

Angular Advanced

DESCRIPTION

This course is intended for developers who already have experience in using Angular. It focuses on advanced topics which will enable you to increase the efficiency of development and improve the quality of code, making it more effective and extensible.

The course deals with such topics as developing libraries for Angular, creating custom directives, provider hierarchy and dependency injection, dynamic / reactive forms and their validation, authorization with JWT tokens, managing a complex application state with Redux (NgRx) and time-travel debugging, and advance router capabilities.

Attention will also be paid to unit testing with Jasmine, plus E2E testing with Cypress.

PROGRAM DETAILS

- ◆ Period – January-March 2024
- ◆ 30 hours in total per course
- ◆ Training is delivered in English

TARGET AUDIENCE

- ◆ Web Developers

OBJECTIVES

- ◆ More efficiently use the already known Angular modules
- ◆ Build external libraries
- ◆ Increase the efficiency of application testing and debugging
- ◆ Use advanced features, including optimization

PREREQUISITES

- ◆ Experience in web development (0.5 - 2 years)
- ◆ Experience in Angular and TypeScript development, or completed course WEB-021 Angular

Training Presentation

AGENDA

- ◆ Creating directives (6 h)
Directives, creating directives, structural directives
- ◆ Creating libraries (2 h) Types of JS modules Library assembly. Library assembly for Angular
- ◆ Routing Advanced (3 h) Lazy loaded modules, data resolvers, children routing, outlets
- ◆ Dependency Injection, provider hierarchy (4 h) Providers for Services, Components, Modules.
Providers hierarchy
- ◆ Reactive programming (RxJS) advanced (3 h) RxJS operators and their utilization. Event loop and RxJS.
- ◆ Forms (3 h) Custom form validation. Dynamic forms. Reactive forms. Using reactive services.
Data exchange in reactive forms
- ◆ Authorization with JWT tokens, HTTP Interceptors (2 h) Authentication and authorization.
Benefits of JWT. HTTP Interceptors for setting JWT token, error handling. Mocking HTTP requests with interceptors for testing.
- ◆ Testing in Angular (3 h) Frameworks and libraries for components testing (based on Jasmine).
Mocking services Unit tests, test-bed tests. E2E testing with Cypress
- ◆ Change detection. Optimization of Angular application. (2 h) Zone.JS, NgZone. Detaching change detection, manual change detection. OnPush strategy
- ◆ Managing application state with NgRX (2 h) State Management with Redux (ngrx). Time-Travel debugging

PRICE

- ◆ Price per 1 participant: 800 EUR + VAT
- ◆ The price includes materials and content