

# Assignment #4: HTML/HTML5, CSS, and JavaScript.

**Due:** Due Friday, December 1, 2017, at 11:30 p.m.

## **Learning Goals:**

This assignment will allow you to demonstrate your mastery of the following topics:

- Basic HTML5 for web page creation, including structural tags
- Basic CSS (Cascading Style Sheet) creation and application to HTML tags
- Selecting and embedding media in web pages
- Using JavaScript to interact with your user (e.g. Input/Output) via web pages
- Designing and deploying JavaScript in a web page so as to afford your user the possibility of doing something (e.g. selecting something given a set of criteria, calculating something and giving a result, playing a game, etc.).

**Submission:** This assignment may be done in a group of 3 to 5 people. DO NOT ask me if you can do it with 1 or 2 or 6, etc. The assignment will be made up of several HTML pages uploaded to the UVic Web Server accessed via the Netlink account of **one group member**.

The Assignment will be turned in for marking by copying and pasting the URL to the CSC105 Connex website → Assignments → Assignment 4.

When submitting the URL to Connex, the person submitting the URL will do the following:

- Make sure that the NAMES of everyone involved in the group are entered into the Assignment 4 Submission Text box.
- Paste the URL into the Assignment 4 Submission Text box and submit the assignment.
- **ONLY one person in the group submits the assignment – marks deducted if more than one person in the group submits the URL.**

## **References:**

**W3Schools:** <http://www.w3schools.com/>

**Uploading to your Netlink account:** <http://youtu.be/skHhrm7-CHw>

## **Notes:**

1. DON'T LEAVE THIS UNTIL THE LAST MINUTE!
2. Create backup copies of your work by saving older versions under different file names and/or in different folders.

3. HTML can be edited on Macs, Windows, or Linux machines. However, it may look different in different browsers. We will most likely be using Firefox or Chrome to evaluate your work, so do test it on both those browsers.

### **Overall purpose of Assignment 4**

As noted above, this is a group assignment. Everyone in the group will get the same mark. However, the instructor reserves the right to assign grades differently within a given group if it is clear that everyone in the group has not contributed equally to the assignment.

Assignment 4 gives you and your group a chance to demonstrate mastery of some basic HTML5 / Cascading Style Sheet / JavaScript concepts. Rather than following a step-by-step procedure you and your group will be given a series of requirements. It is up to you and the group to determine how best to demonstrate your mastery of this material.

### **REQUIREMENTS:**

1). **Create a set of web pages** with a consistent look and feel on a topic of your choosing. If you cannot think of a topic you can design a website that is designed to bring attention to **one** of the following:

- An environmental cause and/or issue (e.g. climate change, sustainable energy issues, forestry, food production, water conservation, sustainable transportation, etc.);
- A social cause and/or issue (e.g. homelessness, hunger, safe injection sites, events to support research into various diseases, child welfare, poverty, etc.);
- A health and wellness issue ( e.g. spread of Ebola and other viruses, exercise, healthy eating, diabetes or other illnesses, quitting smoking or other drugs, etc.)

The site must contain, **at minimum 4 pages**. You may do more if you wish, but this can be time consuming, so better to do a good job on 4 than a rush job on more.

You and your group will decide upon a look and feel for the site and carry this through on all the pages.

You and your team are allowed to use CSS Templates, but you must make them your own by changing the text, colours and images. You may change more than just those three components for better customization. Here are a few places you can go to look at templates:

[40 Free HTML5 & CSS3 Templates](#)

[Free CSS Templates](#)

[Free Website Templates](#)

[More Templates](#)

However, do be aware that in order for me and the marker (and the rest of the world) to see your project you must locate these pages on your Netlink account (see point 5 below).

Only one person on the team has to upload the pages to her or his Netlink account – but, the pages must be located on someone’s Netlink account. **This is not as easy as it looks – do an upload and test your templates early. Test on at least two different computers.**

## 2). HTML/HTML5 Tags

As well as following proper general structure (head and body), the site will use the following HTML5 tags to set up its structure:

- <HEADER> </HEADER>
- <FOOTER> </FOOTER>
- <NAV> </NAV>

This structure, or something similar to it, must carry across to all pages on your site. All pages in your site should be accessible to all other pages. It is likely that most templates will already have these tags in them but it is up to you to make sure.

Other tags, like <Aside> </Aside> or <Article></Article> may also be used.

Other tags, like list tags, table tags, paragraph, and break tags will be used as necessary in your pages. (It is likely that most templates will already include these tags, in that case no extra work is required.)

## 3). CSS

All of the HTML5 structural tags noted above in 2). will be styled in a Cascading Style Sheet. The Style sheet will be in a separate file and linked to your web pages in the HEAD of each page. Again, these things will most likely be styled already in the template’s css file.

As well as styling all of the HTML5 structural tags, the css file will also style the BODY component of the web pages.

Other styles are allowed too – style what you want to achieve the effect you are looking for on whatever elements you wish.

## 4). Page Requirements

At minimum your website is made up of 4 pages. Below are some suggestions for each page but you may have other ideas. Just be sure to include all the suggestions below somewhere in your site.

1<sup>st</sup> Page or “home” page:

- Introduce or characterize in some way what your site is about.
- Have a “tag line” that characterizes your team’s purpose in some way. Tag lines usually go with a logo, or title, or as part of an introductory paragraph.
- Links to all of the other pages on the site in a <NAV> tag

2<sup>nd</sup> Page – the “media” page:

- At least one sized image that works with your topic.
- At least one embedded video that works with your topic.
- Embed at least one customized map from Google Maps that works with your topic.
- An HTML table used in some way to organize some or all of your media.
- Descriptions/headings/text to weave the media components together – in other words, don’t just plunk the media components down on the page, make them part of the user experience by giving them meaning within the context of your site.
- Links to all of the other pages on the site in a <NAV> tag

3<sup>rd</sup> Page – the JavaScript page:

- Prompts the user to enter a name.
- Use an if statement to say either “Good morning user\_name, Good afternoon user\_name, Good evening user\_name, or Good day user\_name to the user, where user\_name is the name the user entered at the prompt.
- A widget of your own design that uses form components to interact with the user – it should solve a simple problem (e.g. calculate a carbon footprint, what a donation of x dollars per day can buy, virus comparison tool, etc. ), or let the user play a game, or just generally do something based on user input (e.g. change the colour of elements on a page). You should write a paragraph describing how the Javascript behind the tool works. Reference any outside resource that helped you with this widget (you don’t have to reference lectures / labs).
- You may also add some JavaScript you have discovered online – put a comment in the code saying where it came from and list it in the references section.
- Links to all of the other pages on the site in a <NAV> tag

4<sup>th</sup> Page – Contacts & references page

- You should have a listing for each person in the group here with a little bit about them.
- Include an image of each member.
- You should also list any references here.
- Use any of the reference styles you wish (e.g. APA, MLP, Chicago Style, etc.) to reference your work. Use <http://www.wikihow.com/Cite-a-Website> to learn how to cite web pages.
- Links to all of the other pages on the site in a <NAV> tag

## 5). Uploading and display

None of the work in the four points above can be assessed if you don’t get the material successfully uploaded to your Netlink account. We will talk about how to do this in lab, but here is a video to assist:

Uploading to your Netlink account: <http://youtu.be/skHhrm7-CHw>

After uploading and checking your URL on several different computers, one of the team copies and pastes the URL into Connex → Assignments → Assignment 4 text box. Ensure that the name of everyone on your team is also in this text box. Submit as normal.

**Final note** -- the staff at the **Computer Science Consultants Office (Help Desk)** are there to help you. They can't "do" the Assignment for you, but they can help out with application problems, printer problems, understanding questions, saving documents, uploading and moving files, etc. You can call on them for help, as well as dropping in for help with Kirti, Rizwana, Ahmad or Rich.