

# Project: Calculator

HTML / CSS / JavaScript

## Introduction

Using HTML, CSS, and javascript we will build a simple two number calculator. It will allow for addition, subtraction, multiplication, and division and all interaction with the user will be via the html page.

## Assignment

Create a calculator on the screen that when the user selects the operate button (i.e. “=”) it will produce a result of the requested operation. There should also be a “Clear” button that sets the page back to its original state. The user should not need to interact with the console for this project. All communication should be handled via messaging on the page itself.

first number      second number

4      10

☒ Add   ☐ Subtract   ☐ Multiply   ☐ Divide

=   Clear

The result of adding 4 and 10 is 14

## Requirements

- Should have the content centered both vertically and horizontally
- Two number inputs that only allow numbers to be entered
  - displayed inline with each other
  - focus set to the first one on page load and after clearing

- Radio buttons on one line that provide a choice of operator (i.e. Add, Subtract, Multiply or Divide)
  - Clicking on the label (i.e. the word “Add”) should cause the radio button to be selected
  - Only one radio button should be able to be selected at a time
  - Selected radio button should have bold text
- Equal sign button that causes the numbers and operator to be evaluated and updates the results text
  - styled to be the primary action (i.e. blue or green)
- Clear button that blanks out the number inputs and the results field and sets focus to the first input
  - styled to be the secondary action (i.e. gray)
- Results text that holds any messages to the user
  - Should be styled to be larger than other text on the page
- Do not allow dividing by zero. Present a message warning the user if they attempt to divide by zero.

## Tips

- Use pseudocode to frame out the solution before writing the code
- Use `document.getElementById` and `document.getElementsByName` to access the objects on the page
- Use the “debugger” statement to set a breakpoint in your code to see what it is doing and what values variables have at the time of execution
- This project should only require code elements that were covered in class

## Turning it in

Projects are to be submitted via Github as a repo that is publicly accessible. Submit the link to this repo to the instructor before the last day of the class to receive credit for the work.