Onyekachi Nwabueze
PUI Homework 6B, Reflection

Github pages: https://onyekachinwa.github.io/homework_6b/
Github repository: https://github.com/OnyekachiNwa/homework_6b

Challenges

I experienced challenges that took up most of my time trying to debug, rather than focus on implementing and finishing my assignment. It took me a while to understand that data stored in localStorage is converted into one long, non-manipulative string that I needed to parse through the data when using getItems to retrieve them back as manipulative data. I found it challenging to create for loops that successfully iterated through my product objects and call or access the right values. I also found it challenging to use and call functions that were usable or actionable since some of my functions were a part of another function or used local variables that were non-accessible. I felt that I understood what I needed to complete my tasks and accomplish my programming goals for this assignment, however I did not have the tools, explanation, or scope of comprehension to move forward.

For most of the challenges I faced, it helped to watch YouTube videos, search for online answers and solutions of similar issues, and take breaks to return to my work with a fresh and clear mind. Because I created a new repository for this part of the assignment, I was able to adjust and move elements around more freely without the fear of completely ruining or messing up my existing code.

Learned Programming Concepts

1. localStorage setItem vs. localStorage getItem

Adding and storing things in localStorage takes two steps. To initialize storing of data, I need to use localStorage.setItem(data). In order to retrieve the data, I need to use localStorage.getItem(data). These two steps I learned are essential for any data I wish to recall or use for or to display on another page.

2. JSON stringify vs. JSON parse

JSON automatically stores all data (with the exception of Dates) as a string. It took me a while to realize that an array of objects such as [{name:"Gluten-Free", quantity:2},{name:"Blackberry", quantity:1}], is stored as a string when using JSON.stringify. In fact, all elements, symbols, letters, and numbers are stored as a string (which means the "[","{", and even ":" are stored as parts of the string). In order to "un-stringify" the stored data and to tell JSON to read or retrieve

the items as manipulative data again, JSON.parse is used to enter and decode the information stored.

3. Iterating through list of objects

Although I have experience iterating through objects and calling certain values or keys from objects, iterating through an array of objects proved to be a learning experience. I had to mostly re-learn how to use for loops within for loops to access 3 levels or layers of information (the array, the objects, and the values). Using dot notation as well as array indexing served as a nice refresher course for me.

4. Clear localStorage

Since data in localStorage stays stored until the session is over, clearing the items from the cart was a learning experience as well. I learned that there are multiple ways to implement this but the main idea behind the objective is to clear the localStorage. I could use a function to clear the desired objects or data in the localStorage and, in this case, they would disappear from the cart.

5. Using javascript in html documents <script>

Connecting html documents to javascript files has always been a bit fuzzy to me. Before this assignment, I understood that they must connect in some way, I just was not too sure on the execution of such a connection. I was pleased to discover that these types of files are linked with a single line of code <script src="myscripts.js"></script> for example. Another learning moment was using onload="function()" in my HTML files to call functions from my javascript files. I also did not know that multiple HTML files can use a single javascript file, but learning this was another programming gem.