

## **Angular Level 2 Certification**

1. Advanced Component Features
  - Content projection and ng-content
  - View encapsulation strategies
  - Dynamic component loading
2. Building Custom Directives
  - Creating structural and attribute directives
  - Advanced directive behavior (host listeners and bindings)
3. Introduction to State Management
  - State management patterns and best practices
  - Using services and RxJS for state management
4. NgRx
  - Core concepts: Actions, Reducers, Selectors, and Effects
  - Setting up NgRx in an Angular application
  - Architecting the store, managing side effects
5. Change Detection and Zones
  - Change detection strategies (Default vs. OnPush)
  - Zones and manual change detection
6. Performance Techniques
  - Lazy loading modules and components
  - Preloading strategies for modules
  - Optimizing templates and tracking performance
7. Complex Routing Scenarios
  - Nested routes and multiple router outlets
  - Handling large routing configurations
8. Route Guards and Resolvers
  - Implementing advanced guards (CanLoad, CanActivateChild)
  - Using resolvers for pre-fetching data
9. Dynamic Forms
  - Dynamic form creation and configuration
  - Advanced validations and custom validators
10. Integrating Third-Party Form Libraries
  - Overview of popular Angular-compatible form libraries
  - Best practices for integration and customization
11. Introduction to Angular Universal
  - Benefits of SSR
  - Setting up SSR with Angular Universal
12. Pre-rendering and SEO Considerations
  - Strategies for SEO optimization
  - Handling common issues in SSR (Window, Document, etc.)
13. Theming and Styling
  - Custom themes and overriding styles

- Building responsive layouts with Angular Flex Layout
- 14. Advanced Components and APIs
  - Using dialogues, snack bars, and custom data tables
  - Advanced data table optimizations and customizations
- 15. Advanced HTTP Communication
  - Using interceptors for request and response handling
  - Techniques for dealing with web sockets and real-time data
- 16. Microservices Architecture
  - Understanding microservices architecture
  - Best practices for integrating Angular with microservices
- 17. Advanced Testing Techniques
  - Integration testing
  - End-to-end testing with Protractor and Cypress
- 18. Deployment and Continuous Integration
  - Building for production
  - Continuous Integration (CI) practices with Angular
- 19. Capstone Project Capstone Project