

Npm Basics

1. Creating node project
2. package.json
3. Versioning
4. Installing dependencies

Javascript Primer (Advance JavaScript)

1. What is ES6
2. Promises
3. Arrow Functions
4. Rest and Spread
5. Fetch, XMLHttpRequest
6. Async, Await

Introduction to React

1. What is React?
2. Why React?
3. React version history
4. Just React - Hello World
5. Using create-react-app
6. Anatomy of react project
7. Running the app
8. Debugging first react app

Templating using JSX

1. Working with React. createElement
2. Expressions
3. Using logical operators
4. Specifying attributes
5. Specifying children
6. Fragments
7. Types of components
8. Functional
9. Class based
10. Pure
11. Component Composition

Working with state and props

1. What is state and its significance
2. Read state and set state
3. Passing data to component using props
4. Validating props using propTypes
5. Supplying default values to props using defaultProps
6. Using react key prop
7. Using map function to iterate on arrays to generate elements
8. Understanding React event system
9. Understanding Synthetic event
10. Passing arguments to event handlers

Understanding component lifecycle and handling errors

1. Understand the lifecycle methods
2. Handle errors using error boundaries
3. Using react ref prop to get access to DOM element
4. Context - Create Context, Context.Provider, Context.Consumer

Hooks

1. Different types of hooks
2. Rules of hooks
3. useState
4. useEffect
5. useCallback
6. useMemo
7. useRef
8. custom Hooks

Routing with react router

1. Setting up react router
2. Understand routing in single page applications
3. Working with BrowserRouter and HashRouter components
4. Configuring route with Route component
5. Using Switch component to define routing rules
6. Making routes dynamic using route params
7. Working with nested routes
8. Navigating to pages using Link and NavLink component
9. Redirect routes using Redirect Component
10. Using Prompt component to get consent of user for navigation
11. Path less Route to handle failed matches

Unit Testing

1. setup
2. act
3. rendering
4. events
5. mocking

Webpack and Babel

1. Webpack Installing
2. Webpack Configuration File
3. Entry point and output configuration
4. using bundle in html
5. Installing babel
6. Webpack and babel configuration
7. Rules for babel
8. CSS and images configuration babel

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