Angular 17

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Duration: 5 days

Module 1: Introduction to Angular and TypeScript

- Introduction to Angular
- Introduction to TypeScript
- Setting up the Development Environment and Running the Angular Initial Application
- Angular Directory Structure
- Angular Building Blocks

Module 2: Components and Data Binding

- Working with standalone Components
 - o @Component Decorator and its Metadata
 - o Generating a Component using the Angular CLI
 - Invoking Components
- Data Binding
 - Interpolation
 - Property Binding
 - Event Binding
 - Two-way Binding
- Control-flow grammar
 - o Conditionals:
 - @if
 - @else
 - Loops:
 - @for
 - Switch Statements:
 - @switch
 - @case
 - @default

Module 3: Dependency Injection and HTTP Communication

- Angular Forms
 - o Template Driven Form and its validation
 - o Reactive Form and its validation
 - o model () function
- Interface
- Dependency Injection
- Working with Services

- Calling Backend APIs
 - Working with JSON Data
 - o CRUD operations from a Rest API using HttpClient
 - o Map, CatchError/ThrowError and Retry Operators

Module 4: Component Communication and Routing

- Angular Component Communication with @Input/@output decorator
 - Required Inputs
- Introduction to Routing
 - o Implementing Routing in an Angular App
 - o Wildcard Route / Default Route
 - Navigate Programmatically
 - o Implementing Child Routes
 - Named router outlets
 - o multiple outlets in one view
 - o Router Inputs
- Working with Route Guards in Angular

Module 5: Authentication

- Implement JWT Token for authentication (Demonstration with available Token Based Api)
- Functional Interceptors

Module 6: Pipes & Directive

- Attribute Directive
 - NgStyle, NgClass
- Pipes
 - o Introduction to Pipes in Angular
 - Using Built-in Pipes
 - o Creating Custom Pipes in Angular

Module 7: Angular Best Practice

- Lazy Loading components
- Standalone Components and Multi-Route Application

Module 8: Unit Testing

- Unit testing with Jasmine & Karma
- E2E testing with cypress