Fundamentals

* Javascript ran on engine dependant on browser. Google is V8, FireFox is SpiderMonkey, Edge is Chakra, Safari is JavaScriptCore
* Environments to execute Javacript: Node, Browser, Embedded HTML document.
  + Install Node with installer @ nodejs.org
* Variables
  + Assigned dynamically
  + Uninitialized are ‘undefined’
  + Acquire type with ‘typeof’ keyword
  + Types:
    - Number
      * Can be integer or floating point
    - String
      * Can be single or double quote
      * Console.log(‘Hello World’);
      * Console.log(“Hello “ + world);
        + Concatenate with +
    - Boolean
      * true or false value
    - Object
    - Null
      * Explicitly defined values to represent nothing
    - Undefined
      * Variables uninitialized are set to this.
  + Declare: let var\_Name;
* Operators
  + ==
    - Console.log(‘100’ == 100) //true
  + ===
    - Console.log(‘100’ === 100) //false
  + \*\*
    - Console.log(5\*\*2) //25
* Conditional Statements
  + If (coniditon) { } else { }
    - Is else if { } – Nested if statements for additional conditions
  + Ternary operator:
    - Condition ? Output1 : Output2
  + Switch(choice\_val) {
    - Case ‘a’ : console.log(“Hello World”);
      * Break;
    - Default: console.log(“Hello”);
* Iterative Statements
  + for( initialize; condition; increment) { }
  + while(condition) { block; }
  + Do { } while(condition)

Functions

* Printing
  + Console.log(‘Hello World’);
  + Console.log(“Hello “ + world);

OOP

Pattern Matching

Error Handling

Asynchronous Execution

Web API – DOM and AJAX (XHR)

Web API – Notification and Storage

Testing