Reflection

For this assignment, I encountered many bugs while completing the shopping cart aspect of the website. This is because it got a lot more complicated using JavaScript to add child elements and also storing into local storage for different pages to interact with each other. For example, one bug that took me a while to fix was removing items from the shopping cart. This was especially difficult because we couldn't simply remove the element from the page. When I only removed the item from the page, if the page reloaded, the removed item would reappear. This is because the item wasn't actually removed from local storage. Therefore, I had to fix this bug by giving each element an ID, and when the child element was removed, have the JavaScript code also remove the element from the Local Storage. Other smaller bugs I encountered were, for example, being able to add elements to cart even though the quantity required was 0. I overcame this by making a check in the JavaScript code to only add element to local storage when the option selected for quantity was not 0. Furthermore, I also had bugs with the first part of the assignment, such has using various flex boxes to justify and align content. I realized that easiest way to fix those bugs were to use google chrome's inspect and change the styling there and then go back to add it to my style sheet.

Programming Concepts Learned

1. Local Storage- I had to use local storage for the shopping cart because the cart items had to be stored in a local storage such that when I navigate to different pages, the cart items would show.
2. Splicing in JavaScript- To remove an item in a JavaScript array, I had to use splice. This was used in removing an item from the localStorage after parsing the JSON object to a JavaScript array.
3. Parsing JSON Object- Since objects in localStorage were stored as JSON Objects, I had to parse them to JavaScript using the JSON.parse command to convert it to something that JavaScript could understand.
4. Appending child elements to existing HTML using JavaScript- Since we wouldn't know which elements would exist for the cart page, we had to dynamically add in child elements to the HTML.
5. Removing Child Elements- I had to remove HTML child elements when deleting items. Even though I deleted in the localStorage, the change wouldn't show until I refresh the page. So I had to use remove child element to delete that current HTML element.