

Reflection:

Bug 1 Encountered:

When I added items to the cart, it was not parsing it correctly, and was displaying the items in a string format. In addition, when items were being added to the cart, they were creating an array within local storage for each addition, rather than adding on to the existing array.

Bug 1 Fix: I created an empty array as a global variable called `oldItems`. Then each time an item was added to the cart, I pushed it to the `oldItems` array so that it would add it to the array rather than creating a new array. After doing this, it was able to parse correctly as objects rather than strings.

Bug 2 Encountered: When I loaded the cart page which should reflect the items added, it was not storing in local storage what was actually clicked on the product details page.

Bug 2 Fix: I created a prototype called `orderList`, and used the 'this' constructor property so that I did not have to say the exact value that got added to the cart. Then within the adding glaze/quantity functions, I called the prototype function I created.

Bug 3 Encountered: I was having a really difficult time removing the correct divs from the cart page. It would remove only the first one and it did not seem like it was correctly identifying the 'i' variable.

Bug 3 Fix: I had to isolate the variable within the create cart function so that it was actually able to be picked up. I did this by adding a + before and after the variable within the string so it saw it as a variable rather than a string.

Programming Concepts:

- 1) Constructors and prototypes: Instead of creating a variable for each option(glaze/quantity) that could be clicked, I created constructors and prototypes that points back at the function. This created multiple similar objects rather than having to create individual objects.

Example:

```
function orderList(glaze,quantity,id){  
  this.glaze = glaze;  
  this.quantity = quantity;  
  this.id= id;  
}
```

```
var item = new orderList(globalGlaze, globalQuantity,globalid);
```

- 2) Set attribute function: When creating new divs, instead of having to update the value manually or create the attributes of the function manually, this automatically adds attributes like onclick features, style, etc... when a function is called.

Example:

```
var deleteBtn = document.createElement("button");  
deleteBtn.setAttribute('content', 'test content');
```

```

deleteBtn.setAttribute('class','custom-button');
deleteBtn.setAttribute('id','plzdelete');
console.log('testing setattibute ' + deleteBtn.id);
deleteBtn.innerHTML = 'Delete';

```

- 3) For loops: Instead of writing individual code for each time a different variable is passed, this allows me to run the code over and over again with a different value.

Example:

```

for (var i = 0; i < parsedOld.length; i++) { //loop over the collection
  console.log ('1. this is i', i)
  if (parsedOld[i].id === id){
    console.log("this is i " + i)
    console.log("this is parsedold- first if" + parsedOld[i].id + " this is the id- first if"
+ id)
    parsedOld.splice(i,1);

```

- 4) If/else statements: To check if an item meets a certain condition, I included an if statement, so that it only runs when the condition is met. I also included an else statement that included a console log, so I could see what was going on internally and if the condition was met.

Example:

```

if (parsedOld[i].id === id){
  console.log("this is i " + i)
  console.log("this is parsedold- first if" + parsedOld[i].id + " this is the id- first if"
+ id)
  parsedOld.splice(i,1);
} else {
  console.log("this didnt work");
}

```

- 5) JSON stringifying and parsing: In order to add arrays into localStorage, I used the JSON stringify function which takes objects and converts them into usable strings. Then when I want to choose a specific item to take out of the array, I created a local variable that used the JSON parse method which parses the string and converts it back to an object. Then I called that variable within a function.

Example:

```

localStorage.setItem("itemsArray", JSON.stringify(oldItems));
var parsedOld = JSON.parse(localStorage.getItem('itemsArray'));

```

Bonus:

- Added carousel into product details page of Original roll. It is at the bottom of the page.

References:

http://archive.oreilly.com/oreilyschool/courses/javascript2/IntroLocalStorage.html#h_05

W3schools

Stackoverflow

https://www.w3schools.com/howto/tryit.asp?filename=tryhow_js_slideshow