## Issues I encountered

- 1) One bug I had was not being able to switch between different subcategories in the product detail page. After clicking one of the subcategories (e.g. big size), the category kept being selected. After referring to stack overflow and youtube videos, I came up with the solution that using 'flag' to tie the sub-categories to selectors and disabled the selected style of the unselected category while enabling the style of the selected one.
- 2) Another critical issue I encountered was not being able to remove items from the cart. After referring to series of youtube videos, I solved the problem by using ".remove" when the item number <= 0.
- 3) I also had difficulty adding unit "USD" after the total money in the cart page. I tried editing the html file first to add the string "USD", but it didn't work. Finally, I identified the reason was that I set the function of counting total money in js file, and js has a higher priority than html. The only way to add the unit "USD" was to edit the function in my js file.

## **Programming Concepts I learned**

1) Flag: used as a signal to let the program know that a certain condition has met. In this example, I used flag = "big"/"small"to represent the selection of different sub-categories.

```
selectors[0].onclick = function () {
   flag = "big"
   DetailImage.src="Detailbig.png"
   for (var j=0;j<selectors.length;j++){
      selectors[j].style.borderColor=''
      selectors[j].style.color=''
      selectors[j].style.fontWeight=''
}
this.style.borderColor='#923D00'
this.style.fontWeight='bold'
}</pre>
```

2) localStorage.setItem & localStorage.getItem: these two methods allow you to store and retrieve values in the localStorage object. I used these concepts to count and store the value of product numbers.

```
carts[0].onclick = function () {
   if (flag == "big") {
      if(bigs) {
        localStorage.setItem('Bigs', bigs + 1)
            bigs = parseInt(localStorage.getItem('Bigs'));
        span.innerHTML=bigs+smalls
   }
   else {
      localStorage.setItem('Bigs', 1);
      bigs = parseInt(localStorage.getItem('Bigs'));
      span.innerHTML=bigs+smalls
   }
}
```

- 3) parseInt: converting its first argument to a string, parses that string, then returns an integer or NaN
- 4) addEventListener: the addEventListener() listen for an event and can execute a callback function when a button is clicked, as the example below shows.

```
for (let i=0; i<selectors.length; i++){
    selectors[i].addEventListener('click', () => {
        selectPrice(products[i]);
    })
}
```

5) document.querySelector: a method that returns the first HTML element that matches the specified selectors.

```
function selectPrice(){
  let productNumbers = localStorage.getItem('cartNumbers');
  productNumbers = parseInt(productNumbers);

carts.forEach(add => {
    add.addEventListener('click', () => {
        if(productNumbers) {
        localStorage.setItem('cartNumbers', productNumbers + 1);
        document.querySelector('#cart span').textContent = productNumbers + 1;
    } else {
        localStorage.setItem('cartNumbers', 1);
        document.querySelector('#cart span').textContent = 1;
    }
    });
});
});
```