

## Assignment 1: (30%)

This assignment tests your knowledge of JavaScript variables, operators, pre-defined functions (e.g Math.Random). The following tasks need to be fulfilled for the assignment to be complete.

## Instructions

- 1. The javaScript program should allow users to enter two numbers and generate a random mathematical operations (+, -, /, \*)
- 2. The program should know how to calculate the correct answer based on the two numbers entered and the mathematical operator.
  - Users should be able to guess the answer and the program should be able to display the message "correct" or "incorrect" based on the user's answer and the correct value calculated.

Please refer to the rubric at the end of this document for evaluation details.

## Requirements

1) Package your HTML, JavaScript and CSS code as a zip file and submit to D2L dropbox for Assignment 1.

## **Evaluation**

This assignment is graded out of 35 points using the following rubric and is worth 30% of the final grade.

Learners may receive partial scores or a zero for unacceptable work.

Criteria	Does Not Meet Expectations 1	Partially Meets Expectations 2	Meets Expectations 3	Exceeds Expectations 4	Max Points
Program uses external javaScript file	Does not include javaScript (0 point)	JavaScript is included in the HTML and not in an external file or the external file is not referenced in HTML  (1)	All JavaScript code is in the external JavaScript file and properly referenced in the HTML file (2 points)		2
User can enter numbers	User is not asked to enter any number (0 point)	User is asked to enter number but those numbers are not saved (2 Points)	Users are asked to enter number and those numbers are saved (4 points)		4
Randomly generate mathematical operator	Mathematical operator is not randomly generated or not generated at all.  (0 point)	Mathematical operator is generated randomly but not used. (5 points)	Mathematical operator is generated randomly and used in the calculation (10 points)		10
User answer is compared with correct answer	Comparison is not done (0 points)	Comparison is done but incorrect result of the comparison is reached (5 point)	Comparison is done and result of the comparison is reached (10 point)		10
Result of comparison is shown to the user	Result is not shown to the user (0 point)	Result is shown but it is incorrect (2 points)	Correct result is shown to the user (4 points)		4