

Sela.

AdvAng

Advanced Angular

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Advanced Angular

AdvAng - Version: 1

 4 days Course

Description:

Intended audience:

Prerequisites:

Experienced Angular developers

Objectives:

Topics:

Module 1 - Advanced JS Quick Overview

- Anonymous Functions
- Lambda functions
- Functional Programming
- High Order Functions
- Callback Functions

Module 2 – Async Programming with Angular



- Async programming with Promises
- Async programming with async-await
- Promise chaining

Module 3 – Architecture Considerations

- Implementing BL & DAL Layers
- Async Flow
- Architecture Best Practices
- Performance Considerations

Module 4 – Authentication & Authorization

- Authentication & Authorization Basics
- JSON Web Token (JWT)
- Ent-2-End Authentication with JWT
- Access Express Bases Server
- Authentication in MEAN Stack Application

Module 5 – Angular Http Interceptors

- Interceptors Basics
- Implement Interceptors
- Logging & Caching Interceptors
- Authentication Interceptors

Module 6 – Angular Reactive Programming

- Reactive Programming paradigm
- Observer Design Pattern



- Promise vs. Observable
- Streams with Observables & Subjects
- Observables build-in implementations
- Observables Operators
- Reactive Architecture Considerations
- Best Practices
- Preventing memory leaks

Module 7 – Redux

- State Machine
- Flux design patterns
- Redux basics
- Reducer
- Actions
- Store
- Implement Redux with @ngrx

Module 8 – Routing & SPA (Single Page Application)

- What is Routing
- The need for routing
- Routing options
- Path Location
- Passing parameters
- Nested routes
- Advanced Routing Scenarios
- Guards & Async Guards
- Module Lazy Loading



Module 9 – Change Detection

- What is change detection
- When does change detection happen in angular
- What is zone.js
- How angular use zone.js for change detection
- NgZone
- ChangeDetectorRef
- Change detection strategies
- When will OnPush detect changes
- Observables and immutables to leverage OnPush

Module 10 – Dynamic Components

- What are dynamic components
- The template directive
- Loading components

Module 11 - Angular Unit Testing

- Unit Testing Basics
- Mocha
- Chai
- Karma
- Component Unit Testing
- Service Unit Testing
- End-To-End Unit Testing
- Automation with TestCafe

Module 12– Advanced Front End with Angular (If time permits)

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- Drag & Drop
- Files Upload
- Working with Canvas
- Multithreading
- HTML 5 integration