

## Goal4 : Assignment: Guessing Game (3h)

### Guess my number!

In this assignment you will try and guess what number the computer has chosen. However, you only have a fixed number of guesses before the game is over so guess wisely!

### Objectives & Outcomes

Successful completion of this activity will show that you can:

- Create new code using information from all the lectures thus far.
- Utilize JavaScript DOM manipulation functions effectively.
- Comprehend the different ways of accessing DOM elements.
- Recognize and understand basic HTML hierarchy.
- Recognize when an incorrect data type is being used, and converting datatypes.

### Level of Effort

This activity should take approximately 180m to complete. It will require:

- 0m Research
- 15m Prep & Delivery
- 165m Work

If you find that this activity takes you significantly less or more time than this estimate, please contact me for guidance.

### Reading & Resources

#### ALL Rubric *(necessary)*

This is a Google doc link to ALL the Rubrics for ALL assignments.

#### Assignment: Lab Files *(necessary)*

This link has all the files you need to get started with this programming assignment.

### Instructions

### Getting Started:

- In your local branch of the PWA1 GIT repo, you will need to create a directory entitled "goal4\_assign\_guess".
- Download the .zip file from FSO for this assignment and unzip it in the directory "goal4\_assign\_guess/" . This is where all your assignment development files will reside.
- Make sure you adhere to proper folder constructs, if applicable (css, images, js, etc)
- Using JavaScript comments, place your name, date and assignment at the top of the JavaScript file.
- You will need to create a script tag for js/main.js in your .html file.

(Online) Please watch the associated demonstration screencast that shows the finished assignment and explains the rubric and requirements.

## Criteria:

To obtain full credit on the assignment your submission should match the functionality of the demonstration. The following criteria must be adhered to as well as satisfying all items on this assignment's rubric.

- Open the HTML file associated with this assignment and take note of the elements that have an id attribute and also the button.
- Create a variable to store a random integer within the range 1–10.
- Create variables that reference the DOM(html) elements or 1 object literal.
- Create an .addEventListener event listener on the guess button to listen for a click event.
- When the guess button is clicked, evaluate your guess with the number the computer has chosen.
- Create a function to validate the users input:
  1. Validate that a number was entered. AND
  2. Validate that the number entered is between 1 and 10
- If your guess is higher than the computer's number then display appropriate message in the HTML.
- If your guess is lower than the computer's number then display appropriate message in the HTML.
- If your guess is equal to the computer's number then display appropriate message and end the game.
- Tally all the wrong guesses and end the game after the 3rd incorrect guess and show appropriate game over message in the HTML.
- Deactivate the button by removing the event listener when the game is over.
- Use a keyboard event for the ENTER button that also acts like clicking on the guess button.

## Deliverables

You will submit your project via GIT. This is where your work will be graded. You will need to ensure you have at least 6 resonable commits.