

## **Angular Web Development**

#### Audience Angular Web Development Course

Web Developers who want to use the latest version of the Angular JavaScript Framework, at the time of writing, Angular 9, when developing modern single page Web Applications.

#### **Prerequisites Course Angular Web Development**

JavaScript programming experience and a good knowledge of JavaScript is required to participate in this course.

#### **Realization Training Angular Web Development**

The theory is treated on the basis of presentation slides. The concepts are illustrated with demos. The theory is interspersed with exercises. The course times are from 9.30 to 16.30.

#### **Certification Angular Web Development**

The participants receive an official certificate Angular Web Development after successful completion of the course.



### **Content Course Angular Web Development**

In the course Angular Web Development participants learn to use the Angular JavaScript Framework to develop modern single page Web Applications. The course covers the latest Angular version, version 9 at the time of writing.

#### **Angular Framework**

The Angular Framework is a major upgrade of the AngularJS 1.x JavaScript Library, offers better performance and uses TypeScript and the new features of the ECMA 6 JavaScript standard.

#### **Angular Architecture**

In the course participants learn the architecture of an Angular application in which a collection of components cooperate together in modules.

#### **Angular Components**

Attention is paid to the components such as templates, annotations, views and services. Dependency injection is also discussed. The syntax of TypeScript and the new JavaScript standard ECMA 6 is covered.

#### Angular CLI

The significance of Angular CLI and the generation of artifacts as components and services and the function of the dependency injector tree to keep applications extendable and maintainable are also discussed.

#### Routing

Attention is also paid to the new component router for basic routing, child routes and router lifecycle hooks. Forms are also on the program where template-driven forms, model-driven forms and validators are discussed.

#### Observables

Observables open the door to reactive functional programming and their function is demonstrated when making HTTP requests with the new HTTP layer. Finally, the participants learn to build new reusable user interface components.

info@spiraltrain.nl www.spiraltrain.nl Tel.: +31 (0) 30 – 737 0661 Locations Houten, Amsterdam, Rotterdam, Eindhoven, Zwolle, Online



# **Modules Course Angular Web Development**

| Module 1 : Intro Angular        | Module 2 : TypeScript           | Module 3 : ECMA Script 6  |
|---------------------------------|---------------------------------|---------------------------|
| What is Angular?                | What is TypeScript?             | Block Bindings            |
| Newest Features Angular         | Weak typing in JavaScript       | Let Variables             |
| Development Environment         | Strong Typing in TypeScript     | Arrow Functions           |
| Bootstrapping an app            | Using Built-in Types            | Rest Parameters           |
| Displaying data                 | Inferred typing                 | Spread Operator           |
| Using Directives                | Explicit casting                | Strings                   |
| Templates                       | Classes                         | Functions                 |
| Annotations                     | Interfaces                      | Closures                  |
| Views                           | Decorators                      | Iterators                 |
| Controllers                     | Generics                        | Promises                  |
| Modules                         | Sync and await                  | Reflection                |
| Module 4 : Components           | Module 5 : Dependency Injection | Module 6 : Routing        |
| Component Architecture          | What is dependency injection?   | Angular Routes            |
| Inputs and Outputs              | Writing Imports                 | Routing Configuration     |
| Data flow                       | Creating services               | Route comparison          |
| Smart vs. Dumb components       | DI for component communication  | Routing Parameters        |
| Communicating via state service | Configuring providers           | Configuring routes        |
| Custom event bus                | Defining provider recipes       | Linking to routes         |
| Reusable UI Components          | The injector tree               | Guards                    |
| Querying view children          | Injecting using tokens          | Child routes              |
| Querying content children       | Opaque tokens                   | Sibling routes            |
| Host Bindings and Listener      | Multi Providers                 | Lazy loading routes       |
| Module 7 : Forms                | Module 8 : HTTP and Observables | Module 9 : Angular CLI    |
| Template-driven forms           | Performing HTTP requests        | What is Angular CLI?      |
| Model-driven forms              | Configuring request headers     | Modern tooling            |
| Tracking Changes by CSS         | HttpClientModule.               | Generate with CLI         |
| Control                         | RxJS 6 Observables              | Directives and services   |
| ControlGroup                    | Observer Design Pattern         | Compile, run with CLI     |
| FormBuilder                     | Observables versus Promises     | Deploy your applications. |
| Validation                      | Creating Observables            | Generating components     |
| Validation Styling              | Creating Subjects               | Generating services       |
| Error messages                  | Emitting events                 | Transpiling TypeScript    |
| Custom validators               | Subscribing to observables      | Building and serving apps |
| Asynchronous validators         | Observable Operators            | Debugging                 |

SpiralTrain BV Standerdmolen 10, 2e verdieping 3995 AA Houten info@spiraltrain.nl www.spiraltrain.nl Tel.: +31 (0) 30 – 737 0661 Locations Houten, Amsterdam, Rotterdam, Eindhoven, Zwolle, Online