Getting Started with React Essentials - TT4190

Learn how to create interactive React apps using components, state, routing, forms, and essential testing practices.

Duration: 3 Days
Skill Level: Introductory
Available Format: Instructor-Led Online; Instructor-Led, Onsite In Person ; Blended; On Public Schedule

In this hands on React course, you will gain the skills and confidence to build modern, interactive web applications that feel smooth, engaging, and enjoyable to use. With expert guidance and plenty of practice, you will learn how to create reusable components and craft polished user interfaces that are easy to maintain. You will discover how to work with dynamic data and interactions so your applications respond beautifully to users. The course will help you manage forms with ease, connect to real world data, and build features that make your applications truly come alive. You will also learn how to test and debug your work so you can deliver reliable results with confidence. Along the way, you will build practical projects that let you apply what you learn right away in a supportive and approachable setting. This course is a great fit for web developers with some JavaScript experience who are ready to level up their skills and create modern applications. You will leave with the ability to build applications you can be proud of and the confidence to apply your new skills on the job. Join us to grow your abilities and take an exciting next step in your development journey.

What You'll Learn

Overview

React is one of the most in-demand tools for building fast and interactive web applications, and learning it can open the door to exciting new projects and career opportunities. In this engaging three day expert-led course, you will get hands-on experience creating modern React applications from the ground up. You will not just follow along with examples but build real projects that help you understand why React works the way it does and how to use it effectively. You will walk away with the

confidence to create polished user interfaces using tools like TailwindCSS and Material UI and apply best practices that keep your code clean and easy to maintain.

You will strengthen your ability to create powerful React applications by working directly with the key patterns and tools used every day on the job. You will learn how to manage dynamic data and interactions with React Hooks, create reusable components, handle complex forms, and work smoothly with routing and REST APIs. You will also sharpen your testing and debugging skills so you can catch problems early and deliver reliable applications. The course is about fifty percent hands-on so you will spend plenty of time applying what you learn and getting expert feedback in a supportive environment.

This course is designed for web developers who have some JavaScript experience and want to become fully job ready with React. Whether you are moving into a React role for the first time or want to strengthen your skills for your team or company, this course will give you the real world techniques and knowledge you need to succeed. You will leave with the ability to build modern applications using the latest React features and tools, ready to take on new challenges and contribute with confidence.

NOTE: For a deeper dive into React essentials with extended topics and labs, you might consider the five day React Boot Camp (TT4195) course as an alternative. The five day Boot Camp is a superset of this three day React Essentials (TT4190) course.

Objectives

This course is designed to help you become confident and job ready with React by giving you hands-on experience and practical skills you can use right away. Whether you are a web developer with some JavaScript knowledge or someone looking to strengthen your React abilities for your team or company, this course will guide you through the key tools and techniques used in modern React development.

Working in a hands-on learning environment, guided by our expert React instructor you will learn how to:

- Build modern React applications confidently using functional components and Hooks.
- Style your applications with TailwindCSS, Material UI, and styled-components to create polished user interfaces.
- Create smart, reusable forms with validation using React Hook Form, Formik, Zod, and Yup.
- Implement routing and navigation using the latest React Router tools, including dynamic routes and loader patterns.

- Connect your React apps to REST APIs using fetch and axios while handling responses and errors smoothly.
- Write meaningful unit tests and debug effectively using Vitest, React Testing Library, and React Developer Tools.

If your team requires different topics or tools, additional skills or custom approach, this course may be further adjusted to accommodate. We offer additional full stack development, React, React Native, web development, design and security courses which may be blended with this course for a track that best suits your development objectives.

Audience

This introductory-level course is designed for experienced web developers who have a basic understanding of JavaScript and want to strengthen their React skills to become confident and job ready. It is a great fit for roles like front end developers, full stack developers, or software engineers who want to build modern web applications using React. The course is fast paced but welcoming, making it ideal for anyone ready to roll up their sleeves and apply what they learn through hands-on practice.

Before attending, you should have a general comfort working with JavaScript and a basic understanding of how web applications work.

Pre-Requisites

This course is designed for experienced web developers who have a basic understanding of JavaScript and want to strengthen their React skills to become confident and job ready. It is a great fit for roles like front end developers, full stack developers, or software engineers who want to build modern web applications using React. The course is fast paced but welcoming, making it ideal for anyone ready to roll up their sleeves and apply what they learn through hands-on practice.

Before attending, you should have a general comfort working with JavaScript and a basic understanding of how web applications work.

Here are three helpful skills to bring with you:
- Familiarity with JavaScript concepts like functions, arrays, and objects.
- Experience using a code editor
- A general understanding of how HTML and CSS work together to build web pages.

Take Before: In order to gain the most from this course, you should have incoming skills equivalent to those in the course listed below, or should have attended this as a prerequisite:

TT4003	Introduction to HTML5, CSS3 and JavaScript
TT4110	Introduction to JavaScript / Modern JavaScript Essentials

Agenda

Please note that this list of topics is based on our standard course offering, evolved from current industry uses and trends. We will work with you to tune this course and level of coverage to target the skills you need most. Course agenda, topics and labs are subject to adjust during live delivery in response to student skill level, interests and participation. The course tools, topics, use cases and hands-on labs can also be easily adjusted to suit your specific needs, goals or requirements. Please inquire for details and options.

1.Your First React Web Application
- Creating a new React project with Vite
- Understanding the project structure
- Installing necessary dependencies

2.Functional Components
- What's a component?
- Class components
- Functional components - Motivation behind Hooks
- Our first component
- Building the App
- Props - Making the App data-driven
- Events - Your app's first interaction with the useEffect() Hook
- State - Updating state with the useState() Hook

3.JSX and the Virtual DOM
- React Uses a Virtual DOM
- Why Not Modify the Actual DOM?
- What is a Virtual DOM?
- Virtual DOM Pieces
- ReactElement

4.JSX
- JSX Creates Elements
- JSX Attribute Expressions

- JSX Conditional Child Expressions
- JSX Boolean Attributes
- JSX Comments
- JSX Spread Syntax
- JSX Gotchas
- Enhance Component with TailwindCSS, Material UI, styled-components

5.Essential React Hooks

- useState
- useEffect
- useContext

6.Forms

- Forms 101
- Text Input
- Multiple fields
- Validation
- Creating reusable form components
- Controlled vs. uncontrolled components
- React Hook Form
- Formik
- Zod and Yup for Validation

7. Routing 6.30+ and 7

- Navigating and routing in a React application
- Defining routes and rendering components based on URL
- Dynamic routing and parameters
- loader, errorElement
- React Router's core components
- Building the components of react-router
- Outlet component
- Router Hooks: useNavigate, useLocation, useParams

8. Unit Testing

- Vitest + React Testing Library
- Snapshots, async testing, mocking, coverage
- Optional: JEST

9. Debugging React

- Using React Developer Tools
- Using Visual Studio Code
- Using the Chrome Debugger
- 10. REST
- REST Basics
- Using fetch
- Handling responses and errors
- Using axios

11. ES6 Primer

- Prefer const and let over var
- Arrow functions
- Modules
- Object.assign()
- Template literals
- The spread operator and rest parameters
- Enhanced object literals
- Default arguments
- Destructuring assignments
- Modules
- Classes

Follow On Courses

TT4199	Mastering React Native
TT4215	Practical Web Accessibility Standards for Designers and Testers: WCAG 2.1 and 2.2
TT4214	Hands-On UX Workshop: Designing Web and App Experiences That Work

Related Courses

TT4002	Introduction to HTML5 / CSS3 and Responsive Design
TT4003	Introduction to HTML5, CSS3 and JavaScript
TT4110	Introduction to JavaScript / Modern JavaScript Essentials
TT4115	JavaScript & jQuery Essentials
TT4153	Introduction to Node.JS	JumpStart to Node.JS
TT4165	Introduction to Angular 18 Essentials
TT4199	Mastering React Native

TT4215	Practical Web Accessibility Standards for Designers and Testers: WCAG 2.1 and 2.2
TT4214	Hands-On UX Workshop: Designing Web and App Experiences That Work
TT4154	Introduction to TypeScript: Clean Code and Strong Skills for Web Developers
TT4190	Getting Started with React Essentials
TT4168	Mastering Angular 18 Boot Camp
TT4195	Mastering React Boot Camp

Setup Made Simple! All of our course software, digital course files or course notes, labs, data sets and solutions, live coaching support channels and rich extended learning and post training resources are provided for you in our easy access, single source, no install required online Learning Experience Platform (LXP), remote lab and content environment. Or we can provide a local installation (trial edition) to setup and use on your machine. Access periods and versions vary by course. Please inquire about set up details and options for your specific course of interest. Regardless of setup option, we will collaborate with you to ensure your team is set up and ready to go well in advance of the class.

Ways to Learn: At Trivera, we believe that Experience is Everything. Our customizable, hands-on courses are delivered live online, onsite, or in a blended format for maximum flexibility. We provide real-time expert-led training and coaching for all skill levels, from small groups to enterprise-wide programs, ensuring every learner gains the latest, most relevant job-ready skills they can apply with confidence. This course is also available for individuals or small groups on our extensive Public Schedule (see current dates below). We look forward to helping you take the next steps in your modern web developer learning journey.

For More Information

Please contact us or call 844-475-4559 toll free for more information about our training services (instructor-led, self-paced or blended), coaching and mentoring services, public course enrollment or questions, partner programs, courseware licensing options and more.