

# DETAILED SYLLABUS OF JAVASCRIPT

## Basic of JavaScript - PART 1

- Values and Variables
- Data Types
- var keyword
- let keyword
- Const
- Operator Precedence
- String and Template Literals
- If-else conditions
- Type conversion and Coercion
- Truthy and falsy values
- Equality operator
- Logical operator
- The Switch Statement
- Statement and Expressions
- The ternary operator

## Basic of JavaScript - PART 2

- Using strict mode
- Functions - basics
- Function Declaration and Expression
- Arrow Function
- Function calling functions
- Introduction to Arrays
- Basics of Array operations
- Introduction to objects
- Dot & Bracket Notation
- Object Methods
- Iteration of the for loop
- Looping array, break and continue statements
- While loop

## **VS code setup and developer skill**

- Setting up Visual Studio Code Editor

## **JavaScript in the browser and DOM event**

- Selecting and manipulating elements
- Handling click events
- Manipulating CSS Styles
- Creating games :- Hit the Target and Tic Tac Toe

## **How JS works behind the scene**

- An advanced overview of JS
- The JS Engine
- Execution context
- Scope and scope chain
- Variable environment and hoisting
- Hoisting and TDZ
- this keyword
- Regular functions
- Primitives vs Objects

## **Data Structures And Strings**

- Destructuring Arrays
- Destructuring Objects
- Spread Operator
- Rest Pattern and Parameters
- Short Circuiting
- Nullish Coalescing
- For Loop
- Enhanced Object Literals
- Optional Chaining
- Looping Objects
- Sets
- Maps
- String - Part I
- String - Part II

## More About Functions

- How Argument Passing is done
- First class and higher order functions
- Function accepting function
- Function returning function
- Call, Apply
- Bind
- Closures
- IIFE(Optional)

## Arrays

- For-each Loop
- For-each with map
- Filter
- Reduce
- The magic of Chaining
- Find method
- FindIndex method
- Some and Every
- Flat and Flat-Map
- Sorting