React Development

GENERAL ASSEMBLY

Overview

Facebook created React to build a robust, dynamic platform that could adapt to continually changing data. To date, this JavaScript library fuels countless websites and applications across industries.

Learn to leverage React's power in this hands-on, project-based course. Build your own web application and compile a professional project portfolio to showcase your new skills.

Throughout the course, you will:

- Explore the essentials of programming with React, including components, JSX, props, and state.
- Push your knowledge to the next level by learning not only how to create React applications, but how and why they work.
- Build multipage web applications using the popular React Router package.
- Create a custom, functioning web application.
- Call upon an application programming interface (API) in a React application.
- Host a React application on Heroku to share with the world.

What to expect:

Engage in hands-on, project-based learning that's designed to inspire a lifetime of discovery. As a React Development student, you'll:

- Explore new concepts and tools through expert-led lectures and discussions.
- Complete coding exercises to reinforce newly learned skills.
- Dive deeper into topics and techniques via programming labs.
- Receive individualized feedback and support from your instructional team.
- Apply what you've learned to build a custom React application.

Prerequisites:

Incoming students should have a familiarity with HTML and the Document Object Model (DOM), along with a working knowledge of JavaScript programming and functions, objects, arrays, and classes.

What You'll Learn

Pre-Work

- Dive into React fundamentals with four hours of online preparatory lessons and prepare to hit the ground running on day one of class.
- Get acquainted with ES6.
- Start building a custom blog application.

Unit 1 Key React Concepts (7 hours)

Lab: Add nested components to your blog application.

- Apply React fundamentals to solve common user interface (UI) problems.
- Render components within another component.
- Pass props to a nested component.

Unit 2 React State (7 hours)

Lab: Use state to create editable entries in your blog application.

- Differentiate between props and state.
- Create and change state in a component.
- Describe the flow of methods in a component.
- Identify the triggers for the re-rendering of a component.
- Contrast class components with functional components.
- Define unidirectional flow.
- Diagram data in a component hierarchy.

Unit 3 Underlying Concepts (3 hours)

Lab: Implement functional components in your blog application.

- Rewrite class components into functional components.
- Define the main categories of the component life cycle.
- Identify general methods in each category of the component life cycle.
- Contrast the concepts imperative and declarative programming.

Unit 4 APIs and Heroku (3 hours)

Lab: Use an API to display the current weather on your blog application.

- Describe what an application programming interface (API) is and why we might use one.
- Using fetch() to make an API call and working with API keys.
- Describe Heroku.
- Deploy an app on Heroku.
- Set up a CORS proxy on Heroku.

Unit 5 React Router (4 hours)

Lab: Use React Router to add multiple pages to your blog application.

- Contrast historical and modern browser history mechanics.
- Define routing.
- Describe React Router's main features and history.
- Use React Router to map URLs to components.
- Use React Router to create links to different components.

Unit 6 Applied Practice (16 hours)

Final Lab: Build a working React application of your choice from scratch. Prompts and guidelines are available for students who would like help brainstorming ideas.

- Build a tic-tac-toe game.
- Confidently find and apply features from documentation.
- Create an ATM application.

Frequently Asked Questions

Why is this course relevant today?

If you're in search of programming skills to differentiate yourself within the software development crowd, React knowledge is the place to start. According to Stack Overflow, this JavaScript library is the one "most developers want to work with if they don't already." Employers are in search of talent who can leverage React's ability to handle constantly changing data inputs. And there's not enough talent on the market to meet this need.

What practical skill sets can I expect to have after completing this course?

Throughout this course, you'll:

- Explore the essentials of programming with React.js, the JavaScript library, including components, JSX, props, and state.
- Push your knowledge to the next level by learning not only how to create React applications, but how and why they work.
- Build multipage web applications using the popular React Router package.
- Create a scalable, maintainable web application.
- Call upon an application programming interface (API) in a React application.
- Host a React application on Heroku to share with the world.

What are the prerequisites for this course?

Incoming students should have a familiarity with HTML and the Document Object Model (DOM), along with a working knowledge of JavaScript programming and functions, objects, arrays, and classes.

What kind of community will I find in this course?

General Assembly courses attract eager learners who are as passionate about growing their careers as you are. Their backgrounds span professions in design, product management, and many other fields. The GA experience can create lasting friendships and collaborations that will support you throughout a lifetime of discovery.

Still curious?

View all FAQs.

Contact Us

Check out our Locations page to find contact information and explore events, workshops, and networking opportunities in your city.

Additional Resources

Course Application

Student Financing Details