# Matthew Guo Assignment 6B Reflection

This project has taken me out of my comfort zone entirely. I love designing interfaces and experiences but when it comes to code, I have a much more difficult time parsing through tiny details. I think one of the biggest difficulties I encountered from this assignment was that HTML/CSS/JavaScript is hard to debug. Your code will often times work but not in the way that you want to. Something I realized is that there are so many ways to do the same thing in CSS, but there may be only two or three ways that work for your particular website. Hence, the reason why – for me – a lot of this project was trial and error. Trying things in the console and seeing which methods would work for my particular case. I mitigated these errors by trying my best to understand the small differences like the difference between padding and margin to the larger ideas such as storing inside of local storage for JavaScript.

### Programming Concepts in JavaScript

### 1. Scope

Scope is defined in tow main ways – global scope and local scope. Scope is the accessibility of variables, functions, and objects in some particular part of your code during runtime. I utilized global variables and local variables in order to finish my assignment.

## 2. Storing in Local Storage

I utilized local storage when adding to cart and allowing the shopping cart to register what I had put into it. Local storage is a type of web storage that allows JS sites and apps to store and access data right in the browser with no expiration date. The data stored in the browser will persist even after the browser window has been closed – nifty!

#### 3. Callback functions

I utilized call back functions which are functions that are passed into another as an argument – this allows for the outer function to complete an action.

### 4. Integrating with HTML

I thought it was interested to learn about the integration between HTML and JavaScript. When I fist started this assignment, I was most curious to know how code form the HTML would be manipulated in JavaScript. Turns out the syntax is document.getElementbyID()!

### 5. JavaScript arrays

I previously learned about arrays in Python so it was really cool to be able to see how the data type transferred to HTML. It behaves quite similarly and it allows you to store multiple elements. I used an array to hold the items in my shopping cart and if I wanted to remove something, I would remove from the array as well ... handy!