

JavaScript & Angular JS

Duration: 45 Hours

Prerequisites

- Knowledge of HTML/CSS
- Basic Knowledge of Programming Language is advantageous.

Basic Part

1. JavaScript

- Introduction
- Statements & Comments
- Variables
- Operators and Comparisons
- Conditional Statements and Loops
- User Defined Functions
- JS Objects
- JS Validations

2. The DOM Objects

- Introduction to DOM object
- DOM Methods
- Access & Modify HTML through DOM
- Event Listeners

- DOM Navigation
- Dynamic Content Handling
- Session Storage
- Local Storage

3. Object Oriented JS

- OOJS concept
- Classes & Instances
- Exception Handling in JS
- Constructors & Inheritance
 - Encapsulation
 - Abstraction
 - Polymorphism
- Prototype based programming

Angular JS Introduction

1. Introduction

- What is AngularJS?
- Why we need Framework?
- Pre-requisite requirement

2. Introduction to MVS

- Design pattern

3. Data Binding

- Two way binding with Model and view
- Two way binding with view and Model

4. Controllers

- Understanding controller
- Setting up initial state of a \$scope object
- Adding behavior to a Scope object
- Associating controller with Angular scope object
 - Explicitly using angular module controller function
 - Implicitly using ng-controller or \$route
- Scope inheritance

5. Service

- What is angular service?
- Usage of service

6. Scopes

7. Dependency Injection

8. Filters

- AngularJS build in filter
- Custom filter

9. Directives

- AngularJS build in directives
- Creating custom directive
- Isolated scope in directive
- Adding event listener

10. Module

- What is a module
- Module loading and dependencies

11. Providers

- Value recipe
- Factory recipe
- Service recipe
- Constant recipe
- Provider recipe

12. Routing

13. Basics of Security in AngularJS

Introduction to Node JS

- 1. The Node.js framework**
- 2. Environment Setup and Installing Node.js**
- 3. REPL terminal**
 - Introduction
 - Starting REPL
 - REPL Commands
 - Stopping REPL
- 4. Node Package Manager**
 - Installing modules using npm
 - Global/Local installation
 - Using package.json
 - Attributes of package.json
 - Uninstalling a module
 - Updating a module
 - Search a module
 - Create a module
- 5. Callback concept**
 - Introduction
 - Blocking Code
 - Non-Blocking Code
- 6. Working with Node JS Application using Event loop Concept**
- 7. Data Sources and How Node.js connects to databases**