Angular Workshop Overview

Overview

Angular is one of the most popular client-side JavaScript frameworks. It is used to create dynamic, interactive and responsive cross platform applications. It is a full-featured Single Page Application (SPA) framework.

This workshop is designed for software professionals who want to learn the basics of Angular 2/4 and its building blocks in simple and easy steps. It follows a hands-on approach. It is structured around a small sample application. Different concepts will be explained in detail as they are introduced in the application.

Participants' Profile

The participant should have a good working knowledge of HTML, CSS and JavaScript. Knowledge of Bootstrap and Angular 1.x is a plus, but not mandatory.

Benefits

At the end of this course, the participant will:

- Understand the key building blocks of an Angular 2/4 application
- Learn to build interactive, single page applications using Angular
- Understand and appreciate the application of emerging concepts like MVC, MVVM, DI, REST, etc.
- Be able to use various Angular features including modules, components, directives, services, pipes and routers

Topics Covered

1. Need for frameworks
2. Introducing Angular
3. Setting up Angular
4. Architecture overview
5. TypeScript – What, Why?
6. Create your first Angular app
7. Components & Templates
8. Data Binding
9. Directives
10. Pipes
11. Forms & Validation
12. Services & Dependency Injection
13. Introduction to Reactive Extensions
14. Understanding Component Life Cycle

15. Server Communication
16. Building Single Page Apps using Routing

Software Requirements

1) Node.js (https://nodejs.org/en/)
   a) Required for installing JSON Server and Angular CLI mentioned below
2) Angular CLI (https://cli.angular.io/)
   a) A command line interface for Angular
3) JSON Server (https://www.npmjs.com/package/json-server)
   a) Allows us to expose JSON data as REST API
   b) This is required for demonstrating client-server communication
   c) Install it globally using "npm install -g json-server" command
   d) Check the URL for more information
4) Code Editor (any one)
   a) Visual Studio Code (https://code.visualstudio.com/)
   b) Sublime Text (https://www.sublimetext.com/)
   c) Brackets (http://brackets.io/)
   d) Atom (https://atom.io/)
5) Browser - Google Chrome
   a) Preferred because of easier debugging
6) Bootstrap (http://getbootstrap.com/)