Alex (Pei-Yu) Tsai
PUI

Assignment 6B - Learning How localStorage Works

Repository: https://github.com/peiyutsai/peiyutsai.github.io/tree/master/assignment_6B
Website: https://peiyutsai.github.io/assignment_6B/home.html

Main Changes:
I implemented a cart system that actually works and tracks the orders a user declares. When orders are removed, the cart updates itself in real-time. I also added functionality to the other pages on the product browsing screen. No confirmation boxes or modals because I still don't have those figured out.

Challenges:
I didn't have a great time with this assignment. By the time I turned in 6A, I just wanted to do the bare minimum and get this over with. I did eventually reach that low bar, though it took me a while. Thank goodness I asked Hyeonsu how to do localStorage right. Here are some of the bugs I encountered.

1. The number on the cart malfunctioning
    - Initially, I had issues getting the number that indicated how many buns are in the cart to concatenate correctly. Instead of having 0+3+3=6, I'd get 0+3+3="033" because I didn't use parseInt() to convert everything into the correct data type.
2. Functions getting called before the page is done loading
    - This happened when I was still working on 6A. I would test the page out only to find that the server is trying to access information that has not been loaded yet. This resulted in a lot of error messages and a temporary workaround that looked ugly but somehow got the code to run.
        - ❖ Somehow I was on the right track. The TA told me about how it's proper etiquette to use window.onload() like I did, though there are ways to organize the functions called so that the .js file didn't look like a complete mess. From this experience, I learned a bit about how a website's code is called and in what order certain pieces of computer instruction are resolved.
3. Figuring out how to get localStorage to do what I want to do and save what I want to save.
    - This is where the TA session came to play. I was struggling because though the console registered that it was saving an order, it didn't save anything beyond that. Furthermore, the number always reset to 0 every time the page is reset.
    - The TA ran through my code with me, gave me some advice on where to take my code, and got me into the correct mindset so that this assignment is only 1 day late rather than permanently missing.
    - This exercise got me to pay attention to where functions are being called, what information is being saved, and what events are happening when the page is first fully loaded.
        - ❖ I learned how to use localStorage and have information stay even after the refresh button is pressed. The fact that I can carry the number on the cart around every page of my website is proof of my meager success.

        - ❖ I also had better awareness of where arguments are being called, what arguments are being called, and what data is being returned as a result of practicing localStorage and event handling commands. Generally, my intuition of when to build if-statements to catch rare contingencies also improved.
4. Struggling to figure out how to have a div delete itself
    - I wanted to have a button that, upon being clicked, deletes the generated div container that shows up on the cart page.
    - Turns out I can't do that. I can't have a div kill itself. I had to implement a workaround and delete everything in the DOM tree with the autogenerated tag, remove the array item in the localStorage that the div corresponded to, then regenerate all the divs based on the updated localStorage dataset.
        - ❖ This is probably not a long-term solution, but for simple text-based divs with no loading burden, this will do for now. However, I at least learned techniques to get around the DOM tree and find the things I need to manipulate even if it doesn't have an ID tag.
        - ❖ I also learned how to use Javascript to add and remove elements from an html page, so that's really neat. Perhaps I could do something along the lines of "generating content" for my future projects. Thank goodness for TA lecture slides. I really needed that.
5. Some silly CSS stuff
    - For the longest time, I didn't know why certain styles on my CSS applied to my tags and why some didn't.
        - ❖ Turns out, if you hover your cursor over the CSS selector, you'd know exactly what parts of the html code the CSS is looking for. I then added pressed backspace in the appropriate regions.