

Angular 2.0

Course 3377 - 32 Hours

Overview

Angular 2 is the successor of AngularJS, the currently most successful JavaScript framework for Web applications. Angular2 brings better performance, better compatibility with web standards and it is easier to learn. These two framework are different and any knowledge of AngularJS 1.x is nice to have but is not a requirement. We, at JB, are offering both the Angular 2 and the AngularJS courses.

The Angular 2 is recommended for developers who wants to be ready for the very close release date. Angular 2 is production-ready, for those able to temporarily work around beta limitations. The AngularJS 1.x course from the other hand is recommended for developers who must work with a production-proven framework at the very moment.

On Completion, Delegates will be able to

- Build Single Page Application with Angular 2
- Understand how Angular 2 works
- Use best practices for testing, app structure and performance.

Who Should Attend

This course intends to front-end developers who wish to work with the best framework

Prerequisites

Before attending this course, students must have:

- Previous experience in Object Oriented Programming (Java, C++, C#)
- Basic understanding of the HTTP protocol
- Basic knowledge of HTML, CSS and JavaScript

Course Contents

Module 1 - Introduction to Angular 2

- Single Page Applications (SPA)
- The need for javascript framework
- AngularJS vs. Angular 2 vs. React
- Setting up the environment
- “Hello Angular 2” - your first app.



Module 2 - Type Script

- Angular 2 is built on Type Script
- JavaScript, ECMAScript5 , ECMAScript 6 and Type Script
- Types
- Classess
- Inheritance
- Generics Modules
- Raytracer
- Tools

Module 3 - Angular 2 behind the hood

- Angular 2 architecture
- How angular 2 works
- The application
- The model
- The components
- The component decorator
- Putting it all together

Module 4 - Angular 2 Components

- NgFor
- NgIf
- NgSwitch
- NgNonBindable
- NgStyle
- NgClass

Module 5 - Angular 2 Forms

- Forms in angular 2
- Using controls in forms
- Using Control Groups
- Constructing a Form using a FormBuilder
- Input Validations
- Watchers
- The NgModel

Module 6 - Routing

- What is Routing
- The need for routing
- Routing options
- Path Location
- Passing parameters
- Nested routes



Module 7 - going deeper: Services, Data Model and view Components

- Understanding promises
- Understanding the RxJS
- Working with data Observables
- Constructing your Models
- Implementing custom services
- Creating the view components

Module 8 - communicating with the server

- XHR and AJAX
- Working with Angular 2 http
- Basic get request
- Using REST
- Http and promises
- Http api

Module 9 - Testing

- Testing overview
- End-to-End vs. Unit Testing
- Jasmine testing
- Class testing
- Pipe testing
- Async Service Testing
- The Angular Test Environment
- Component Testing
- Testing tools

Module 10 - (optional) - Migrating AngularJS 1.x to Angular 2

- Preparations
- Using the Module Loader
- Migrating to TypeScript
- Using Component Directives
- Upgrading with the Upgrade adapter
- Interoperability