JP Park (jaepyunp) Section B

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ASSIGNMENT 6

LINK TO LIVE VERSION: HTTPS://JAEP3347.GITHUB.IO/

LINK TO REPOSITORY: HTTPS://GITHUB.COM/JAEP3347/ASSIGNMENT_6

REFLECTION

There were several challenges I've encountered throughout the design and development of this website. First challenge I encountered was writing HTML codes using Javascript language. Since we were not allowed to use any external frameworks that are really convenient in making aesthetic user interface, all of my manual, event-oriented contents had to be written so that the Javascript codes actually append to the DOM tree in the cart page. I had to learn about how making new components and appending them work in jQuery (which we were allowed to use). This also involved dealing with bugs that appear when newly appended elements are not put inside the correct div, which in these cases I would manually have to assign the mother class or id to the element.

In CSS, I realized also how two stylesheets could be imported in the HTML but the stylesheet that gets added later on would override some styles that were previously defined if the tags that define the styles were the same. This was useful in cases where I wanted to use the same underlying style but change just miniscule design such as font weight. However, this also yielded some problem in that it requires developers to carefully think about the naming of their ids and classes. For my cart page, I did not realize why it was aligned in a disorganized manner until finding out that the <li> tag was actually overridden by the styles that I have set for the menus in the navigation bar. I was able to solve this problem by adding a class attribute to the element that required extra styling and refactoring the CSS codes to have specific styles for that class name only.

PROGRAMMING CONCEPTS

First programming concept I learned was the “top-down design principle” of the software. This is a programming design principle that writes code from the main function and breaking down that function into sub-functions for each specific feature. In jQuery, the main function would be $(document).ready(function(){};). Being able to break down each feature into functions allowed be to fix errors and debug the website since I would get immediate feedback from each of the sub-functions if I just simply console logged out some variable. This was very helpful in guiding me to think about which functions I should look to fix them.

Second concept would be organization of data. For example, when storing values, I needed to make decisions on which data structure to use. There are simple variables, arrays, maps and even objects in Javascript. Objects also have special key-value pair mapping, and those values could be any of the data structure possible. I learned about how organizing and grouping data is important because it allows for easier access of the value later when I want to use it.

Third concept is looping. Every programming language has some form of looping through string, array, maps and so on. Javascript in particular has a built in Array.prototype.forEach method that allows developers to iterate through with an index and value pair. This feature was useful to learn when I wanted to style the buttons of the glazings so that the only the selected button had certain style and others had removed style.

Fourth concept is arrow functions. The fat arrow functions have not been introduced until lately. However, fat arrows are much easier to use in most of the cases since it automatically assigns the function’s “this” value to its parent’s “this”. In some normal functions, if we do not bind using the .bind(“this”) operator, it would return undefined. Learning about arrow functions reduced a lot of code duplications in the overuse of the bind operator.

Fifth and last concept I learned was conditionals. I was surprised to learn that Javascript has “hoisting” feature, which is leaving a variable undefined would yield a value of “undefined”. Also, null was something the developer was actually assigning to the variable. Knowing the difference between these two, I was able to apply conditional concepts and even make use of the ternary operator in the product.js file to clean up the logic and check appropriately when the cart item list was null.