

# Syllabus for AngularJS



## Course Duration For AngularJS Training Course:

- 5 weeks (Weekday batches) or 6 Weekends (Weekend batches)

## Objectives For AngularJS Training Course:

- Implement single-page applications
- Understand the concept and implementation of Dependency Injection
- Understand the use of Modules, Controllers and Directives
- Master AngularJS expressions, filters, and scopes
- Build Angular Forms
- Write AngularJS directives and know how to use AngularJS services
- Unit test and end-to-end test your AngularJS applications



## Eligibility For AngularJS Training:

- Basic knowledge of HTML, CSS & Javascript

## AngularJS Syllabus

### HTML & CSS Overview

#### Introduction

- HTML Basics
- HTML Elements
- HTML Attributes
- HTML Styles
- HTML Forms
- HTML Form Elements
- HTML Input Element Types
- HTML Input Attributes
- HTML File Paths
- Script tag and its uses
- HTML & XHTML
- CSS Introduction
- CSS Syntax
- CSS Selectors
- CSS Styling

### Javascript Overview

#### Javascript Primer

- Introduction to Javascript
- Javascript Statements
- Javascript Keywords
- Javascript Functions
- Javascript Programs
- Javascript Operators
- Function Parameters
- Function Return Values
- Javascript Data Types
- Primitive Types

#### Working with Objects

- Object Overview
- Object Oriented Programming
- Object creation
- Adding Properties to Objects
- Adding Methods to Objects
- Javascript Conditional Statements
- Javascript Loops & Iteration
- Enumerating properties
- Callbacks
- JSON

## AngularJS

### AngularJS Basics

- What is AngularJS?
- Why AngularJS?
- Features of AngularJS
- Model-View-Controller explained
- Why MVC matters
- MVC - the AngularJS way
- The IIFE
- My first AngularJS app

### Angular Expressions

- All about Angular expressions
- How to use expressions
- Angular expressions v/s Javascript expressions

### Filters

- Built-in filters
- Using AngularJS filters
- Creating custom filters

### Directives

- Introduction to Directives
- Directive lifecycle
- Using AngularJS built-in directives
- Binding controls to data
- Matching directives
- Creating a custom directive

### Controllers

- Role of a Controller
- Attaching properties and functions to scope
- Nested Controllers
- Using filters in Controllers
- Controllers in External Files
- Controllers & Modules

### AngularJS Modules

- Introduction to AngularJS Modules
- Bootstrapping AngularJS

### AngularJS Forms

- Working with Angular Forms
- Model binding
- Form controller
- Validating Angular Forms
- Form events
- Updating models with a twist
- \$error object

### Scope

- What is scope
- Scope lifecycle
- Two way data binding
- Scope inheritance
- Scope & controllers
- Scope & directives
- \$apply and \$watch
- Rootscope
- Scope broadcasting
- Scope events

### Dependency Injection & Services

- What is Dependency Injection
- Using Dependency Injection
- What are services
- Creating services
- Factory, Service & Provider
- Using AngularJS built in services

### Single Page Application(SPA)

- What is SPA
- Pros & Cons of SPA
- Installing the ngRoute module
- Configure routes
- Passing parameters
- Changing location
- Resolving promises
- Create a Single Page Application

### AngularJS Animation

- ngAnimate Module
- CSS transforms
- CSS transitions
- Applying animations
- Directives supporting animation

### Testing

- Unit testing
- Introduction to Karma
- Using Jasmine
- Testing controllers
- Testing filters
- Testing directives
- End-to-end testing

### Project

Students will create a dynamic web site using various AngularJS components like controllers, directives, filters, Angular forms and modules. This project will be completed under the careful guidance of an experienced faculty. Working on this project will give students all the clarity they require in order to develop AngularJS applications in the software world.