



☎ +44 7989 401397

✉ info@olsensoft.com

Angular 8 Development

(4 days)

Course overview

This course takes a thorough look at Angular 8, the latest version of the Angular framework. We can also run courses on earlier versions of Angular, if this is what you're looking for - just contact us to discuss the details.

What you'll learn

- Angular architectural concepts
- Creating and testing Angular apps
- Templates
- Data binding and forms
- Dependency injection
- Pipes
- Directives and transclusion
- Routing and navigation
- Calling REST services
- Web sockets
- Angular CLI
- Angular Universal
- Testing
- What's new in Angular

Prerequisites

- Familiarity with HTML and JavaScript programming

Course details

- **Angular Essentials:** Features in Angular 8 and earlier versions; Angular architecture components; Development tools state-of-play
- **TypeScript and ECMAScript 6 Essentials:** Overview of TypeScript and ECMAScript 6; Transpilation; Using the TypeScript Playground; Configuring and using the TypeScript transpiler
- **Understanding TypeScript Syntax:** Variables and types; Functions; Classes; Generics; Inheritance; Interfaces
- **Creating a Simple Angular Application:** Structure of an Angular application; Importing Angular libraries; Angular bundles; Angular components; Templates; Binding expressions; Bootstrapping Angular

- **Data Binding:** A closer look at data binding; Two-way data binding; Delayed binding; Applying CSS styles and classes conditionally; Using structural directives; Differences in earlier versions of Angular
- **Pipes:** Using built-in pipes; New pipes in Angular 4; Internationalization support introduced in Angular 5; Using promises, observables, and the async pipe; Defining custom pipes; Applying pipes programmatically
- **Forms:** Template-driven forms; Reactive forms; Dynamic (data-driven) forms; Validation techniques; New features introduced in Angular 5
- **Configuration:** A closer look at SystemJS; Loading multiple modules; Configuring SystemJS; Using a package manager; Configuring the TypeScript compiler
- **Component Hierarchies:** Structuring applications; Defining component inputs; Defining component outputs; The mediator pattern
- **Dependency Injection:** Overview of dependency injection in Angular; Simple dependency injection; Using the provide() function; A hierarchy of injectors; Global provision; Injection into services; Values and factories
- **Angular Routing:** Getting started with routing; The role of routing in Single Page Applications; Route parameters and route data; Defining multiple router outlets; Lazy loading; Router lifecycle events
- **Calling Rest Web Services:** Overview of Rest services; Calling Rest services using HttpClient; Dealing with asynchronous results
- **Web Sockets:** Web Sockets concepts; Calling Web Sockets from JavaScript; Using RxJs Observables with Web Sockets
- **Testing Angular Code:** Setting the scene for unit testing; Getting started with Jasmine; Using Jasmine to test Angular code
- **Implementing Custom Directives:** Attribute directives; Specifying parameters and events; Structural directives; Transclusion
- **Angular CLI:** Overview of Angular CLI; Creating a template application; Generating components, services, and other artefacts; AOT vs. JIT compilation; Bundling and tree-shaking