

# ITIS 3135 Web-Based Application Design and Development Assignment 3 Introduction to JavaScript

Due 11:59 PM – Thursday, June 10

The goal of this assignment is to utilize HTML and JavaScript to create a simple calculator. You will modify the JavaScript file to make sure that all operations are working in the calculator.

## Part 1: Obtain the required files

- Download "Assignment3.zip" from Canvas from the following link https://drive.google.com/file/d/1QbFz 1irtvO7RdDVmZi8d7euWisYjKX5
- 2. Extract all the files in "Assignment3.zip"
- 3. Rename the file as "Lastname-Assignment3.html" (Change 'Lastname' to your actual last name)
- 4. Also, rename the JS file "Lastname-Assignment3.js" (Change 'Lastname' to your actual last name)
- 5. Then, got to line 9 in "Lastname-Assignment3.html" file (open it using any text editor). Change "Lastname-Assignment3.js" to include your actual last name (since you renamed the .js file and you need to link it correctly in the .html file).
- 6. Once you fix the .js file name in the .html file, open the "Lastname-Assignment3.html" using your web browser. You should see the following page.

ITIS 3135 Calculator		
1st Number : 2nd Number:		
Add Subtract Multiply Divide Modulus		
The Result is : <u>Validate</u>		

- 7. Enter any two numbers in the "1st Number" and "2nd Number" text boxes. Then, click the "Add" button. The result of the addition should appear on the page under the "The Result is:" label. If it did not appear, make sure that you perform Steps 4 and 5 correctly. If you click any of the other buttons, it should show 0 as a result.
- 8. Verify the new webpage is viewable using your UNCC webpage (by uploading the files to the "public html/Assignments" directory).

#### Part 1: Modify the Lastname-Assignment3.js file

- 1. Open the "Lastname-Assignment3.js" using your text editor. This file contains the JavaScript code used on this web page. No need to worry about everything listed in this file. You learn all contents of this file in upcoming classes.
- 2. In this file, there are five functions: "addNumbers", "subNumbers", "multiplyBy", "divideBy", and "modulusOf" that are called when you click the buttons in the HTML file. For each of these functions, the input from "1st Number" text box (in the HTML file) will be stored in the "num1" variable. While the input from the "2nd Number" text box will be stored in the "num2" variable.

The last line in each function (i.e.,

"document.getElementById("result").innerHTML = 0;") is responsible for printing the result of the operation in the HTML file. For example, the "addNumbers" function, which is the function that is responsible for adding the two numbers, adds the two numbers by simply performing "num1 + num2", as you can see in the last statement of this function, to find the sum of the two input numbers.

- 3. For each of the four functions: "subNumbers", "multiplyBy", "divideBy", and "modulusOf", change the last line (remove the 0) in each function. Here, you must replace the 0 with the correct operation between the two input numbers to perform the correct operation described for each function.
  - The "subNumbers" function should subtract the input numbers.
  - The "multiplyBy" function should multiply the input numbers.
  - o The "divideBy" function should divide the input numbers.
  - The "modulusOf" function should calculate the first number modulus the second number.
- 4. Make sure to end each statement with a semicolon.
- 5. Open your HTML file in your browser and make sure that all buttons are working correctly.
- 6. Verify there are no errors.

### Part 3: Upload ALL files to public html/Assignments folder and verify the URL

• Make sure to verify that you have no validation errors on the html file.

# Part 4: Submission

- 1. Upload a zip file from the .html and .js files to the submission page on Canvas.
- 2. Then, click on "Comments" and in the textbox provide the URL of your html file on your webspace.
- 3. SUBMISSIONS WITHOUT THE URL WILL AUTOMATICALLY RECEIVE ZERO.

The rubric for this assignment is available on the following page.

Criteria	Possible Points
Function "subNumbers" is implemented correctly.	2
Function "multiplyBy" is implemented correctly.	2
Function "divideBy" is implemented correctly.	2
Function "modulusOf" is implemented correctly.	2
No error in the HTML file	2
Correct URL	4
Total Points	14