

Angular Fundamentals: Empowering Web Development

Learn to develop frontend applications using Angular framework.

Category: Programming · Duration: 4 days

WHO IT IS FOR

- Front-end developers
- Developers of any background
- Beginners welcome: no prior experience required

Welcome to our Angular Fundamentals Training! In the Angular training, dive into Angular's core, building confidence in crafting dynamic web apps. Whether beginner or seasoned, this training adapts to your skill level. Backed by Google, Angular reshapes front-end development. This course lays the groundwork for novices and fortifies the skills of intermediate users. Master Angular's essentials to forge scalable, modern web applications by training's end. Join us on this journey to create vibrant user experiences!"

Prerequisites

Basic knowledge of HTML, CSS, and JavaScript is required.

Syllabus

ECMAScript 5 & Typescript

- Overview of modern JavaScript (ES6+)
- Key syntax enhancements: let/const, arrow functions, template strings
- Destructuring assignments and the spread/rest operators
- TypeScript introduction: typing, interfaces, enums, and classes
- Differences between types and interfaces
- Type inference, union types, and optional parameters

Angular Fundamentals

- Application structure

- Components
- Angular modules: core and main modules
- Templates and styles
- Using Angular CLI
- Various types of data binding
- View and style encapsulation
- Pipes and custom pipes
- Directives and custom directives
- Template variables
- Decorators and their properties in detail
- Events
- Forms: Reactive Forms, FormControl, and FormGroup
- Form validation
- Build an interactive application

Reactive Programming

- Setting up an RxJS application
- Observables
- Subscriptions
- Operators
- Hot observables
- Create an RxJS page to test each topic listed above

Component Deep Dive

- Decorators: @Host, @ContentChild, @ViewChild
- Passing data between components
- Component lifecycle and inter-component communication
- Inputs and Outputs
- Encapsulation and internationalization: component locale
- Bootstrapping
- Services and dependency injection
- Providers and the injector hierarchy
- Injecting a service into another service
- Using services for component communication
- Observables, Subjects, and modules: RouterModule, SharedModule
- Test each concept within the interactive application

Routing and HTTP Requests

- Introduction to HTTP requests
- Creating HTTP requests

- Using an external cloud
- Headers and error handling
- Managing routes within the component tree
- RouterLink and RouterLinkActive directives
- ActivateRoute and Router services
- Passing parameters through routes
- Using QueryParams and Fragment, and nested routes
- Update the application by integrating the features covered in this module. Consume a REST API.

Deploying an Angular Application

- Managing authentication and authorization
- Preparing files for deployment
- A single command to prepare all
- Deploying to a web server
- Optimizing files for production
- Production delivery of the interactive project