

PUI: 05-430 Section A

Link to GitHub Repo: https://github.com/jlyu1209/homework_5-6

Link to hosted website: https://jlyu1209.github.io/homework_5-6/

HW# 6B: Reflection

What challenges or bugs did you encounter? How did you overcome these challenges?

Some of the challenges I faced as a beginner programmer when working on this assignment were (1) addressing syntax errors, (2) accidentally using variables without declaring them, (3) debugging, and (4) using an attribute or method. There were multiple incidences where I would get a coding error only to find out that I did not close out the statement with a semicolon or curly brackets or parenthesis. This was particular prevalent when I was defining function sand using for loops inside the function. In addition, there were times when I didn't declare a variable prior to using it. These errors were more common earlier in the assignments and I was able to overcome it with time after becoming more familiar with the language. Now I get in the habit of re-reading the code before running the program and when I get an error, the first thing I check now is the syntax to eliminate this as a potential bug before changing the code. Another way I overcome some of these challenges, especially trying to debug is using console.log at each step of the code. Before coding it in a block and running the program, I would get in the habit of using console.log on the variable at each step to see what value I get in return. This was a great way to see if the intended value I wanted was being pulled or grabbed. For example, I grabbed an element in my html expecting it to be a numerical value to conduct multiplication, but the code did not execute. Only after using console.log, I realized that the element was being returned to me as a string instead of an integer so had to use parseFloat() to get the intended value I wanted. This practice really saved me a lot of time in the long-run and helped me with debugging and narrow down on what aspect of the code may be the problem. Lastly, it was a challenge to know what attributes or method an object had and how I can use it. It helped using w3school and I would always first google the command I would like to execute to see if there was an attribute or method I can use.

What programming concepts did you learn as part of the assignment?

The five programming concepts I've learned and used in this assignment were (1) finding and accessing HTML elements, (2) defining functions, (3) using events and event handling, (4) declaring objects and using local Storage, and (5) dynamically creating DOM using JavaScript.

Through the assignment, I used document.querySelector (), document.getElementsByClassName(), or document.getElementsByTagName () a lot to access and grab

specific elements from my HTML file to execute an method to dynamically change it using JavaScript. For example, I would grab my html element that statically showed the total cost of all the buns I bought and to use `.innerHTML ()` to dynamically change the text to update the price calculated based on the number of items stored in the shopping cart by the user. In addition, to make the website more interactive, it was helpful to use events and event handling. I mostly used `.onclick` to switch between pages and (in my case) to pop-up a modal to select product quantities and additional features of the product (e.g. glaze) before adding it to the bag. Throughout my assignment, I had to create functions to execute specific tasks. This was especially helpful when I had to remove items from the shopping cart or to update the bag number by using a for loop inside a function to count and update the numbers. And lastly specifically for assignment 6B where I had to show the user the products they have selected in the shopping cart, it was important to first create a class to set initial parameters for objects. All buns had specific parameters such as flavor, glaze, and quantity and creating a class to specify the instance of objects and storing these objects in an array list was important. Also in order for the selected products to show in the shopping, I had to store it using `localStorage` and call the stored items in different page (in this case from the product page to the shopping bag). Lasting creating elements using JavaScript was key to dynamically list the items stored in storage and display them for the user. These programming concepts we learned was helpful in executing the functionality in this assignment.