Mastering Angular 6/7 (TT4168-A6)

Modality: Virtual Classroom

Duration: 5 Days

About this course:

Learning Angular includes and offers hands-on, practical experience with a better way to create rich web apps. When you develop for the web, understanding Angular can alter the way web interfaces are written, operating through many platforms and browsers. Angular offers the best possible output on today's web platform.

An Angular developer's average salary is $120,000 per annum.

Course Objective:

This online training program offers indoctrination in the effective use of the technology umbrella which is at the forefront of modern web creation. Students will discover too:

· Discover what is Angular and learn why and how to use it

· Explore what is TypeScript, and discover why and how it is used with Angular

· Understand how to work with the different facets of Angular technology to introduce smooth, reactive web interfaces

· These are the best ways to use Angular so it functions discreetly and does well

· How to ease running and testing Angular apps utilizing various techniques and tools

· Effective methods for Angular to function unobtrusively and do well

· Make server-side rendering easier

· How to simplify unit monitoring

· How Angular decreases the amount of code you need to compose to add rich features to both new and existing web pages

· Use Angular CLI to facilitate deployment and development

· How routers can help to browse in a single page app

· Works with Regardless of Time compilers like developer effects and creation phase

· How to support REST, JSON, and other resources using Angular with HTTP

· Create data models on RxJS to fulfill huge data needs

· Comprehending the MEAN Stack Components

· How to support, deploy, and run Angular Apps use MEAN stack

Audience:

· It is an introductory level program of Angular development, built for professional web developers who want to further broaden their web development expertise. To be in this class good.

Prerequisite:

· Participants must have recent, hands-on experience in the development of simple web apps, and be knowledgeable in JavaScript, CSS3, and HTML5.

Course Outline:

Module 1: Angular Overview

Lesson: HTML5, CSS3, RWD, and jQuery

- Leading to Angular
- Evolution of HTML and CSS
- Responsive Web Design
- jQuery Under the Covers
- Bootstrapping to Browsers

Lesson: Angular Framework

- Frameworks vs Libraries
- AngularJS to Angular2
- Angular Release Schedules
- Angular 4/5

Lesson: Overview of Angular Architecture

- Architectural Elements and Concepts
- TypeScript
- Model-View-*
- Data Binding
- Components and Services
- Factories and Events
- Exercise: Hello Angular

Module 2: Getting Started with Angular

Lesson: Getting Started with TypeScript

- Why Use Typescript
- Typescript Module System
- Types/Keywords/Concepts
- Transpilers
- Angular and TypeScript
- Exercise: Hello TypeScript

Lesson: Bootstrapping with Angular CLI

- Challenges in Setting up Projects
- Angular CLI Overview
- New Projects with CLI
- Testing and Generating with CLI
- Ahead of Time (AOT) Compilation
- Implications of using AOT

Lesson: Angular Project Structure

- Top-Level Files and Directories
- Folders" src and src/app
- Exercise: Creating Projects with Angular CLI?

Lesson: Components and Events

- Usable Classes in Angular
- HTML, CSS, and TypeScript in Components
- Data Binding and Events
- Exercise: Building Components

Lesson: Third Party Libraries

- Angular and the Need for Libraries
- Options for adding Libraries
- Working with npm install
- Working with angular-cli.json
- ng2 Wrappers
- Exercise: Using Libraries

Module 3: Views

Lesson: Dynamic Views

- Overview of Directives
- Built-in Directives
- ngIf and else

- ngFor and ngSwitch
- Conditional Styling
- Exercise: Working with Directives

Lesson: Pipes

- Overview of Pipes
- Built-in Pipes
- Formatting and Conversions
- Parameterizing Pipes
- Exercise: Working with Pipes

Module 4: Angular Forms

Lesson: Forms and the Forms API

- Forms and NgModel
- NG Form Groups
- NG Form Validation
- Built-in Validators
- Exercise: Basic Forms with Angular
- Exercise: Powerful Forms with Angular

Lesson: Single Page Applications

- Overview of SPA Concept
- Routing in SPAs
- Creating Routes
- Routing Options
- Exercise: Routing in a Single Page Application

Lesson: Injectables and Local Storage

- Components and Injectables
- Services
- Service Interfaces
- Local Storage
- Exercise: Local Storage

Module 5: Unit Testing with Angular

Lesson: TDD, BDD, and ADD

- Test-Driven Development
- Testing Types
- Behavior-Driven Development

- Acceptance-Driven Development

Lesson: Testing and Angular

- Testing dependencies
- Options for Testing in Angular
- Components and Injectables
- Services
- LocalStorage
- Exercise: Unit Tests with Angular, Karma, and Jasmine
- Exercise: Local Storage Service

Lesson: Angular Best Practices

- Upgrading from Angular 1.x
- Angular Style Guide
    - Single Responsibility Principle
    - Naming Conventions
    - Coding Conventions
    - Application Structure
    - Components, Directives, Services
    - Lifecycle Hooks
    - Routing

Module 6: Using RESTful Services

Lesson: Overview of REST

- REpresentational State Transfer
- REST and HTTP
- REST/HTTP: Representation-Oriented
- REST Design Principles

Lesson: Angular and REST

- REST in Angular
- Promises
- Observables
- Http Module
- Putting it all Together
- Exercise: Using RESTful Services in Angular?

Module 7: Working with Applications

The MEAN Stack

- MEAN Components and Overview
- Working with MongoDB
- Working with Node.js
- Working with Express
- Creating a Node.js Web Server
- Exercise: Implementing a MEAN Application
- Exercise: Working with the Database

Module and Dependency Management

- Node.js Projects and Modules
- Making a Module Executable
- Core Modules
- Dependency Management Using NPM
- Setting Up Dependencies
- Installing, Updating, and Uninstalling Packages
- Exercise: NPM Cache Clean
- Exercise: NPM Init
- Exercise: Package.json