

## Assignment 6b Reflection

Personally, some of the biggest challenges I faced while trying to add functionality was understanding the importance of testing through console and checking storage. Without checking console logs and printing out values to test if my functions were working properly, there would definitely be many more major flaws to my shopping cart functionalities. I also had a lot of trouble in general with just making localStorage work and making my values actually store itself. I think console testing really helped me in figuring out how localStorage worked and how to customize what I want into storage. I also initially had problems with showing the array as a visually appealing cinnamon bun rather than just an array/list of the localStorage description. Using divString to generate the items in the cart allowed me to save a lot of time and make it so implementation was easy no matter how many items there were.

One bug that I had was that I was unable to submit my cinnamon bun form to localStorage and it would keep giving me no console log errors. I eventually found out that I made a typo with the onload feature, which meant I wasn't updating the cart at all. I also had a bug where my localStorage data wasn't being implemented correctly but it turned out that I matched the index of certain properties for an array incorrectly with other properties, like glazing = 2 instead of count = 2, or having count = vanilla-milk.

### 5 Programming Concepts I Learned:

1. I learned how to implement tool kits into Javascript to use those icons in a simple manner while also doing the functionalities I implemented myself, such as the trash icon logo actually removing the whole item.
2. I also learned how to use localStorage in my own code and find out how to implement functions to save data between HTML pages. This allows for less hard coding specific elements into pages and just transferring a list of arrays within each page, similar to how components work in Figma.
3. Using console.log was a gift and it was extremely helpful for creating easy test cases where you can check if internal variables are being processed correctly. Debugging with console makes it extremely easy to catch mistakes and edge cases where oftentimes, I would get null values that weren't able to be evaluated, but were only shown through console.

4. I used this mostly when implementing the product detail page, but I learned how to implement state changes with javascript to have a “popup” technically when you click on a product and are finally customizing it.
5. Using .innerHTML was extremely helpful in manipulating datapoints that were already seen on the screen. By doing this, I could calculate total cost in real time without having to make the user press/click anything.