

COMMERCE AND BUSINESS ADMINISTRATION
CSIS 3380: Full Stack Development with JavaScript
Assignment 1

(5 % towards your Final Grade)
(20 +20+10+10 = 60 Marks)

Instructions

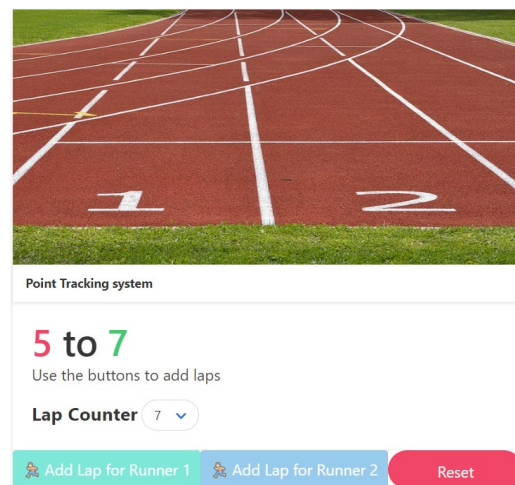
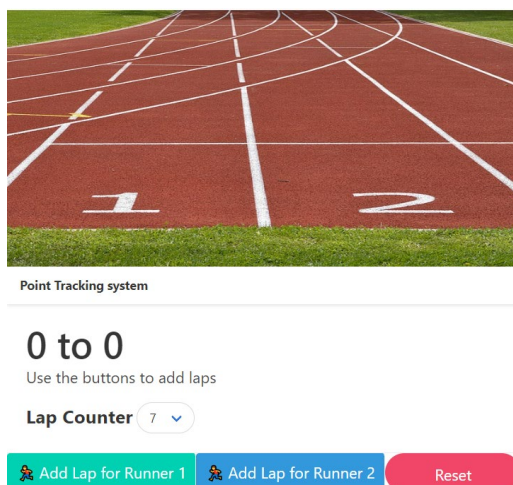
Please begin by downloading the Assignment 1 folder. Rename the folder as: AS1_YourName.

You are provided with an HTML template file that you should use to accomplish the following tasks. Don't modify the template file. Use the external file "as1Solution.js" to code JavaScript (ES6) to accomplish the tasks.

Note: The assignment is to be completed individually. Any form of cheating or sharing of work may have serious consequences.

1. Create a point-tracking system for a race between two runners. Each runner has their own button to track their progress. The buttons are labeled as "Add Lap for Runner 1" and "Add Lap for Runner 2." Allow the user to select a total number of laps to race, with options ranging from 5 to 11 laps.

For example, if the race is set to 7 laps, clicking a runner's button will add one lap to their total. The first runner to complete all 7 laps is the winner. Once a runner wins, their lap count is highlighted in green, while the losing runner's lap count is shown in red. After a winner is declared, both buttons for recording laps should be disabled. Then, you can only click the reset button to reset the score to begin a new race from zero laps.



2. Create a produce selection system for a farmer's market that helps customers track and calculate their purchases of fresh fruits and vegetables.

Instructions:

- The customer enters the name of a fruit or vegetable they want to buy in the textbox and clicks the **Add Produce button**.

Note: If the produce item is left blank or a duplicate is entered, an alert should appear prompting the customer to enter a valid, new item.

- The entered produce item should be added to the select box with **id="produceList"**. After the item is added, the textbox should be cleared, so the customer can enter another item.
- The customer can delete an item by selecting it from the select box and clicking the **Remove Produce button**. The selected produce should be removed from the list.

Note: If there are no items in the select box and the **Remove Produce button** is clicked, an alert should display the message: "There are no items to remove."

- Next, the customer selects the produce from the select box and enters the weight (in pounds) of the selected produce in the textbox with **id="produceWeight"** and clicks outside of that textbox. This weight will be added as the value of the value attribute for the selected option [Hint: Use the blur event with `addEventListener()` to trigger this action]. Also, clear the textbox after the event has happened.

Note: If no weight is entered by the customer, the default weight is 1 pound.

- Finally, the total purchase price is determined by multiplying the weight of each produce item by its price per pound (refer to the table), and then summing the results for all items.

Note: If the user enters an item that is not listed in the table, apply a default price of \$5 per pound for that item.

- The total amount should be displayed in the textbox with **id="totalAmount"** when the user clicks inside the textbox [Hint: Use the focus event with `addEventListener()` to trigger this action].

Item	Price (\$) Per Pound
Cherry Tomatoes	5
Savoy Cabbage	4
Green Beans	6
Yellow Peppers	3
Salad Mix	4
Grapes	3
Oranges	5

3. You are supplied a text file called “*InspirationalQuotes.txt*” that contains 25 inspirational quotes. Copy the text file into an array and thereafter create a function called *displayQuotes()* that will dynamically pick **four quotes** at random to display. The four quotes displayed (in label with *id* = “*displayQuotes*”) should be changed after every 5 seconds (i.e., after every 5000 milliseconds). Use the *setInterval()* function to repeatedly execute the *displayQuotes()* function after every 5000 milliseconds.
4. Create a slide show application that runs the slide show in the div with *id* = “*slide*” using five images (casting1.jpg, casting2.jpg, catchrelease.jpg, fish.jpg, lures.jpg). When user starts the application, it displays a new caption and image every two seconds. The *src* attribute provides the location for the images in the slide show and *alt* attribute provides the caption for the slide. Use the *setInterval()* function to repeatedly execute the *slideShow()* function after every 3000 milliseconds.

Submission:

Compress/zip your Assignment_1 folder and upload it to Blackboard. NO LATE SUBMISSION is allowed.