Mid-Term - Create a "Weekly Calorie Calculator" Application

For this mid-term activity, you'll create an application that allows a user to add their information, update their calorie, find average calories, find maximum calories, and cheat day. You will have **2.5 hours** to complete this activity. Please start from the beginning and progress step wise. Rubric is on the last page. Keep the last 30 min to wrap up and submit your work on Canvas.

Part 0: Download files

- 1. Download *Midterm .zip that contains the Midterm.html*, *Midterm.css*, *and Midterm.js* and save it under the Exercise folder on your computer. Then extract the zip file.
- 2. Verify there are no errors in all the files.
- 3. The current webpage should look like the below figure:

Weekly Calorie Calculator

Show Maximum Calorie and Cheat Day:

<u>Validate HTML</u> Validate CSS

You need it to transform it to the one shown in the next page. Direction are given to you for each change.

Weekly Calorie Calculator Enter you details Name Enter your name Email Enter your email Submit Choose a day: Monday \circ Tuesday 0 Wednesday \circ Thursday 0 Friday \circ Saturday 0 Sunday \circ Enter the Calorie: Update Average Calorie Average Calorie Consumed is: Show Maximum Calorie and Cheat Day: <u>Validate HTML</u> <u>Validate CSS</u>

Part 1: Design the application (22 pts):

After designed and developed, the application should look similar to the above figure.

- 1. Add a form so that it looks similar to the above figure:
 - a) Header with content-"Enter your details"
 - b) Input fields will be for Name, and Email. Add appropriate placeholders and labels.
 - c) There should be HTML validation for the email.
 - d) A submit button.
- 2. Outside the form, add a set of radio buttons with appropriate label and options- all the days from Monday through Sunday. Make sure you can select only one button at a time.

Note: The alignment of the radio button can be different from one shown above in the picture, depending upon the browser.

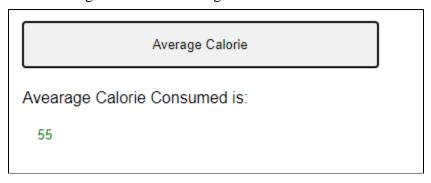
- 3. Input field for the calorie with appropriate label should only accept numbers.
- 4. Two buttons, one for "Update" and another for "Average Calorie".
- 5. Input field for the average consumed calorie with appropriate label.
- 6. In the Midterm.css apply same **style** to the three buttons (Submit, Update and Average Calorie), so that it looks similar.
- 7. Check that there are no HTML and CSS errors.

Part 2: Add interaction to your application (22 pts)

- 1. Two arrays for days of a week and corresponding calories are given to you with pre-filled data in the JS file.
- 2. Write an **updateCalorie**() function. This event will be triggered, after a user chooses a day, enters calorie, and hits the Update button. This function should read the calorie amount entered by the user, and update the calorie in the "calories" array for the particular day that the user choose. With that, it should also show an alert- "Your updated calories details are: " and show the updated calories array. If the user have not entered any calorie and hits update, then an alert should say- "Enter a valid number". After an alert is shown, you should clear the input field for entering a new calorie. Below we show the figure of the alerts.



3. Write the **showAverageCalories** () function. This event will be triggered, after a user hits the Average Calorie button. It should show the **average** calorie inside the input field that has a label of "Average Consumed Calorie is:". Then using JS add style to make the color of the average consumed calorie as **green** and make its background color as **transparent**. A portion of the webpage should look like the below figure after the Average Calorie button is hit.



4. Write the **showMax**() function. This event will be triggered, after a user hovers mouse over the text "Show Maximum Calorie and Cheat Day:". It should find out the **maximum calorie and the corresponding day**, and show it on the HTML page a paragraph (add HTML nodes) as shown in the below figure.

Show Maximum Calorie and Cheat Day: Your maximum consumed calorie is 6000 on Sunday

5. Check that there is no JavaScript errors.

Note: There is no function for the submit button.

Part 3: Turn in your activity

Upload all the files, **Midterm.html**, **Midterm.css**, **Midterm.js** files to Canvas and your webpage account, and add the **URL** to your webpages account to the open-ended comment section on Canvas.

Rubric on the next page.

Criteria		Ratings	
Form Design a) Header with content (1pt) b) Input fields will be for Name, and Email. Add appropriate placeholders and labels. (4) c) There should be HTML validation for the email and all the input field information are mandatory for submitting the form. (3) d) A submit button (1)	9 pts Full Marks	0 pts No Marks	9 pts
Radio button Add a radio buttons with appropriate labels and options (2)	2 pts Full Marks	0 pts No Marks	2 pt
Input field for the calories with appropriate label should only accept numbers (2)	2 pts Full Marks	0 pts No Marks	2 pt
4. Two buttons, one for "Update" and another for "Average Calorie". (1)	1 pts Full Marks	0 pts No Marks	1 pt
Input field for the average consumed calorie with appropriate label. (1)	1 pts Full Marks	0 pts No Marks	1 pt
Same style to the three buttons (3)	3 pts Full Marks	0 pts No Marks	3 pt
Check that there is no HTML, CSS errors, and JS errors	3 pts Full Marks	0 pts No Marks	3 pt
updateCalorie() a) read the calorie amount entered by the user(1) b) update the calorie in the "calorie" array for the day that the user choose and shows the correct alert message (2) c) alert if a number is not entered (1) d) clear the input field for entering a new calorie (1) e) function works as expected (3)	8 pts Full Marks	0 pts No Marks	8 pt
showAverageCalories () a) show the total calorie inside the input field (2) b) use JS to add style (2) c) method works as expected (3)	7 pts Full Marks	0 pts No Marks	7 pt
showMax() a) finds out the maximum calorie and the corresponding day (2) b) show it on the HTML page as a paragraph (1) c) method works as expected (3)	6 pts Full Marks	0 pts No Marks	6 pt
Correct URL provided	1 pts Full Marks	0 pts No Marks	1 pt