

Updated on 13/02/2025

Sign up

Angular training

Learn the most powerful Web Framework on the market!

3 days (21 hours)

Presentation

Dive into the world of Angular with our training course dedicated to the latest advances in this essential framework for modern web development. This course will enable you to exploit the full potential of Angular to create high-performance, modular and maintainable web applications.

In this course, you'll learn how to use the main components: services, dependency injection and router configuration. Advanced concepts such as asynchronous programming and RxJS will also be covered.

Our program based on the latest version of Angular, [Angular 19](#), and includes the new features brought by TypeScript 5.6 and ES2024.

You'll discover new features and best practices for building modern applications. component architecture to advanced data management with RxJS, we'll cover all the essential stages of Angular development.

Objectives

- Discover the new features of the Angular framework
- How to develop a new Web application with Angular
- Designing Angular applications with JavaScript and TypeScript
- Using unit and functional testing in development
- Discover the latest version of the official ES2024 JavaScript specification
- Understanding the Framework's advanced mechanisms

Target audience

- Web Developer
- Lead Developer
- Web Architect

Prerequisites

- Knowledge of JavaScript or TypeScript, HTML5/CSS3
- [Test My Knowledge](#)

Software requirements

- Minimum 8 GB ram (16 GB recommended) on Windows 10, macOS or Linux (Ubuntu type)
- A proxy-free Internet connection
- Nodejs installed
- An installed IDE such as Visual Studio Code

Recommendations for pre- and post-course reading

- If you're not 100% comfortable with Angular components, we suggest this [article from Malcoded](#)
- An Angular guide [to mastering modules](#)
- To find out more, discover the [best development practices](#) for Angular
- A long, detailed article on the [use of routers](#)
- A long tutorial in English to [master the forms](#)

Angular 18 training program

Day 1 - Introduction

- ES2024: the new JavaScript
- ES2024 and modules
- TypeScript: typing JavaScript

Framework basics

- Understanding the framework philosophy
- Templating
- Angular CLI, a tool to generate everything
- Practical work: First application and tooling

Component

- Web Components
- Angular designers
- Property binding, read data from the component
- Event binding, customized events
- Lifecycle
- TP: First component

Guidelines

- Directive: operation and creation
- The directives provided by Angular
- Attribute directives
- Structural directives
- Complex guidelines
- TP: First directive

Modules

- Module declarations: imports and exports
- Module providers
- Introduction to "forRoot" and "forChild"
- Practical work: create, export and reuse a module

Pipes

- Supplied transformers
- Formatting a channel
- Formatting collections
- Using a pipe as a service
- Practical work: Creating your own pipes

Day 2 - Services, intercomponent communication Services

- Services provided
- Service injection
- Practical work: Injecting services provided by Angular

Dependency injection (IOC)

- Principles
- Configuring your application
- Dependency injection: type-based and hierarchical

- Different types of providers
- Practical work: Creating your own services

Router

- RouterModule: Route and URL configuration
- Route, link and redirection definitions, parameters
- Route hierarchies
- Nested views
- Routing lifecycle
- Practical work: Transforming a Web application into a Single Page Application

Day 3 - Reactive programming, server communication

Observables

- Introduction to RxJS
- The Observable concept
- The main operators
- Link with promises
- TP: first steps with RXJS

Exchange with a server

- HTTP requests
- Communication with an API
- Display external data
- Displaying asynchronous data with AsyncPipe
- Practical work: retrieving and displaying data from a remote REST API

Form

- Create a form
- Template-driven forms
- ngModel
- Reactive forms
- Validation and errors
- Observers
- Practical work: Creating your own validators, sending a POST request

Performance

- Tips, best practices & tools
- Discovering different compilation strategies
- TP: Performance testing

Advanced concepts

- Entertainment
- Advanced dependency injection (IoC)
- Unit testing

What's new in Angular 17

- @defer
- SSR and Hydration
- Angular Signals
- What's new in standalone components

Add-on module: Angular Advanced (2 days)

Companies concerned

This course is aimed at both individuals and companies, large or small, wishing to train their teams in a new advanced computer technology, or to acquire specific business knowledge or modern methods.

Positioning on entry to training

Positioning at the start of training complies with Qualiopi quality criteria. As soon as registration is finalized, the learner receives a self-assessment questionnaire which enables us to assess his or her estimated level of proficiency in different types of technology, as well as his or her expectations and personal objectives for the training to come, within the limits imposed by the selected format. This questionnaire also enables us to anticipate any connection or security difficulties within the company (intra-company or virtual classroom) which could be problematic for the follow-up and smooth running of the training session.

Teaching methods

Practical course: 60% Practical, 40% Theory. Training material distributed in digital format to all participants.

Organization

The course alternates theoretical input from the trainer, supported by examples, brainstorming sessions and group work.

Validation

At the end of the session, a multiple-choice questionnaire verifies the correct acquisition of skills.

Sanction

A certificate will be issued to each trainee who completes the course.