Course duration

- 2 days

Course Benefits

Course Outline

1. Setup
    1. Verifying Node.js and either NPM or yarn
    2. Verifying class libraries
    3. Verifying class files
    4. IDE (WebStorm or Visual Studio Code preferred)
2. Context
    1. What is the Context API?
    2. How to use the Context API
        1. Hooks-based Context: the useContext() hook
        2. Class-based Context
    3. Testing while using Context
3. Advanced Redux
    1. Using reselect to minimize re-rendering
    2. Normalizing state
    3. Higher-order reducers
    4. Helper libraries
4. Introduction to routing
    1. What problem is routing trying to solve?
    2. How does routing solve this problem?
        1. Tying components to URLs
        2. Passing parameters via the URL
    3. Routing software: React Router
    4. Simple router example
    5. Testing routing
        1. More complex routing
    6. Top-level routing
        1. Routing at the top of your application
        2. Allowing other parts of the application to manage routing
    7. Redirects
    8. React-router objects
        1. match
        2. history
        3. location
    9. Routing organizational techniques

          10. Testing advanced routing
    5. Advanced React
        1. Understanding and optimizing reconciliation
            1. Best practices for React reconciliation
            2. Recognizing common issues
            3. Making improvements
        2. Refs
            1. What's a ref?
            2. What problem does it solve?
            3. How can I use refs?
                1. Hooks: the useRef() hook
                2. Classes and createRef()
            4. The challenges of testing refs
  6. Render props
        1. Rendering in depth
        2. Rendering a function instead of a prop
        3. Using the render prop pattern
        4. Testing render props

Class Materials

Each student will receive a comprehensive set of materials, including course notes and all the class examples.

Class Prerequisites

Experience in the following *is required* for this JavaScript class:

- Introductory level experience with React.