**Hangman**

For my final project, I decided to recreate hangman using P5, HTML5 and JavaScript.

This program works by randomly selecting a four-letter word from a pre-made array. Each word to guess does not have any repeating letters, so each of the four letters will be unique. Unfortunately, I was having issues figuring out how to make the program only accept the letters if they are guessed in the right order, so for it to work properly, the letters have to be guessed in the correct order, if the word contains the letter. If you are trying to find the word you need to guess, you can check the console, because I have logged the word there. Also, there is in-depth detail of how my program works if you check the comments on the app.js file.

The first resource I used was W3schools in trying to figure out how [return](https://www.w3schools.com/jsref/jsref_return.asp) works. I needed this because I was trying to set a global variable that contains the randomly selected word from the wordBank[] array. In order to do this, I needed to figure out how to access a variable value from outside a function. I understood everything from this resource.

The second resource I used was from Stack Overflow on how to use [split()](https://stackoverflow.com/questions/6484670/how-do-i-split-a-string-into-an-array-of-characters), this was extremely helpful because I needed to split a single word into an array of individual characters. This taught me that all I needed was an empty string as the parameters to do this. I understood everything from this resource, it was very straight forward.

The third resource I used was also from Stack Overflow on how to use [this.id in conjunction with <button>](https://stackoverflow.com/questions/4825295/onclick-to-get-the-id-of-the-clicked-button). My issue was that I could not figure out how to retrieve the ID of the button I was clicking on while all having it run in one function. I could have done this while all running separate functions for each button, but it would have been a mess and possibly been much harder to achieve than just putting in the research work. This was also straight forward, I just needed to go back to my class notes to remember how to set a variable in the function parameters.

The last resource I used was Go Make Things about [how to compare two arrays](https://gomakethings.com/checking-if-two-arrays-are-equal/). For this to work I had to use .stringify. I knew I had to compare two arrays, but I was not quite sure why it had to be a JSON object. Given more time, I would have sat down to understand why exactly I needed to do this, but it worked for my program, and did not seem to cause any issues.

**Work Sessions**

Monday 26th – Started project, learned how to assign a function to a global variable, had to overcome the issue with math.random not working globally.

Wednesday 28th – Figured out how to create an array that would allow me to input characters that the user gets from clicking on the buttons. I had to learn how to use one function that gets multiple ID’s from buttons.

Friday 30th – Created the gallows that would be made when wrong character was guessed. Had to research how to create lines in P5.js

Sunday 2nd – Created a system to check whether the character was guessed correctly, tested to see if the word was guessed correctly. Alerted the user accordingly. Had to figure out how to create a system to judge wrong guesses.

Monday 3rd – Had to research how to use .setAttribute in order to disable the buttons properly. Created a global variable to add++ every time a correct character was guessed, this sorted through the current array and added the character to a display for the user to see using DOM. Finished the project.