Web Essentials: Angular 6/7 (TT4165-A6)

Modality: Virtual Classroom

Duration: 3 Days

About this course:

This Angular course will furnish functional and hands-on involvement in an incredible choice for building advanced web applications, if someone is working for the web, Angular will change the manner in which you compose web interface and work over various platforms and browsers.

Salary Estimate:

The normal pay of an Angular developer is $120,000 every year.

Course Objective:

This course gives inculcation in the practical utilization of the technologies umbrella that is on the main edge of web advancement.

Working inside an engaging, environment of hands-on learning, guided by our master group, participants will figure out how to:

1. Why should you use Angular and what is it.
2. What Typescript is, the reason it is helpful, and how to utilize it with Angular.
3. How Angular decreases the measure of code that you should write to add rich usefulness to both new and existing site pages.
4. Instructions to facilitate deployment and development utilizing Angular CLI.
5. Within a Single Page Application, how Routers can support navigation.
6. How to work with the various aspects of the Angular architecture to implement clean, responsive web interfaces.
7. What are the good procedures for utilizing Angular so it performs well and works unobtrusively?
8. Instructions to encourage running and testing the applications of Angular utilizing different

devices and methods

9. Performing with the Ahead of Time compiler comprising its effect of designers and the improvement procedure
10. Instructions to utilize Angular with HTTP to help REST, JSON, and different services.

Targeted Audience:

This Angular course is for the initial level, intended for experienced developers of the web who want to broaden their aptitudes in web advancement.

Prerequisite:

Participants should have broad working information in creating fundamental web applications.

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