kod szkolenia: VUE / ENG DL 3d

Web application with Vue framework

Training recipients

The training is dedicated to:

- JavaScript / TypeScript programmers who want to extend their skills with the Vueframework,
- People interested in building web applications in Vue (SPA, SSR, SSG),
- Frontend developers who want to work in the modern Vue and TypeScript ecosystem, usingthe Composition API and <script setup>
- Project teams wanting to adopt Vue as their main frontend technology and to startcollaborating with AI assistants when writing Vue code.

Benefits

1. Ability to build web applications in Vue. Understanding SPA architecture and awareness ofalternative rendering modes (SSR, SSG, hybrid) and hydration techniques in the context ofmodern projects.
2. Knowledge of the Vue framework and its ecosystem in the latest version. Learninginstallation, configuration, working with Single-File Components, Composition API-basedreactivity, and communication with APIs.
3. Updating knowledge of JavaScript and getting to know TypeScript. Familiarization with themodern JavaScript standard (ES.Next) and the TypeScript language, which is today thestandard when working with Vue.
4. Deliberate application state management at three levels: local, global, and server —together with an understanding of which layer to choose for a given problem.
5. Introduction to LLM-assisted programming. Configuring project context for AI assistants andusing them in everyday work, including test generation.
6. Practical knowledge of developer tools. Effective use of the Node.js platform, CLI tools,linters, builders, and the TypeScript compiler.

Training program

1. Web application architecture
- Rendering modes: SPA, SSR, SSG/prerender, hybrid
- Hydration and modern UI delivery techniques
- Communication standards with the backend system
2. Node.js platform
- Characteristics and architecture
- Package management
- Tools: compiler (tsc), linter, builder (Vite)
3. Vue
- Installing and configuring the project (Vite; Vue Router)
- Introduction to TypeScript and ES.Next
- Framework architecture, Single-File Components, <script setup>
- Defining templates, built-in directives, dynamic manipulation of CSS styles
- Reactivity based on the Composition API (ref, reactive, computed, watch,watchEffect, useTemplateRef, composables)
- Using component life-cycle methods
- Communication between components, parent-child relationship (props, emits,defineModel, provide/inject)
- State management at three levels: local (composables), global (Pinia), server(TanStack Query)
- Form handling
- Routing, navigation between components (Vue Router)
- Communication with the API (TanStack Query)
- Awareness of the framework's direction: Vapor Mode and SSR/SSG with Nuxt(overview)
4. LLM-assisted programming – introduction
- Configuring project context for the LLM (rules, context files)
- Generating unit and component tests with AI support (Vitest, Vue Test Utils)
- Good practices when working with AI agents

Expected preparation of the participant

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

Training Includes

- Training method Workshops.

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

Czas trwania

3 dni / 21 godzin

Language

- Training: English