## Day3 - JS

### Js - Symbol

- Object property key may either be string type or of symbol type, cannot be a boolean or number.
- Symbols are guaranteed to be unique:
- https://javascript.info/symbol
- As Symbols are unique they reduce the risk of overwriting each other unlike strings

https://github.com/NandiniNayak/javascript-LessonPlan/blob/master/lesson3-export.js

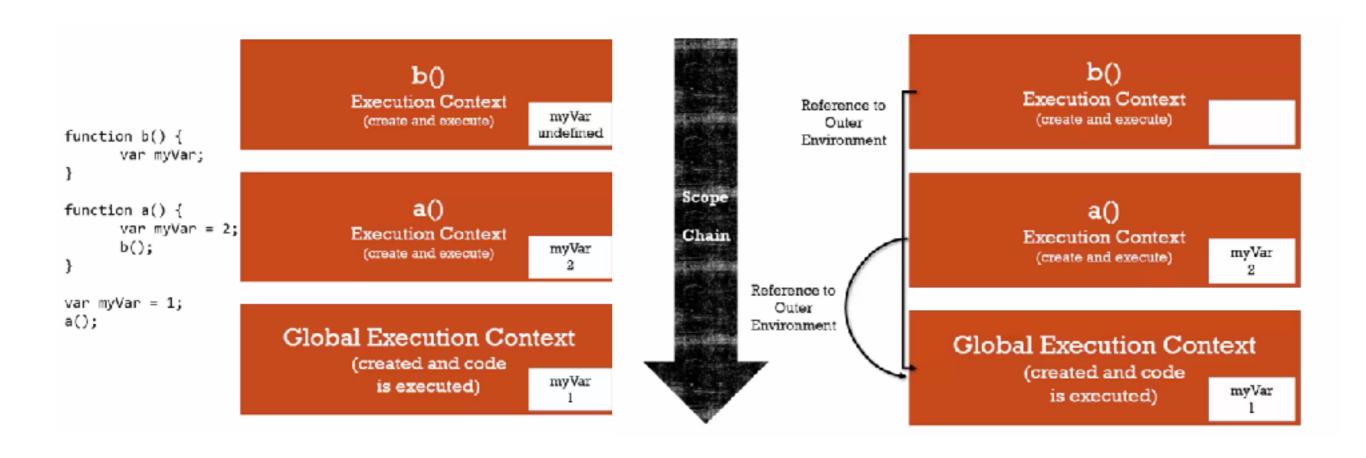
https://github.com/NandiniNayak/javascript-LessonPlan/blob/master/lesson3-symbol.js

#### Js - Loops

- https://developer.mozilla.org/en-US/docs/Web/JavaScript/Guide/ Loops and iteration
- for statement
- do..while statement
- while statement
- for..in statement. [iterates over property names]
- for .. of statement [iterates over property values] (equivalent to array.each in ruby)
- https://github.com/NandiniNayak/javascript-LessonPlan/blob/master/ lesson6-loops.js

#### Scope Chain

 Every function in the execution stack always has access to the variables in the outer environment(global).



# Js - Class, Constructors, Prototypes

- Javascript Classes introduced in ECMAScript 2015, are primarily syntactic sugar over existing prototype based inheritance.
- The class syntax does not introduce a new object oriented model to javascript
- Important difference between class declaration and function is, functions are hoisted, but classes are not. Hence class can be used only after its creation.
- Just like functions, a Class can be defined as a class declaration and expression
- Main difference between class and function is the static method, which allows calling class methods directly without an instance

#### Summary

- Constructor method are like initialize in ruby, for creating and initialising an object created from class or a function
- Prototype are special objects in function and classes which allows us to add or update properties of the function/class, hence allowing all the instance methods to access newly added properties
- Major difference between class and functions are hoisting and availability of static methods in class