

# Angular JavaScript 2.0

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**Duration: 7-8 Weekends (Weekend Batch)**

## Prerequisites

- Knowledge of HTML / CSS is required
- Candidate should have a good knowledge of JavaScript and Object Oriented JavaScript

## Course Contents

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### 1. Getting Started

- Introduction
- What is Angular 2?
- How Angular Works ?
- Difference between Angular and Other Framework
- Advantages of AngularJS

### 2. Typescript

- What is typescript?
- Compare typescript with Javascript
- Data Types & Variables
- Variable & Operators
- Control Structure and Decision making & loops
- Typescript Functions & Strings
- Typescript Object
- Class , Abstract Class
- Constructor Method
- Type of Assertion
- Interfaces

### 3. Application setup

- Installing Angular JS
- Configuration of Angular JS
- Creating an Angular 2 project
- Creating an Angular 2 project using CLI

### 4. NodeJS

- Setup
- Commands
- What is NPM
- Install Nom for Angular.

### 5. Architecture

- Module
- Component
- Template
- Metadata
- Data binding
- Directive
  - Attribute Directive
  - Structural Directive ,
- Services
- Dependency Injection

### 6. Directives

- Understanding Directives
- Directives Overview
- Different kinds of directives
- Build attribute directive
- Apply the attribute directive to an element in a template
- Respond to user-initiated events
- Pass value into the directive with an @Input data binding
- Custom Attribute Directive

### 7. Structural And Attribute Directive

- What is structural directive?
  - (1) NgIf case study
  - (2) NgFor,NgSwitch
- What is attribute Directives
  - (3) Using the NgStyle Directive
  - Using the NgClass Directive
  - (4) The <template> element

### 8. Service

- What is service?
- Create a service
- Understanding Services Injecting Concepts
- Async service and promise
- Introduction to Observable
- What is web service
- how to create web service
- how to consume rest service
- posting data to client server architecture
- Introduction to Material Design
- Introduction to card Material Design .
- What is Json Server .
- Install json server and run and up into your local machine
- crud operation using son server.

### 9. Dependency Injection

- Why dependency injection?
- Angular dependency injection
- Injector provider

### 10. Data Binding

- Interpolation
- Property binding
- Event binding

- Attribute binding
- Class binding
- Style binding
- Multiple components & passing data

#### 11. Display data

- Class Binding
- Style Binding
- Event Binding
- Two-way Binding
- Component Data Binding
- Component Events
- Ng-Model

#### 12. User input

- Binding to user input events
- Get user input from the \$event object
- Get user input from a template reference variable
- Key event filtering (with key.enter)

#### 13. Form

- Types of Forms in Angular4

- Introduction to Template Driven Forms.
- Validation of Template Driven Forms.
- Introduction Model Driven Forms.
- Validation of Model Driven Forms.
- Two way data binding using ngModel.
- Model Driven Forms With Form Builder
- How to post data via a angular forms with rest service.

#### 14. Pipes

- Introduction to Pipes
- Why pipes are useful.
- Type of pipes
- Built-in pipes
- parametrised pipes
- how to create custom pipes

#### 15. Router

- Setting Up Router
- Imperative Routing
- Route Parameter
- Child Routing

## ANGULAR 4 & 5

#### 16. Angular4

- Features of angular 4
- Animation package
- Angular Universal
- Typescript 2.1 and 2.2 compatibility
- Flat ES Modules (Flat ESM/FSEM)
- Upgrading from angular 2 to 4

#### 17. Angular 5:

- What is new in Angular 5?
- Introduction to Build optimizer.
- New Router Lifecycle Events in Angular 5
- Service Workers in Angular 5
- Deprecations and Other Updates

## Ionic 3 (Building mobile apps for IOS+Android+Windows ) using Angular

- Installing the Ionic 3 CLI
- Creating a New Project with the Ionic 3 CLI
- Listing Project Templates
- Running our Project in the Browser and on a Device
- Using Live Reload on a Device
- Generating Project Components with the Ionic CLI
- Getting Environment Information with Io
- Accessing the Ionic Documentation
- Creating an Ionic.io Account
- Authenticating to Ionic.io Within the CLI
- Creating an Application on the Ionic.io Platform
- Using Ionic View to Run Your Application on a Device
- Generating Splash Screen and Icon With the CLI-
- Getting Started with Ionic 3
- Creating an Ionic Application
- Serving the Application
- Folder Structure
- Your First Application
- Ionic Document Flow
- Challenge - Create an Ionic Application
- Run Your Application in a Browser

#### 1. Hands on Experience on Live Project

1. Online portal for E-learning Management
2. A Web based project like E commerce Website
3. Mobile Application in Native and hybrid platform using angular and ionic3