# Assignment 6B Reflection Cam Davison jcdaviso@andrew.cmu.edu

The main challenge with this assignment was trouble shooting errors. Errors seem inevitable in coding and particularly in javascript, but they become slightly harder to identify and troubleshoot with js. The console becomes your best friend very quickly. At first, I would get frustrated and go directly back to my code, but with more testing and experience my first step became the console. I started adding alerts and console.log to every function to know if they were being called at all so I could determine my course of debugging.

I found javascript to be more of a test and learn approach. I would try something, see if it worked and then decide if I would build on it or if I should try another avenue. Using javascript really gave me a view into how a large amount of programming the front end works. I'm interested to see what else I can do with it.

## **Programming Concepts**

## For-loops

The first concept learned is using for loops. I had a basic knowledge of using these loops to iterate through an array from python but hadn't actually used the concept in programming. It is a real mindset shift from an actual product to attribute within an array. But, when you make mind shift the idea of storing and calling the inputs from that array becomes clear. I used a for loops in AddToCart to select the color choice and in cartLoad when iterating through the prodParse array.

# Alert/Console.log debugging

Adding alert() and 'console.log() statements in my functions was a game-changer for me when it came to debugging. They allow you to quickly determine if your function is being called, and then you can get to the second level of debugging quickly. Typos are real, a space here a space there, using ' 'instead of " ", can really throw you off. Using these lead to more accurate and efficient coding. I used console.log() and alert in nearly all of my functions. I took many of the alerts out for the final deliverable.

### Using the <input> tag

In my initial HTML coding I tending to use <span> and tags often. When it came to retrieving values with javascript I realized how much better using <input> was because I could associate a value to the id and there were more js operators to choose from. I rethought a fair amount of the HTML elements on my product page because of this. Also, the <input> tag is versatile using the 'type' command. I changed both my drop downs and color selectors to inputs. The color selectors are styled radio inputs.

## **Javascript Operators**

This product lead me to learn and use more javascript operators than I have before. innerHTML was particularly helpful in understanding how a function adding or replaced content on the cart page. After gaining a better understanding of options available from using innerHTML, I used .value and .innerText as well. I used innerHTML in cartLoad to generate dynamic divs.

### Local Storage

Despite buying thousands of items online and interaction with an equal amount of shopping carts, I had never considered how items were tracked, stored and surfaced. It was really interesting understanding how to create an object based on user selections, pushing that to an

array and saving it in local storage using JSON +stringify. Then having to call and parse that object and surface it in specific html tags dynamically. Coming in to this I would have said there was no way I would have figured this out in a few weeks. Needless to say, I am proud of the work.