Reflection Bugs & Challenges encountered

I have encountered 3 major challenges while programming this website:

- 1. To have a number label always stick to the shopping cart icon and to update numbers. I resolved this problem by first create two element with unique IDs-one for the circle and one for the number-and have it embedded in the menu section in my html. I did not put any text content for the number element in HTML because I want to keep track of everything in javascript. Then I wrote the style in css before doing any Javascript coding. Lastly I used javascript to create a list to keep track of all features of the items in my cart and created a variable that sums up the amount of each item
- 2. I could not have my calculated total amount of money to be displayed. When I used JSON.parse to get the total quantity of items, I forgot to use Number() to convert string to numbers and made a mistake of multiplying the string with my price number. I fixed the bug by simply adding the Number() function.
- 3. I implemented the delete function in javascript and the number on cart icon changes but the page is not updated with one less item showing. I fixed the problem by calling the onLoad() function inside my delete function so whenever I clicked on "delete", the web page is updated.

Programming Concepts Learned

- createElement: One concept I learned and was very helpful to me during the
 assignment was to use functions document.createElement to create html tags in
 javascript. In previous iterations, I created everything in html file and did the style in
 css
- setAttribute: This function allows us to assign attribute to a current existing
 element. We learned about this during the lab and it has been very useful to me in
 this assignment. On the product detail page, I have implement clicking function and
 switch picture function using the up and down arrow. I simply used this function to
 complete the task of switching images according to mouse inputs.
- 3. LocalStorage: This is also a concept that we touched upon in previous lab sessions, and in this assignment, it plays a major role when adding things to my shopping cart. On my product detail page, When users click on "Add to cart", JSON.parse will get the array from local storage, and then it will be updated and stored back to local storage. For the shopping cart page, I just loop through my stored list to display everything on the screen.
- 4. addEventListener: In the lab session we usually used onClick() to deal with mouse clicks, but in this assignment I chose to use addEventListener with input "click" and a self defined function because my onClick ran into some error. I used this function

- multiple times throughout the assignment to implement interactive features by clicking the mouse (Ex: Add to cart, delete, etc.)
- 5. AppendChild() and style: In this assignment, I learned to use AppendChild to add children to parent node in a looping function and define elements' style in the loop. This concept was very helpful for me to display all the elements in the savedList on the cart page because I would like the position of each element to be differ by a certain amount of pixels in the display.