www.logicalimagination.com
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Angular Advanced

Course #: AN-401 **Duration:** 2 days

Prerequisites

Angular Introduction or familiarity building rich client applications using Angular, including Directives, Services, Routing, Pipes and Forms.

Details

This course teaches developers with a solid grounding in and experience building applications with Angular how to take advantage of the more sophisticated features of this potent platform. Achieve the maximum speed possible on the Web Platform today, and take it further, via Web Workers and server-side rendering. Angular puts you in control of scalability. Meet huge data requirements by building data models on RxJS, Immutable.js or another push-model. Build features quickly with simple, declarative templates. Extend the template language by creating your own components and using many existing components. Get immediate Angular-specific help and feedback with nearly every IDE and editor. All this comes together so you can focus on building amazing apps rather than trying to make the code work.

This course has been updated for Angular 19.

Software Needed

- One or more browsers
- NodeJS
- A text editor (we strongly recommend Microsoft's Visual Studio Code, which is free)

Outline

Angular Advanced

- **Advanced Components**
  - Lifecycle Hooks
  - Composing Your User Interface
  - Component Communication
  - View Encapsulation
  - Style Scoping with Special Selectors
- **Advanced Directives**
  - Access and Update the DOM Using ElementRef and Renderer
  - Respond to User Events Using HostListener
  - Set Properties on the Host Element Using HostBinding
  - Custom Directives Bound to Collections
- **Advanced Routing**
  - Handling Parallel Router-Outlets
  - Route Guards
  - Route Transitions and Animation

- **Testing Angular Objects**
    - Setting Up the Test Environment
    - Testing Pipes and Simple Services
    - Mocks, Fakes, and Spies
    - Parts of an Angular Test
    - Testing a Simple Component
    - Components with Inputs and Outputs
    - Component with Service
    - Mocking the HTTP Backend
- **Reactive (Model-Driven) Forms**
    - Setup/Bootstrap
    - Model
    - Form Component
    - Metadata
    - Template
- **End-to-end Testing**
    - Setting up Protractor
    - Searching the Document for Specific Content
    - Interacting with UI Elements
    - Creating Page Helper Objects
- **State Management**
    - Kinds of Application State
    - Where to Store State
    - Client State Storage Using ngrx
    - State as Immutable Objects
    - Reducer Functions
- **Appendix: AngularJS to Angular Migration Strategies**
    - Design Best Practices for Upgrading
    - Preparation
    - Upgrading with The Upgrade Adapter