Lab 6 Instructions, Selection, Group B
CS 133JS, Beginning Programming: JavaScript

The objective of this lab is to give you practice using:

- Creating objects
- Working with object properties
- Working with object methods
- Using object constructors
- Working with complex objects

Part 1: Object Exercises

A web page, *ObjectExercises.html*, has been written for you that contains code to call functions and use code that you will write in a file named *ObjectExercises.js*. The instructions for writing your functions and the code to test your functions are in *ObjectExercises.html*, but all the code you write will go in *ObjectExercises.js.*

Part 2: Web Apps

You will create two web apps. The HTML page for each of these has already been written for you. You will just write the JavaScript file.

Web App I for Group B – Price List

This web app displays a list of products and prices. A user can add items to the list and enter prices.

This is a new version of the Price List app you made previously using arrays. This one will use objects.

Implementation:

1. Declare a one-dimensional global array named *products*. This will hold *Product* objects.
2. Define an object constructor named *Product* with the following properties:
    a. name
    b. price
3. Write three functions:
    a. *addProduct*
        - Has one parameter: a product name.
        - Adds a *Product* object to the *products* array with a default price (0.0 is OK).
    b. *removeProduct*
        - Has one parameter: a product name.
        - Returns true if the product was found before deleting.

- Use a loop to find the product, then use the *splice* method to remove the correct element from the *products* array.
  c. *changePrice*
     - Has two parameters: the array index for the product, and the price.
     - Returns true if the index is valid.
     - Change the price property of the product.

This is a screenshot of a completed web app:

Price List

	Product		Price	
1	Tent	Delete	195.00	☐ Enter
2	Backpack	Delete	115.00	☐ Enter
3	Camp stove	Delete	55.00	☐ Enter
4	Hiking Boots	Delete	179	☐ Enter
5	Water filter	Delete	35	☐ Enter
☐ Add Product				

Submitting your lab work on Moodle

Beta Version

Post the following in the *Lab Beta forum*:

1. The web pages you created for part 2.
   (Zip the files for you web pages and attach them to the post.)
2. A code review of your lab partner's web page for part 2.
   (Review the part 2 web apps for one of your lab partners using the Code Review Form provided.)

Code Review
1. Submit a copy of the code review above to the *Lab Code Review assignment*.

Production Version
You may revise your beta version before submitting the production version. On the code

review form you received from your lab partner, complete the "Production" column to show what you did or did not revise.

Upload the following to the *Lab Production Version* assignment:

1. A zip file containing the two files (.html and .js) for part 1.
2. A zip file containing the four files for part 2.
3. The code review <u>from</u> your lab partner with the <u>"Prod" column filled in by you</u>.