THE INTRODUCTION TO

FUNCTIONS

DEFINITION:

A REUSABLE BLOCK OF CODE

SYNTAX FOR FUNCTIONS

▸ Function declaration are a set of instructions that is reusable. Think of this as a blueprint.

▸ Function declaration involves:

▸ Function keyword => Name of function => open and closed curly braces *{}*

```
function helloWorld () {
    return "hello world"
}
```

▸ *return* is a key word reserved for functions. This is what the function will output

SYNTAX FOR FUNCTIONS

- You can create arguments to allow us to pass values to the function

- To invoke functions (run the code between the braces) we type the name and put round brackets like below

```javascript
function add(num1, num2) {
  var total = num1 + num2;
  return total
}


add(1, 2);
// 3
```

PARAMETERS

▸ Parameters are identifiers or placeholders to make functions dynamic (not restricted to certain values)

▸ Parameters are used in function declarations (when you write the instructions of the function)

▸ Parameters represent values and should be named appropriately

▸ Parameters are similar to declaring variables

ARGUMENTS

▸ Parameters REPRESENT values in a function while arguments ARE the values passed to a function

▸ When invoking a function (making the code inside the function) can pass arguments (values) to the function

▸ Order matters!!!!

RETURN KEY WORD

▸ The *return* key word is the last line of code.

▸ It is only used in functions

▸ The preceding lines of code will not run after *return*

▸ The *return* key word signals how the function will be evaluated i.e. what will the function return when run

▸ If there is no return key word declared in the function, the default value returned will be *undefined*

CONSOLE.LOG vs RETURN

▸ Console.log is a way to print values when code is running

▸ It is primarily used for debugging (when you write some code and it doesn't preform how you would expect it to)

▸ Console.log can be used anywhere while return is only for functions

▸ A function will only display the return value if it is the last line of the script (a file that code in)

RECAP

▸ A function is reusable code

▸ Parameters are identifiers for values while arguments are values used when the function is invoked

▸ Terminology: Invoke, run, execute, call all mean that the code defined in the function is being used

▸ To invoke a function:

1. Define a function

2. 'Call' the function by writing parenthesis after the name