Modern Web Application with AngularJS Single Page Applications (FT202)

32 Hours

Outline

AngularJS is an advanced client-side framework based on the MVC pattern that allows developers to extend the HTML vocabulary and make the written code much more expressive and readable. With AngularJS, developers can create custom HTML elements with complex behaviors, two-way data binding and much more. In this session, we will see how to use AngularJS to create single page applications with ease.

Target Audience

Front-end developers with good knowledge in o.o JavaScript

Prerequisites

Programmers in any language with basic knowledge in HTML

Contents

Introduction to Modern Web Applications

- Single Web Applications (SPA) Vs. Web Applications
- Binding
- MVC & MVVM Frameworks

Introduction to AngularJS

- What is it?
- Benefits of AngularJS
- Development Environment

AngularJS Building Blocks

- Templates
- Expressions
- Modules
- Controllers
- Views
- Scopes
- Dependency Injection

Filters

- Filters Usages
- Built-in Filters
- Custom Filters

Services

- The $http service
- The $q service
- The $resource service
- Custom Services

Forms

- Form directives
- Submitting the form
- Built-in Validation
- Presenting the Form's State to the User
- Binding to Form and Control State
- Presenting Validation Errors
- Using CSS Classes
- Custom Validation
- Custom Form Controls

Directives

- What are Directives?
- The $compile Service
- Creating Custom Directives
- Restricting Directive Usage
- Template-Expanding Directives
- Isolated Scope
- DOM Interactions
- Collaborating With Other Directives

Single Page Applications (SPA)

- Routing In Single Page Applications
- The ngRoute Module
- Route Registration With $routeProvider
- The ngView Directive
- Parameterized Routes
- $routeParams Service
- Resolving Dependencies

Animations (If Time Permitted)

- CSS Transitions and Animations
- The ngAnimate Module
- Animations In Built-In Directives
- CSS-Defined Animations
- JavaScript-Defined Animations
- The $animate Service