WEB APPLICATION ARCHITECTURES

Loops Functions and Arrays

Objectives

In this exercise you will learn how to create Functions and Arrays

Reference material

This exercise is based on material from the “Functions and Arrays” chapter.

Overview

- In this lab you’ll exercise calling existing functions, creating new functions and using arrays to store data.

Estimated duration

The estimated duration for this lab is 45 minutes.

Completed solution

There is a completed solution for this lab.

Create a function

1. Create a new function which displays a multiplication table. You can copy+paste the code from steps 8-11 of the previous lab, and modify this code as required to turn it into a function.
2. Call this function *multiplicationTable*
3. Run and test your code

Practice using parameters in a function

4. So far, the multiplication function works for a 10 x 10 result but what if we wanted to display a 5 x 5 or 12 * 6 multiplication table?
5. We need to pass these values (like 12 and 6) to the function.
6. Modify the function to accept two parameters like:
   multiplicationTable(maxRows, maxColumns)
7. Use maxRows, maxColumns variables in the function
   Tip: replace number 10s with these variables
8. Call the new multiplicationTable function
   Example: multiplicationTable(5, 5);

Practice returning values from a function.

9. Why should the *multiplicationTable* function display the values? What if we wanted to return the result to the caller who then decides what to do with it?
10. Return the table values that you printed using the document.write function to the caller.
11. Call the new function, gather the returned value and display it using document.write

Practice using arrays

1. Create a new function called getNames
2. In this function create and array called names[] to hold a few of the student names in your class.
3. Create another array called ages to hold the ages of the above students
4. Write a for loop to display the name and age of each student.