Assignment #1: HTML & CSS

**COMP 2511 - Web I: Client Development** 

Due date: February 28, 2025 – Before midnight, before 11:59 PM. <u>Late assignments will be given a mark of 0.</u>

**Group Assignment**: A group may consist of <u>no more</u> than 2 people. I will approve 1 group of 3 people due to the odd number of students enrolled in this class.

#### **Outcomes**

The intent of this assignment is to build your knowledge of using HTML and CSS. Skills learned in this assignment are subject to examination. Upon successful completion of this assignment the student will:

- Understand challenges when applying design principles (PARC principles)
- Experience low-fidelity prototyping
- Understand the syntax of HTML markup.
- Be able to describe and apply semantic tags to create structural meaning.
- Be able to build a consistent navigation structure over multiple pages.
- Be able to understand and use appropriate HTML attributes and tags.
- Use absolute and relative links correctly.
- Include at least one image in the webpage and give appropriate credit to the source.
- Use CSS selectors.
- Apply CSS stylesheets to achieve consistent appearance of the elements as directed.

#### **Submission**

You will be submitting your work through the I: drive: (Academic Files/) AcadShare1/Labs/Compsci/Resources/Comp2511/003

#### **Grading**

Your assignment will be graded based on the overall quality of the pages, consistency between pages, as well as completion of the requirements on a per page basis.

#### Part 1: Design & Sketching

## **Taskwork and Teamwork)**

- Read the requirements and meet with your project partner to divide tasks equally. List all
  tasks and assign them each to one member of the team in a planning document
  (README.txt). The planning document may change from your initial discussion.
- Both team members must contribute to the project.
- Both members of a team must be knowledgeable about the whole project. Your instructor
  may ask questions for a team member or request a team member to modify any of the
  pages in your site. Make sure to review the pages that are developed by your teammate.
- Students may be asked to demo their project to their course instructor.

#### **Design Requirements**

- To obtain full marks, **sketch** the layout and content structure that you will use for the pages necessary for your website.
- Remember, sketches should be done in ink (markers, color pens, not pencil), and you should annotate the sketches since you will not be explaining them to me in-person (unless requested)

#### Part 2: Content, Structure, and Style

#### **Content Requirements**

In this assignment, you will be developing a Website on a topic of your choosing. This can be an educational Website about a topic in your program, a business that you can start with the degree that you are studying at MRU, etc.

Select a topic you both can relate. Your project should be unique to the class and your website should not copy-paste content from an existing web page on the Internet.

You are being asked to **sketch** the layout of your website, **source** (**or create**) content for your Website, **structure** using HTML, **style** it through the application of CSS stylesheets, and **analyse** it by applying design principles.

To get ideas, look at company websites like your, and ask the following questions: What do you think their website is missing? What are they doing well?

#### **Structural Requirements**

- 1. You must submit valid <a href="https://validator.w3.org/">https://validator.w3.org/</a> and semantically appropriate HTML 5 code (use semantic tags like header/nav/etc.).
- 2. You must create at least 3 web pages that will define your website. The pages must be named properly in their filenames and page titles.
- 3. Each of your pages must be consistent with one another. There should be:
  - a. a consistent look and feel between pages
  - b. navigation menu with links to/from all 3 other pages
- 4. Your website must include:
  - a. A logo for your page. This does not have to be professional and you may choose to use a copyright free image that you found on the Internet. Remember to site your source!
  - b. Appropriate content on every page.
  - c. Appropriate META tags must be provided for each page.
  - d. Ensure a unique and descriptive <title> tag for each page.
- 5. Use the following elements in your website:
  - a. At least, one photo (not the logo). enclosed in a <figure> with a <figcaption> All images must be stored in a local directory called images. You must define "alt" attributes for all pictures. (Note that you may leave the value of alt attribute empty for decorative images.
  - b. At least one HTML comment. This can be anywhere in the page.
  - c. One External link to another Website that opens in a new tab
  - d. At least one link to another place on the same page.
  - e. A table with a merged (spanned) cell.

- 6. Semantic markup:
  - a. Use <nav> tag and define a consistent "menu" on each page.
  - b. Use <header>, <main>, and <footer> <article>, and <section> tags to properly define the structure of your pages.
- 7. A form design for contacting you that has:
  - a. Salutation
  - b. First name
  - c. Last name
  - d. Phone number
  - e. Email
  - f. Subject
  - g. Body textbox
  - h. Control the user input as follows:
    - 1. Use the most appropriate HTML 5 inputs for each item above
    - 2. All fields are required
    - 3. 'Autofocus' must be set to the First name
    - 4. Include a placeholder email to show the valid format and a pattern to validate the input.
    - 5. Include a placeholder telephone to show the valid format and a pattern to validate the input.
- 8. Furthermore, add the following elements to your form (you may include them in a relevant requirement from 8):
  - a. Radio buttons with at least 2 different options.
  - b. Checkboxes with at least 2 different options to select.
- 9. Finally, ensure that your form has:
  - a. A reset button that clears all form inputs
  - b. A submit button that submits the form to an email address.
- 10. Valid **HTML 5 markup.** Your site should validate without error (warnings are ok).
- 11. Submit your own raw HTML code evidence of automatically generated HTML code will result in a 0. Remember the purpose of the course is to learn not to do!
- 12. Do not add any internal or embedded CSS, or JavaScript, or other advanced components to the site.

## **Styling Requirements**

1. Use **an external CSS file** to style your website. Include all your CSS files inside a folder called "styles" and include a link to it zin the <head> section of your HTML files.

 All pages must use consistent font, margin, padding. These must be defined using a general CSS file shared by all pages. Page-specific styles should be defined in separate CSS files. Note that you can include multiple CSS files for your HTML files.

## 3. General requirements:

- 1. Navigation menu: In every page, the menu item of the current page must be styled differently. (e.g. special color to indicate the user is at this menu item's page)
- 2. Use the first-letter **pseudo element selector** to style a first letter of (at least) one of your paragraphs differently.
- 3. Use a pseudo class selector of your choice in one of your pages.
- 4. Use a **contextual selector** of your choice in one of your pages.
- 5. Use an **attribute selector** of your choice in one of your pages.
- 6. Style your table using CSS properties to have **striped table format** (i.e., style even and odd rows with different colors. You should **not** use inline styling for this!
- 7. Float an image to the right side of a paragraph of your choice in your website.
- 8. Uses consistent design for the header and footer area in all pages. The whole website should have a professional look and design.
- 9. All pages must use consistent font, margin, padding.

**Note**: If a specific requirement is not given for a part of your Website, you are welcome to use CSS properties to create a design of your choice.

#### **Submission**

- Create a zip file called <u>lastNamefirstNamelastNamefirstName</u> (if you worked in a group of 2) that contains images of your sketches that explain the look-and-feel for the website along with a short explanation of your 'product.
- As discussed in labs, submit the zip file to the following folder:

# AcadShare1/Labs/CompSci/Submit/2511/003

# **Grading Rubric**

	Point	Grade
Planning document is submitted.	2	
Appropriate sketches were submitted.	5	
General	3	
Pages are consistently styled using external CSS files with proper names		
Content		
Includes the 3 pages as described		
Appropriate content	5	
Includes logo		
All images are stored in a directory called images		
Appropriate choices of semantic tags (header/nav/etc.)		
Menu items		
You can create your menu items with spans/list/flexbox		
Menu items are linked to their related pages	5	
In every page, menu item of current page must be styled with different color		
Images		
Include at least one semantically tagged image with a caption		
You must define "alt" attributes	5	
<ul> <li>An image is floated to the right side of a paragraph (this can be on any page)</li> </ul>		
Images are used through relative paths.		

Navigation  One External link to another Website that opens in a new tab  At least one link to another place on the same page.  At least one HTML comment  Table	
One External link to another Website that opens in a new tab     At least one link to another place on the same page.      At least one HTML comment 1  Table	
At least one HTML comment 1  Table	
Table	
T. I	
Table-related HTML elements (table, tr, td, th) are used properly	
A table with a merged cell	
Striped table format is created using CSS properties.	
Form design	
Has all requested elements and requirements specified.  7	
Mandatory fields are visually distinguishable from non-mandatory fields.	
CSS selectors	
Pseudo class selector is used.	
Pseudo element selector is used.  8	
Contextual selector is used.	
Attribute selector is used.	
Design quality	
All pages have consistent and professional look and content.	
Relevant head tag elements used properly (meta/title/link).  6	
Proper use and storage location of shared/page specific CSS files.	
All webpages validate without errors for HTML 5.	
TOTAL 60	0