



Angular: Intermediate Angular 12

Course ID #: 7000-625-ZZ-Z

Hours: 14

Course Content

Course Description:

In this course, you will cover more advanced topics of this next generation of the Angular framework. This Angular 12 Training course is intended for those that already have a basic understanding of the Angular 12 fundamentals and now want to cover more advanced features the Angular 12 framework offers.

This Angular 12 Training course includes advanced topics not covered in our 3-day Introduction to Angular 12 Programming class.

Don't lose any time, gain an edge and start developing in Angular 12 now!

Prerequisites:

Students must have some prior understanding of Angular fundamentals in addition to web development using, HTML, CSS and JavaScript. Experience developing with AngularJS or prior versions of Angular is not required.

Topics:

Lesson 1: Advanced HTTP Client

- Request Options
- Returning an HttpResponse Object
- Setting Request Headers
- Creating New Observables
- Creating a Simple Observable
- The Observable Constructor Method
- Observable Operators
- The map and filter Operators
- The flatMap() Operator
- The tap() Operator
- The zip() Combinator
- Caching HTTP Response
- Making Sequential HTTP Calls
- Making Parallel Calls
- Customizing Error Object with catchError()
- Error in Pipeline
- Error Recovery
- Summary

Lesson 2: Angular Modules

- Why Angular Modules?
- Anatomy of a Module Class
- @NgModule Properties
- Feature Modules
- Example Module Structure
- Create a Domain Module
- Create a Routed/Routing Module Pair
- Create a Service Module
- Creating Common Modules
- Using One Module From Another
- Summary

Lesson 3: Advanced Routing

- Routing Enabled Feature Module
- Using the Feature Module
- Lazy Loading the Feature Module
- Creating Links for the Feature Module



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Components

- More About Lazy Loading
- Preloading Modules
- routerLinkActive binding
- Default Route
- Wildcard Route Path
- redirectTo
- Child Routes
- Defining Child Routes
- for Child Routes
- Links for Child Routes
- Navigation Guards
- Creating Guard Implementations
- Using Guards in a Route
- Summary

Lesson 4: Unit Testing Angular Applications

- Unit Testing Angular Artifacts
- Testing Tools
- Typical Testing Steps
- Test Results
- Jasmine Test Suites
- Jasmine Specs (Unit Tests)
- Expectations (Assertions)
- Matchers
- Examples of Using Matchers
- Using the not Property
- Setup and Teardown in Unit Test Suites
- Example of beforeEach and afterEach Functions
- Angular Test Module
- Example Angular Test Module
- Testing a Service
- Injecting a Service Instance
- Test a Synchronous Method

- Test an Asynchronous Method
- Using Mock HTTP Client
- Supplying Canned Response
- Testing a Component
- Component Test Module
- Creating a Component Instance
- The ComponentFixture Class
- Basic Component Tests
- The DebugElement Class
- Simulating User Interaction
- Summary

Lesson 5: Debugging

- Overview of Angular Debugging
- Viewing TypeScript Code in Debugger
- Using the debugger Keyword
- Debug Logging
- What is Angular DevTools?
- Using Angular DevTools
- Angular DevTools - Component Structure
- Angular DevTools - Change Detection Execution
- Catching Syntax Errors
- Summary

Labs:

- Lab 1. Getting Started
- Lab 2. Build a Single Page Application (SPA)
- Lab 3. Advanced HTTP Client
- Lab 4. Using Angular Bootstrap
- Lab 5. Lazy Module Loading
- Lab 6. Advanced Routing
- Lab 7. Introduction to Unit Testing
- Lab 8. Debugging Angular Applications

Register for this class by visiting us at:

www.tcworkshop.com or calling us at 800-639-3535