

MET CS601: Module 1 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_HW1_***lastName*. Place your solution(s) to the assignment requirements in this folder.

NOTE: THIS DOCUMENT CONTAINS MULTIPLE PAGES

Interactive Web Form with JavaScript

This homework assignment involves developing an interactive web form using HTML, CSS, and JavaScript. The form will include various input types and a dynamic interface for real-time validation and user feedback. You will utilize core JavaScript concepts such as DOM manipulation, functions, high order functions, and loops to create a responsive and interactive form.

Requirements

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

1. Creating the Form
 - a. Include the following form controls:

Label	Field Type	Requirements Information
First Name	Input (text)	Minimum 2 alpha characters
Last Name	Input (text)	Minimum 2 alpha characters
Email	Input (email)	Must follow a valid email format
Package	Select with options	Valid options: Bronze, Silver, Gold, Platinum
Subscribe	Input (checkbox)	Confirm their subscription to newsletter

- b. Do not set the form action and method.
 - c. All fields are required.
 - i. Except for the Email field, but do not use HTML5 validation on other fields (i.e. **do not use "required"**).
 - ii. All validation must be done using JavaScript.
2. Implementing Client-Side Form Validation
 - a. Both First Name and Last Name fields must contain at least 2 alpha characters (A-z).
 - b. Email should be validated to ensure it follows the standard email format.
 - c. A package must be selected.
 - d. Subscribe checkbox must be checked to proceed with the form submission.
 - e. Use arrow functions and other high-order functions like **map()** or **filter()** to process validations when applicable.
3. Processing and Displaying Results
 - a. Upon form submission, prevent default behavior (e.g. do not reload page or navigate away).
 - b. If any validation fails, provide appropriate feedback to the user.
 - c. If all validations pass, proceed as follows:
 - i. Construct a summary of the user's input, such as:

Thank you, [First Name] [Last Name], for subscribing!
Your email [Email] is registered with our [Package] package.

Note: Replace content in brackets "[]" with the actual data from the form.

- ii. Display this summary neatly below the form (e.g. in a `<div>` or `<textarea>`).
 - iii. Hide the form using DOM manipulation.

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. Level of effort put into feedback mechanism: 10%
 - a) Alert with error messages = OK
 - b) Writing errors to the DOM = Good
 - c) Styling errors or displaying errors in real-time written to the DOM = Great
4. Overall quality of work and effort as determined by your facilitator: 10%
 - a) Includes your project/assignment also have a README.md file

Thoroughly test the form to ensure all specifications are met and that validations are accurately implemented.

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_HW1_***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.