any multimedia files, i.e. images, videos, music, etc. Just 3 files, no extras.

Evaluation

See the rubric posted on the LMS for details of the evaluation.