Week 2 Notes

JavaScript comments

```
// this is a short comment
/* This is a longer comment
anything here will be ignored
This is a useful place to put notes
*/
```

Reserved words in JavaScript are:

```
abstract, await, boolean, break, byte, case, catch, char, class, const, continue, debugger, default, delete, do, double, else, enum, export
```

Declaring a variable in JavaScript is done using three keywords

```
const and let
// For example
const name = 'Enmanuel'
```

I think of the keyword const as my name, when we are born, we are not supposed to change the name that we were assigned when we were born.

Why do not we use the keyword 'var' instead

So why was the new word `let` introduced into ES6? Why not just change the behavior of `var` ?

Remember
 that a core tenet of the JavaScript language is that it has to remain
backwardly compatible. This means that the behavior of `var` had to remain consistent, so couldn't just be changed in ES6. For that reason, the new keyword `let` was introduced.

You should be aware of `var` though, as you will see it used frequently in older code examples around the web to declare variables.

Variable naming

Constant and variable names are case sensitive, so `ANSWER` is different to `Answer` and `answer`.

When using multiple words for constant and variable names there are two conventions:

Camel case starts with a lowercase letter and then each new word is capitalized:

```
firstNameAndLastName
```

Underscore separates each new word with an underscore:

```
first_name_and_last_name
```

Type of data in variables

strings, object, numbers.

Arrays, Logic, and Loops

In this chapter we'll look at some of the data structures used in JavaScript to store lists of values. These are called arrays, sets, and maps. We'll also look at logical statements that allow us to control the flow of a program, as well as loops that allow us to repeat blocks of code over and over again.

- Array literals

- Adding and removing values from arrays

- Array methods

- Sets

- Maps

- `if` and `else` statements

- `switch` statements

- `while` loops

- `do … while` loops

- `for` loops

- Iterating over a collection

Functions

Ways to declare a functions in JavaScript:

```
function hello(){
console.log('Hello World!');
}
```

Arrow functions

```
const square = x => x*x;
```