# Module 2 Project 1

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In this assignment, we learned about some of the specific primitive types and data structures of the JavaScript language. JavaScript is a dynamically typed language, meaning that its types will not need to have certain relationships at compile time. This is good because it allows us to develop quickly, but can be bad because it can lead to mistakes or illogical code that will not yield us good results.

We started by creating several greeting functions. These greeting functions had a single parameter field of name and could take in a single name argument and return a greeting in the form of a string. We were able to expand upon this functionality by refactoring it into a fat arrow function and using string interpolation to avoid messy code that uses ‘+’ sign to bind two strings into a single output.

Next we explored some primitive types, such as int, string, double, and function (or object). Using the typeof keyword will allow the exact type of a variable to be displayed on screen or used in logic of other code. We also saw that functions have a type as well, and you can see this type by using the typeof keyword. Functions are also assignable to variables, and we proved this concept by assigning a function to the variable ‘greet’ depending on some logic.

Arrays are like lists of items. The first item’s index starts at 0, and will continue to increment by one depending on the length of the list. Arrays are dynamic in length and can be pushed to with the .push() method. Specific index’s can be referenced by using the name of the array variable and the index with square brackets, like so array[index]. We explored how an easy way to pick from the back of an array is to use the length of the array and subtract off of it- in this method we are able to get the last item of a list easily with arrayName[arrayName.length - 1].

Lastly we explored functions as part of objects. We defined a student object and then created a method on the object called ‘age’ which can use logic and the ‘this’ keyword to reference parts of itself when making a decision on how it should operate or resolve a value. We were also able to push multiple objects into a single array and then iterate over them using the ‘forEach’ method, which is a higher order function.

**Resources**

*JavaScript*. MDN. (n.d.). Retrieved September 10, 2022, from https://developer.mozilla.org/en-US/docs/Web/JavaScript

**Screenshots**















