

## ANGULARJS

**Duration:** 30 hours – 5 full days

**Prerequisite** - Prior experience with HTML, CSS and JavaScript, Good knowledge and experience of using HTML for web application ,Understanding of Model-View-Controller (MVC) concepts ,Working knowledge of Document Object Model (DOM) ,Strong experience in using the JavaScript including creating functions, managing events, and the error handling in JavaScript based applications.

**Course Objectives** - The objective of this course is to empower members to create web applications that depend on the Model-View-Controller Architecture, and decline the reliance on JavaScript required to functionalize web applications.

### Lab Setup Details -

#### Hardware requirement:

CPU : I4/I5 , Hard Disk : 50GB , RAM :8 GB

#### Software Requirement:

- XAMPP <https://www.apachefriends.org/download.html> (DOWNLOAD VERSION 5.6.31)
- MSOFFICE 2010
- NOTEPAD++ <https://notepad-plus-plus.org/download/v7.5.1.html> (DOWNLOAD VER 7.5.1)
- SUBLIME TEXT3 <https://www.sublimetext.com/3>
- Visual Studio Code <https://code.visualstudio.com/download>
- PDF READER <https://adobe-reader.en.softonic.com/download>
- Browser Google Chrome OS Window 10

## Course Outline

### Day - 1

#### Introduction to Angular.js

- Architecture
- How Angular.js helps in effective ui development using javascript

#### Angular.js Building Blocks

- Controller Component
- Model Component
- View Component
- Directives
- Filters
- Services
- Providers
- Factory
- DI in Angular.js

## Anatomy of an Angular.js Applications

- Creating Boundaries using ng-app
- Model View Controller
- Templates and Data Binding
- Repeating elements in templates
- Using Expressions, CSS Classes and Styles
- Using Controllers for UI responsibility separation
- Responding to model changes

## Day - 2

### Modules

Module Loading and Dependencies

- Configuration Blocks
- Run Blocks

### Directives-

Directives Overview

Built in directives

ng-bind, ng-model, ng-show, ng-hide, ng-click, ng-disabled, ng-readonly, ng-app, ng-controller and many more

Using Controllers and Scopes:

Why and When to Use Controllers and Scopes Preparing the Example Project

Creating and Applying Controllers Setting Up the Scope

Modifying the Scope Organizing Controllers

Using a Monolithic Controller Reusing a Controller

Using Controller Inheritance Using Multiple Controllers Explicitly Updating the Scope

## DAY - 3

### Data Binding in Angular.js

- Understanding Built-in Directives
- Scope resolution
- One way and Two way data binding

### Using Filters

- Filters Overview
- Inbuilt filters : limitTo, orderBy, filter, currency, number, date
- Understanding Filter Expressions
- Building custom Filters

### Services & Factories

- Services Overview
- Achieving Modularity and reusability using Services
- Injecting Services
- Creating Custom Factories and Providers

#### **Forms–**

- Handling Forms
- Forms and Validation
- Pristine, dirty, valid, invalid
- Validations in angular
- \$valid, \$invalid , \$error Forms Validations

#### **DAY - 4**

#### **Promises–**

- The need for promises
- Callbacks and Promises
- Built in promises
- Creating custom promises

#### **Communicating with Servers**

- Communicating over \$http
- Configuring the requests
- Sending Http Headers
- Caching Responses
- Request and Response Transformation
- Interceptors
- Using RESTful Resources
- Using \$resource Service

#### **USING THIRD-PARTY MODULES**

- NG-GRID, ANGULAR-UI