

MET CS601: Module 3 Assignment

General Rules for Homework Assignments

- You are strongly encouraged to add comments to your source code. Doing so will help your facilitator to understand your logic/approach and grade your work more accurately.
- You must work on your assignments individually. You are **not allowed** to copy the answers from others. However, you are encouraged to discuss approaches to the homework assignment with your facilitator
- You are expected to write your own code for all assignments. You may use an IDE or advanced text editor for your assignments, but you **must not** use any auto generated code provided by such tools or other applications. So be sure to write your own code in the editor window, don't use the WYSIWYG builder (if applicable).
- Do not use any unapproved code libraries or frameworks.
- Each assignment has a strict deadline. However, you are still allowed to submit your assignment within **two (2) days** after the deadline with a penalty. 15% of the credit will be deducted unless you made previous arrangements with your facilitator. Assignments submitted 2 days after the deadline will not be graded.
- When the term *lastName* is referenced in an assignment's file or folder name, please replace it with **your** last name.

Create a new folder/directory named **CS601_HW3_***lastName*. Place your solution(s) to the assignment requirements in this folder.

NOTE: THIS DOCUMENT CONTAINS MULTIPLE PAGES

Portfolio

This homework assignment is designed to enhance your understanding and skills in using advanced CSS features to create sophisticated web layouts. You will create a responsive web page that utilizes CSS Flexbox and CSS Grid for layout management, along with pseudo-classes, pseudo-elements, combinators, and selectors to style content dynamically and contextually. The assignment will focus on building a professional-looking portfolio page that showcases various CSS techniques to achieve visually appealing and functionally complex design elements.

Requirements

Complete the following using only HTML5 and CSS3 (no other languages, libraries, or frameworks).

1. Web Page Structure
 - a. Design a single-page portfolio layout that includes a header, a main section with a grid of at least four projects, a sidebar for personal information or links, and a footer.
 - b. The header and footer should include relevant content such as the title, logo, navigation links, copyright details.
 - c. Ensure that the layout is responsive and adapts well to both desktop and mobile viewports.
2. Using CSS Flexbox and Grid
 - a. Use CSS Flexbox to design the header and footer sections, ensuring content is properly aligned and spaced.
 - b. Implement CSS Grid in the main section to display projects in a multi-column layout that adjusts based on the screen size.
3. Pseudo-classes and Pseudo-elements
 - a. Apply at least 3 pseudo-classes such as **:hover**, **:focus**, and **:nth-child(n)** to enhance interactivity on clickable elements.
 - b. Utilize one pseudo-element like **::before** and **::after** to add decorative elements or additional content without altering the HTML.
4. Combinators and Advanced Selectors
 - a. Apply at least one type of combinators (e.g., child, adjacent sibling, general sibling) to style specific elements based on their relationships in the document structure.
 - b. Use one attribute selector to fine-tune the styling of specific sections based on their attributes (e.g. type, data attributes).

Assessment/Grading

Your assignment submission will be scored by the following criteria:

1. Strict adherence to the requirements stated above: 70%
2. Code validates without errors (warnings are OK): 10%
3. Overall quality of work and effort as determined by your facilitator: 20%
 - a. Includes your project/assignment also have a README.md file

It is important that your code passes validation; you should use <http://validator.w3.org> for assistance.

You must also validate your CSS code as well, that can be done here: <http://jigsaw.w3.org/css-validator/>

Submission

Export your **CS601_HW3_***lastName* folder containing all the relevant sub-folders and files as a zip file and upload the zip file to the appropriate assignment submission area.