Project 6: Game Show App

Sections of this Guide:

- **How to approach this project** includes detailed guidance to help you think about how to organize your code, project and files.
- **How to succeed at this project** lists the grading requirements for the project, with hints, links to course videos to refresh your memory and helpful resources.

How to Approach this Project

For the sixth project, you will use JavaScript to create the interactivity portion of a word guessing game. The HTML and CSS will already be written for you, and you will interact with elements that are created in the HTML file, as well as create new elements dynamically inside of your JavaScript. You will also write out the logic for displaying a phrase on screen, handling a user selecting a letter, and determining if the user won or lost the game.

❑ **Download the project source files from the Game Show App project instructions page in your Techdegree curriculum.**

❑ **Set up a new GitHub repo and push the project files to it.**

- ❑ *Related video:* **Share Your Projects with GitHub**

❑ **As you write your JavaScript code, be sure to save and test often. Code a small section and then test. This will help make troubleshooting much easier**

❑ **Double check everything, validate your files, request an informal review in Slack, and then submit.**

How to succeed at this project

Here is one approach to completing the things you need to pass this project. Make sure you complete them **before** you turn in your project.

❑ Add needed variables

- ❑ Get the element with the id of qwerty and save it to a variable.
- ❑ Get the element with the id of phrase and save it to a variable.

- ❏ Get the element with a class of `btn__reset` and save it to a variable
- ❏ Create a missed variable, initialized to 0, that you'll use later to keep track of the number of guesses the player has missed (remember, if the player guesses wrong 5 times, they lose the game)

❏ Create an array named phrases.

- ❏ Declare and initialize the `phrases` array, storing at least five strings that contain only letters and spaces, no punctuation.
- ❏ *Related video:* [Practice Basic Arrays in JavaScript]

```
// return a random phrase from an array
const getRandomPhraseAsArray = arr => {

}

// adds the letters of a string to the display
const addPhraseToDisplay = arr => {

}

// check if a letter is in the phrase
const checkLetter = button => {


}

// check if the game has been won or lost
const checkWin = () => {

}

// listen for the start game button to be pressed
startButton.addEventListener('click', () => {

});

// listen for the onscreen keyboard to be clicked
qwerty.addEventListener('click', e => {

});
```

Example of all of the project's function headers, or "stubs"

❏ Attach an event listener to the "Start Game" button to hide the start screen overlay.

- ❏ Add the event listener to the variable you created for the `btn_reset` element
- ❏ Hide the overlay by changing its `display` property.

❑ Create a getRandomPhraseAsArray function.

- ❑ Start by creating a function "stub", where you declare the function and its parameters, but leave the function body blank. Add a code comment that describes the purpose of the function.
- ❑ Create a variable to store a random number based on the length of the array
- ❑ Use the variable to select an index inside of the array.
- ❑ After you create the getRandomPhraseAsArray, you will need to "call" it, and pass the phrases array to it.
- ❑ Return the array element at that index
- ❑ *Related video:* **Practice Basic JavaScript Functions**
- ❑ *Related video:* **JavaScript Basics: Create a Random Number**

❑ Create a checkLetter function

- ❑ Create a function "stub" for the checkLetter function
  - ❑ Include a parameter in the function head for the button that gets clicked
- ❑ Store all of the li elements in a variable inside checkLetter
- ❑ Create a variable to store if a match is found and give it an initial value of null
- ❑ Loop through all of the li elements. *Remember:* arrays start with index 0!
  - ❑ Create a conditional that compares the text of the button parameter to the text of the li at the current index of the loop
    - ❑ If they match, add the "show" class to the li
    - ❑ If they match, store the button text in the match variable
- ❑ Once the loop completes, return the match variable
- ❑ *Related video:* **Practice Basic JavaScript Functions**

❑ Add an event listener to the keyboard

Note: the event listener should be listening for a user to press a button on the on screen keyboard, not the physical keyboard of the computer.

- ❑ Start by creating an event listener for the qwerty element that listens for the "click" event.
- ❑ Use a conditional to filter out clicks that don't happen on the buttons or if the button already has the "chosen" class

- ❏ Add the “chosen” class to the button that was pressed.
- ❏ Call the checkLetter function and store the results in a variable.
- ❏ If the checkLetter function does not find a letter, remove one of the heart images and increment the missed counter

❏ *Related Video:* **JavaScript and the Dom: What is an Event?**

❏ *Related Video:* **JavaScript and the Dom: Listening for Events with addEventListener**

❏ Create a checkWin function

❏ Create a variable to store the li elements that have the class name “letter”

❏ Create a variable to store the li elements that have the class name “show”

❏ Check if the length of the 2 variables are the same. If they are, display the win overlay

- ❏ Create the win overlay by adding the “win” class to the start overlay.
- ❏ Change the headline text of the start overlay to show a person won.
- ❏ Change the display property of the overlay to “flex”

❏ Check if the missed counter is greater than 4. If they are, display the lose overlay

- ❏ Create the lose overlay by adding the “lose” class to the start overlay.
- ❏ Change the headline text of the start overlay to show a person lost.
- ❏ Change the display property of the overlay to “flex”

❏ *Related video:* **Practice Basic JavaScript Functions**

Good luck! And remember if you need any help or have any questions, the Slack community is here for you!