

I. Reflection

While I was implementing the functionality of the shopping cart, I faced many challenges and a steep learning curve. One of the bugs that I faced was that the bag quantity in the top right corner would change when I would move through different pages. I resolved this bug by storing that quantity number and incorporating it in my onload functions. Another bug that I faced was that when the Order Summary was adding up the subtotal with the tax, the final total would add all the numbers as strings instead of as numbers. I resolved this issue by splitting up the addition of the "\$" as a string with the actual integer number of the cost. In addition, while I was developing the "remove" button in the shopping cart, there was a point where only the cart item would disappear when I pressed the "remove" button, but the Order Summary and bag item quantity amounts would remain unless I refreshed the entire page. I resolved this bug by resetting each id that controlled each of these components to an empty string while also deleting the storage. In the future, I will be able to better mitigate these issues, as I have a better understanding of common programming concepts and how to properly execute them with Javascript syntax. As I was debugging and coding this assignment, I realized how important the console was in my debugging process, as it is similar to the "print" capability in Python. Thus, using the console again would be incredibly helpful in mitigating these same bugs in the future. Overall, this assignment gave me a more in-depth learning experience of Javascript, where I had to apply many novel concepts for the first time.

II. Programming Concepts

1. Local Storage

- a. Ex. `window.localStorage.setItem(localStorageCount, JSON.stringify(addItem));`

2. For loop

- a. Ex.

```
for (i = 0; i < lsc; i++) {  
    item = JSON.parse(window.localStorage.getItem(i));  
    var itemKey = window.localStorage.key(i);  
    if (item === null) {  
        break;  
    } else {  
        var quantityCount = document.getElementById("quantityCount");  
        quantityCount.innerText = item.quantity;  
        document.getElementById("quantityCount").style.visibility = "visible";  
    }  
}
```

3. Object creation using a function

- a. Ex.

```
function items(title, quantity, glazing, price, img){  
    this.title = title;  
    this.quantity = quantity;  
    this.glazing = glazing;  
    this.price = price;  
    this.img = img;  
}
```

4. Variables

- a. Ex. `var price = document.getElementById("price-details");`

5. If/else statement

- a. Ex.

```
if (item === null) {  
    break;  
} else {  
    var quantityCount = document.getElementById("quantityCount");  
    quantityCount.innerText = item.quantity;  
    document.getElementById("quantityCount").style.visibility = "visible";  
}
```