



CMST386: Web Site Design II

Assignment 3: JavaScript Programming

Summary:

Write a Program Design Document to include:

1. Written specifications
2. Algorithm design with flowchart or pseudo code description of program process
3. Known test data

Program Implementation needs to be demonstrated by creating a JavaScript program.

You will need to print out and include:

1. Source code from the text editor
2. Results for at least two runs using your known test data. You must test each branch of your selection structure using the test data.

If submitting using paper, create a cover sheet for this assignment to include your name, class, date submitted, and a title. This assignment is due December 1.

Provide a link to each of your files from the home page for Assignment.

Part A: Program Requirements:

Design and implement a program will convert temperatures between Fahrenheit and Celsius temperature systems:

1. Name your file `temperatures.html` and provide a link to this f
2. Prompt for which Conversion to perform F to C or C to F
3. Prompt for the temperature to convert
4. Perform the conversion using the appropriate mathematical formulas
5. Display both the input value and the results with units
6. Display your name as the programmer.
7. Verify your design using the test data and correct your design if necessary.
8. Implement your design using JavaScript as a procedural program.

Part B: Program Requirements:

Convert your procedural program from Part A into an event driven GUI program. First create a GUI (Graphical User Interface) using HTML5 form elements. Then utilize a form event (click, onchange, keyup) to call a function that will update the text fields of the form.

Due Date and Assignment Submission:

This assignment is due **Week 6** at the beginning of **Class 1**. Late assignments will be reduced 20% for each class period late.

Implement your design by creating an HTML document with JavaScript. Correct all syntax errors until the program runs. Verify your program works using known test data and correct any logic errors.