

Angular 15

Table of content:

1: Single Page Applications, Why Angular and Project Setup

- Course Overview
- Introduction to SPA
- What do we need Angular for?
- Setting up the Development Environment.
- Angular Application Architecture
- Angular CLI
- Project Structure

2: TypeScript and ESNext:

- What is TypeScript
- Basic Types in TypeScript
- Variable Declarations using Let and Const
- Spread and Destructure.
- Classes
- Interfaces
- Arrow Functions
- Modules
- fetch API
- async / await

3: Angular Modules and Angular Components

- Working with Modules
- @Component
 - Angular Components and the @Component Decorator
 - Creating an Angular Component using the Angular CLI
 - Component Decorator Metadata
 - Stable Standalone Components API (new feature)
- Data/Property Binding
 - Interpolation
 - Property Binding
 - Event Binding
 - Two-way Data Binding [(ngModel)]
- Built-In Directives
 - *ngFor, *ngIf
 - Introduction to the Directive Composition API
 - ngClass, ngStyle
 - Stable “NgOptimizedImage” Image Directive (new feature)
- Inter-component Communication (@Input/@Output, Event Emitter)
- Template variables (ViewChild/ContentChild)
- Lifecycle hooks

4: Forms

- Template Driven Forms
- Reactive forms
- Form Validations
- Custom Synchronous form validations
- Custom Asynchronous form validations

5: Pipes

- Built-in Pipes
- Custom Pipes

6: Services

- Service as a singleton, data sharing.
- HttpClient, HttpHeaders
- Observables with Operators like the map, subscribe, catch, retry etc
- Subjects
- Sharing data across Components using Service
- Http with provideHttpClient (new feature)

7: Routing

- Child routes
- Route params
- Route Guards - CanActivate, CanActivateChild, CanDeactivate,
- Feature Module
- Lazy loading implementation
- Reduce Boilerplate in Guards (new feature)
- Router Unwraps Default Imports (new feature)
- Enablement to Develop Multi-Route Application (new feature)

8: Integrating with Third-Party Libraries

- Angular Material
- Stable MDC-based Components (new feature)

9: Unit Testing

- Introduction to Unit testing
- Test Component
- Test Services

- Coverage Report

10: New Feature

- Extended esbuild support
- Cleaner, Better Stack Traces
- Automatic Imports in Language Service
- Optimized CLI with a Bunch of Improvements