



Course Name : JAVASCRIPT FROM BASICS TO INTERMEDIATE

Duration : 3 Days (Physical Classroom / Virtual Live Instructor)

Skill Level : Beginner

# **COURSE DESCRIPTION:**

This JavaScript training will provide an in-depth look into the fundamental concepts of the language, starting from the basics and progressing to the intermediate level. The certified trainer will guide you through the features of pure JavaScript, including Object-Oriented Programming (OOP) and ES6 features, without relying on any frameworks or libraries. By the end of the course, you will have a strong understanding of the language and will be able to confidently write, debug, and understand JavaScript code. This training is also ideal for beginner and experienced web developers who are using frameworks such as Angular, React, Vue, or Node and wish to gain a deeper understanding of the JavaScript language.

#### WHAT WILL YOU LEARN?

This course will teach you the fundamentals of JavaScript from the ground up. You will learn the basics of programming and how to manipulate data with JavaScript. You will learn the fundamentals of manipulating DOM elements, working with events, and creating interactive web applications. You will also learn about more advanced topics such as OOP and other related technologies. By the end of the course, you will be able to create dynamic and interactive web applications and websites using JavaScript.

### PREREQUISITE:

Beginners. No programming knowledge is required.

# **METHODOLOGY:**

This program will be conducted with interactive lectures, PowerPoint presentations, discussions, and practical exercises. This course can be conducted as instructor-led (ILT) or virtual instructor-led training (VILT).

#### **JOB SCOPE:**

Upon completion of this course, candidates may pursue the following career paths:

- JavaScript Developer
- Web Developer
- Front-End Developer
- Web Designer
- Back-End JavaScript Developer
- Software Engineer
- Mobile Application Developer
- Systems Engineer
- Full-Stack Developer
- JavaScript Programmer



# **DAY I**

### **MODULE 1: INTRODUCTION**

- Welcome
- Intro to JavaScript
- History of JavaScript
- The JavaScript Console
- Developer Tools on Different Browsers
- console.log
- JavaScript Demo

# **MODULE 2: VARIABLES & DATA TYPES**

- Introduction to ES6
- Setting up the Environment
- Intro to Data Types
- Numbers
- Comments
- Strings
- String Concatenation
- Variables
- String Index
- Escaping Strings
- Comparing Strings
- Booleans
- Null, Undefines, and NaN
- Equality

### **MODULE 3: CONDITIONALS IN JAVASCRIPT**

- Intro to Conditionals
- Flowchart to Code
- If...Else Statements
- Else If Statements
- More Complex Problems
- Logical Operators
- Logical AND, OR
- Advanced Conditionals
- Truthy and Falsy
- Ternary Operator
- Switch Statement
- Falling-through



# DAY 2

# **MODULE 4: LOOPS IN JAVASCRIPT**

- Component Template Files
- Intro to Loops
- While Loops
- Parts of a While Loop
- For Loops
- Parts of a For Loop
- Nested Loops
- Increment and Decrement

# **MODULE 5: FUNCTIONS IN JAVASCRIPT**

- Event Binding
- Intro to Functions
- Function Example
- Declaring Functions
- Function Recap
- Return Values
- Using Return Values
- Scope
- Scope Example
- Shadowing
- Global variables
- Scope Recap
- Hoisting
- Hoisting Recap
- Function Expressions
- Patterns with Function Expressions
- Function Expression Recap



# DAY 3

### **MODULE 7: OBJECT-ORIENTED JAVASCRIPT**

- Intro to Arrays
- Donuts to Code
- Creating an Array
- Accessing Array Elements
- Array Index
- Array Properties and Methods
- Length
- Push
- Pop
- Splice
- Array Loops
- The forEach Loop
- Map
- Array in Arrays
- 2D Arrays

# **MODULE 8: COURSE PROJECT**

### **CONCLUSION**

- QA
- Useful References and Books
- Feedback