Course : ReactJS, advanced programming

Practical course - 3d - 21h00 - Ref. RJS
Price : 1810 € E.T.

★★★★½ **4,6 / 5**

BEST

Originally a simple internal tool for Facebook, React has become one of the leading open source JavaScript libraries. With this training course, you'll deepen your mastery of React, discover its latest features and the ecosystem you need to design even more advanced web applications.

🎯 Teaching objectives

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

- ✓ Understanding advanced ReactJS concepts
- ✓ Optimizing the performance of ReactJS applications
- ✓ Improve product code quality
- ✓ Integrate the various essential external libraries
- ✓ Enhance the user experience with Redux's advanced features

Intended audience
Web developers, architects.

Prerequisites
A first concrete experience with React and Redux and/or have followed the training course "ReactJS, mastering Facebook's JavaScript framework" (Ref. TJS).

Course schedule

1 Introduction

- ES6+ and modules.
- Key React principles: VirtualDOM, JSX, One-way Data Flow.
- Discover the ecosystem of ReactJS tools.

Hands-on work
Set up a development environment optimized for React and a first web application that will serve as a common thread for subsequent chapters.

PARTICIPANTS
Web developers, architects.

PREREQUISITES
A first concrete experience with React and Redux and/or have followed the training course "ReactJS, mastering Facebook's JavaScript framework" (Ref. TJS).

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.

2 Good development practices

- Productivity reminders: prop-types and DefaultProps, component sheet with StoryBook.
- Code typing with flow or TypeScript.
- Rapid component prototyping, solutions.
- Set up unit and functional tests.

Hands-on work
Improved application quality thanks to automated typing and testing.

3 Advanced techniques and design patterns

- The pattern of higher order components (HOC).
- Rendering in remote DOM elements with portals.
- Dependency injection with contexts.
- "React hooks" functional programming: useEffect, useState.
- React: creation of "customHooks" to distribute custom logic.

Hands-on work
Implementing contexts and portals in the fil rouge application. Creating functional components and using hooks.

4 Advanced Redux

- Redux reminder: the different entities, basic syntax and integration with React.
- Simplify and optimize form creation with Redux Form.
- Enhance user experience with Redux Persist and local state storage.
- Create Redux Custom middleware.

Hands-on work
Convert form to Redux Form and save navigation.

5 Performance optimization

- API for React.Suspense optimization React.Lazy, concurrent mode and React.Cache.
- Server side rendering with NextJS.
- How to optimize component life cycles?
- Use immutability to speed up and simplify processing.
- Pure components.

Hands-on work
Implementing splitting code with React.Lazy and Suspense.

6 Animations/transitions

- Animate components "by hand" using CSS animations and transitions.
- Simplify your work with React Transition Group.
- Going further with the main animation libraries: comparison and examples of implementation.

Hands-on work
Added transition for the appearance/disappearance of different screens.

7 Internationalization

- Internationalization versus localization: differences and usage scenarios.
- The main internationalization bookshops.
- Integration with React and Redux.

Hands-on work
Translation of the "fil rouge" application and management of the language change.

Dates and locations

REMOTE CLASS
2026 : 27 May, 8 July, 16 Sep., 30 Nov.

PARIS LA DÉFENSE
2026 : 27 May, 8 July, 16 Sep., 30 Nov.