

Web applications with the Angular framework



Training recipients

The training is dedicated to:

- JavaScript / TypeScript programmers who want to extend their skills with the Angular framework,
- People interested in building web applications in Angular (SPA, SSR, SSG),
- Frontend developers who want to work in the modern Angular and TypeScript ecosystem, using signals and zoneless mode,
- Project teams wanting to adopt Angular as their main frontend technology and to start collaborating with AI assistants when writing Angular code.



Benefits

1. Ability to build web applications in Angular. Understanding SPA architecture and awareness of alternative rendering modes (SSR, SSG, hybrid) in the context of modern projects.
2. Knowledge of the Angular framework and its ecosystem in the latest version. Learning installation, configuration, working with standalone components, the CLI, signal-based reactivity, zoneless mode, and communication with APIs using RxJS.
3. Updating knowledge of JavaScript and getting to know TypeScript. Familiarization with the modern JavaScript standard (ES.Next) and the TypeScript language, which is key when working with Angular.
4. Introduction to LLM-assisted programming. Learning about Angular CLI's built-in support for working with AI assistants and using them in everyday work.
5. Practical knowledge of developer tools. Effective use of the Node.js platform, the Angular CLI, linters, builders, and other tools that support application development.



Training program

Training program

1. Web application architecture
 - Rendering modes: SPA, SSR, SSG/prerender, hybrid
 - Communication standards with the backend system
 - Rendering modes in Angular — overview
2. Node.js platform
 - Characteristics and architecture
 - Package management
3. Angular
 - Installing and configuring the framework
 - Introduction to TypeScript and ES.Next
 - Framework architecture, standalone components
 - Generating project artifacts, CLI
 - Working with components, their data state and events
 - Signal-based reactivity (signal, computed, effect, linkedSignal, resource)
 - Use of the life cycle methods in components
 - Defining templates, built-in control flow (@if, @for, @switch), @defer
 - Communication between components, parent-child relationship (input/output assigns, model)
 - Form handling with Signal Forms (comparison with Reactive/Template-driven forms)
 - Formatting text using pipes
 - Routing, navigation between components
 - Dependency Injection (DI), inject
 - Integration with RxJS and interop with signals in the context of API communication
4. LLM-assisted programming – introduction
 - Angular CLI's built-in support for working with AI agents
 - Configuring project context for the LLM (rules, context files)
 - Generating unit and component tests with AI support
 - Good practices when working with AI agents



Expected preparation of the participant

Knowledge of HTML, CSS, JavaScript at the basic level.



Training Includes

- Mode: Distance Learning (DL)
- Level: Intermediate
- Duration: 3 days | 21h

- Language: English
- Training method: Workshops.



Duration

3 days / 21 hours

Language

- Training: English