

Lab 1

Introduction

This first lab will have you try to implement some of the JavaScript syntax, event handling, and basic DOM manipulation similar to what we discussed in class.

Objective

Use the **single HTML5 file** that was provide as a template. You will modify only 3 areas in the template to create a very simple calculator. Follow the directions closely.

Requirements

- All HTML tags and page structure should be **HTML5** compliant
- Do not modify the provided template in any way other than in the three areas indicated by the comments (title tag, headlines in body, and JavaScript section). This means do not add, change, or modify any other HTML, CSS, ids. Everything is there you would need for this project. Any additional modifications to the HTML other than the three areas will result in deductions.
- Look at the provide mockup image to see what it should look like.
- The application should function as demonstrated in class:
 - Put in value 1 and value 2
 - Click any of the buttons (add, subtract, multiply, divide) and it will do that operation to value 1 and value 2 and show the answer in the results box.
 - If value 1 or value 2 is blank or not a number you need to instead show an alert prompt stating that one of the two values are not a number or empty and do not show any results in the results box.
 - If a letter or non-number character is put in a value box it should show an alert error saying so.
 - If the reset button is clicked it should clear out all the values in value 1, value2, and the results box.
 - Prevent the user from trying to divide by zero. If they try to divide by zero prompt them with an alert error.
- Each of the five buttons should have a corresponding event handler function that has been attached to the click event on the respective button. Use the `addEventListener` method, do not modify the HTML to add an `onclick` attribute.

Graduate Additional Requirements

If you are involved in **any section of 565** you need to complete the additional requirements listed here.

No additional requirements on this Lab.

README File

Not Required for this Lab

Due Date / Late Policy

This assignment is due **Tuesday January 30, 2018 6:25 PM Chicago Time**. We will discuss this in class on January 30 so **no assignments will be accepted as of class (6:25pm) that night. No Extensions or Exceptions.**

Submission Guidelines

You must upload your submission, to the blackboard assignment by the due date. The submission must be in the following format and structure. If you do not submit your assignment exactly as specified, you will receive an immediate 5% deduction.

Submission Format Specification:

YourUsername_lab1.zip

|

|-----**YourUsername_lab1.html**

Hints

JavaScript possibility helpful Functions and Properties:

getElementById()

addEventListener()

Number()

parseInt()

parseFloat()

isNaN()

string trim() method

value property of a form element

innerHTML

All four math function event handlers should be almost identical except the math operation