Lab 16 – Arrays

Objectives

- Writing Javascript functions that make use of arrays

What to do in Lab?

1. Log in to the computer. If you are reading this, you must have done this already.
2. Create CPSC1045\Lab16 folder
3. Download the file Lab16.zip from D2L to your system. Unzip the contents into your Lab16 folder.
4. Open the included HTML document named **lab16.html** in Google Chrome by either double clicking (if Chrome is the default browser) or by right clicking on it in your file explorer and then selecting Open With -> Google Chrome. The document looks as follows:

Lab 16 – Arrays

Enter any color to put in the array [   ] [Add to Array]

Your array contents are:

Check if a color exists in the array:

[   ] [Check Color]

That color is at index:

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5. Now open the **lab16.js** file using your favorite HTML editor such as Brackets or VS Code, so that you can write the code. You need to work with only this file.

The Task (10 marks)

6. Write the JavaScript to complete the following steps:
   a) Create an empty, global array that will be used to store colors.
   b) Create an onclick event handler for the Add to Array button. Every time the button is pressed, the function should get the value from the text field and push it into the color array.

c) Create a function that displays the colors contained in the array on to the HTML page. This display function should be called every time a color is added to the array.
d) Create an onclick event handler for the Check Color button. Every time this button is pressed, the function should get the color value from the second text field, and find the index at which that color occurs in the array. This index should then be displayed to the HTML page. The sample output after each of several steps is shown below:

Lab 16 – Arrays

Enter any color to put in the array red | Add to Array

Your array contents are:

red

Check if a color exists in the array:

| Check Color

That color is at index:

Lab 16 – Arrays

Enter any color to put in the array blue | Add to Array

Your array contents are:

red,blue

Check if a color exists in the array:

| Check Color

That color is at index:

Lab 16 – Arrays

Enter any color to put in the array green | Add to Array

Your array contents are:

red,blue,green

Check if a color exists in the array:

| Check Color

That color is at index:

Lab 16 – Arrays

Enter any color to put in the array yellow | Add to Array

Your array contents are:

red,blue,green,yellow

Check if a color exists in the array:

| Check Color

That color is at index:

Lab 16 – Arrays

Enter any color to put in the array yellow | Add to Array

Your array contents are:

red,blue,green,yellow

Check if a color exists in the array:

blue | Check Color

That color is at index: 1

Lab 16 – Arrays

Enter any color to put in the array yellow | Add to Array

Your array contents are:

red,blue,green,yellow

Check if a color exists in the array:

green | Check Color

That color is at index: 2

Submission: What to hand in

Zip the folder Lab16 which contains your source code (the edited file **lab16.html** and the **lab16.js** file you created) and upload it to D2L.

Submission: When to hand in

At the end of the lab period.