Course : Next.js: making web application development easier

Practical course - 2d - 14h00 - Ref. NEX
Price : 1610 CHF E.T.

NEW

Next.js is a framework based on React. It facilitates server-side development (SSR), uses static generation (SSG) and optimized routing management. You'll master the concepts of performance optimization, integrated SEO and the use of features like Server Actions and Middleware.

Teaching objectives

At the end of the training, the participant will be able to:

- Understanding and manipulating Next.js concepts
- Developing high-performance web applications
- Managing data and APIs in Next.js
- Deploying and maintaining a Next.js application

Intended audience
JavaScript developers.

Prerequisites
Knowledge of React and JavaScript.

Practical details
Hands-on work
Each new theoretical concept is immediately applied in practice.

Course schedule

1 Next.js basics

- How NextJs works in general.
- Creating web pages with Next.js.
- Using ReactJs components in pages.

Hands-on work
Setting up a Next.js application.

PARTICIPANTS
JavaScript developers.

PREREQUISITES
Knowledge of React and JavaScript.

TRAINER QUALIFICATIONS
The experts leading the training are specialists in the covered subjects. They have been approved by our instructional teams for both their professional knowledge and their teaching ability, for each course they teach. They have at least five to ten years of experience in their field and hold (or have held) decision-making positions in companies.

ASSESSMENT TERMS
The trainer evaluates each participant's academic progress throughout the training using multiple choice, scenarios, hands-on work and more.
Participants also complete a placement test before and after the course to measure the skills they've developed.

TEACHING AIDS AND TECHNICAL RESOURCES
• The main teaching aids and instructional methods used in the training are audiovisual aids, documentation and course material, hands-on application exercises and corrected exercises for practical training courses, case studies and coverage of real cases for training seminars.
• At the end of each course or seminar, ORSYS provides participants with a course evaluation questionnaire that is analysed by our instructional teams.
• A check-in sheet for each half-day of attendance is provided at the end of the training, along with a course completion certificate if the trainee attended the entire session.

2 Using style sheets

- Using CSS Modules.
- Handle component libraries (Material UI and Style Components).
- Discover Styled Components.

Hands-on work
Create a simple section using Material UI then Styled Components to compare approaches.

3 SSR and optimization

- Static site generation.
- Handling Server Side Rendering.
- Mastery of Incremental Static Regeneration.
- Code splitting.

Hands-on work
Implement Server-Side Rendering (SSR) in a Next.js application.

4 SEO improvement

- Dynamic META generation with next/head.
- Optimizing HTML tags for SEO.
- Optimize application performance.

Hands-on work
Optimize the SEO performance of a Next.js application.

5 Testing a Next.js application

- Use of Jest and React Testing.
- Security testing with OWASP ZAP.
- Accessibility testing (a11y).
- Using Cypress.

Hands-on work
Test a Next.js application.

6 internationalization (I18N)

- Introduction to internationalization (I18N) with Next.js.
- Configuring Next.js for internationalization.
- Use next-translate or react-i18next to manage translations.
- Management of data formats and local elements.

Hands-on work
Creating a multilingual page with Next.js.

Dates and locations

REMOTE CLASS
2026 : 11 June, 14 Sep., 3 Dec.