

For this assignment you are expected to work alone. You should not copy any code you find online but rather practice with the knowledge you already have. Any referenced code should be properly documented.

The object of this assignment will be practice working with our document object model (DOM), timers, and functions.

TO GET FULL MARKS, YOU MUST:

- Follow all directions below
 - In particular make sure that required function names, variable names, output strings and return string as **spelled and capitalized exactly as described in this document**.
- Make sure that your JavaScript does not generate any errors
 - It is better to have part of your code working than none of your code at all.
- Write your name and student ID in the space provided.
- Indent your code properly
- Name your functions and variable appropriately.
 - Unless you are provided specific function or, variable names, you can use any appropriate name.
 - The purpose of any function or variable should be obvious from its name.
 - You are allowed, but not obligated, to create other functions you feel are necessary.
- Comment your work
 - A comment every line is not needed, but there should be enough comments to fully understand your script.
 - English and French are accepted for comments.

You are not required to validate input, unless it is specifically indicated

ASSIGNMENT DETAILS

The objective it's for a user to stop the counter as close to five seconds as possible.

YOU ARE ONLY ALLOWED TO EDIT THE JAVASCRIPT FILE. You cannot modify the html file provided.

The *prepForm* function is called as soon as the page is loaded and it should

- Add the following elements to the form element `<form id="myForm">`
 1. A button with the text *"Start Count"* and the id *btnStartClock*
 - i. When a click occurs the button, it should call the *startClock* function
 2. A button with the text *"Stop Count"* and the id *btnStpClock*
 - i. When a click occurs the button, it should call the *stopClock* function
- Update the *txtTargetTime* with the value found of the const *targetTime*

When the user presses the *"Start The Clock"* button your script should start a timer at a 1 ms interval. Your timer should increase *currentTime*.

When the user presses the *"Stop The Clock"* button, your timer should stop, show the user their score in an alert window, and append to *informUser* a message based on their score.

View *Calculating and Displaying the Score* below for information on how to calculate score and message to display

CALCULATING AND DISPLAYING THE SCORE

The user's score is calculated based on how far away they are from the target time. The target times in milliseconds should use the const *targetTime*.

Replace the content of *informUser* with their score for that round given a specific format.

If they scored a new high score

[NEW HIGH SCORE] is a new high score.

If they score anything else, calculate the difference

Your score is [DIFFERENCE] away from your high score of [HIGH SCORE]

View the following chart to calculate the score and expected message:

Target Time	User Stop Time	Score	Message
2000	2010	10	10 is a new high score
4500	4408	92	Your score is 92 away from your high score of 10
4000	4001	1	1 is a new high score

DELIVERABLES

Submit only your *reflex.js* file on Léa. You should not have modified the HTML