

ReactJS Course Structure

React JS

☰ Tags

Introduction to Frameworks

1. An Overview of Modules in JavaScript
2. Brief introduction to the command line
3. NPM introduction (how to install & why is it needed)
4. How to improve website performance
5. Javascript memory Management
6. Useful Chrome Extensions

Introduction to ReactJS

1. What are Frameworks & Why do we need them?
2. What is a component?
3. Creating new React project
4. File structure of a React Project
5. JSX Fundamentals
6. Virtual DOM
7. Creating your first react component
8. Adding Styling to the component
9. Adding JS Code to the component
10. Expressions in JSX

11. React DevTools
12. Introduction to Babel

Props

1. Creating Parent Component & Child Component
2. Sending data from parent to child
3. Passing data from child back to parent

React State & Working with Events

1. Listening to Events and Working with Event handlers
2. How Component Functions are executed
3. Working with “State”
4. useState hook
5. Adding Form Inputs
6. Listening to User Input
7. Working with Multiple States
8. Updating State that depends on the Previous State
9. Handling Form Submission
10. Lifting the state up
11. Controlled vs Un Controlled Components
12. Stateless & Stateful

Rendering Lists and Conditional Content

1. Rendering Lists of Data
2. Using Stateful Lists

3. Understanding “Keys”
4. Outputting Conditional Content
5. Adding Conditional Return Statements
6. Working with Ref’s in react

Styling React Components

1. Setting Dynamic Inline Styles
2. Setting CSS Classes Dynamically
3. Introducing Styled Components
4. Styled Components and dynamic Props
5. Styled Components and Media Queries

Handling Side Effects, Using Reducers and Using the Context API

1. What are “Side Effects” and Introducing useEffect
2. Using the useEffect() hook
3. useEffect & Dependencies
4. useEffect Cleanup Function
5. useReducer Introduction
6. Using useReducer() hook
7. useReducer vs useState for State management
8. Introduction to React Context (Context API)

Behind The Scenes of React and Optimisation Techniques

1. How React Really Works
2. Component Updates in Actions
3. Insights of Child Component Re-Evaluation
4. Preventing Unnecessary Re-Evaluations with `React.memo()`
5. Preventing Function Re-Creation with `useCallback()`
6. `useCallback()` and its Dependencies
7. State and Components
8. State Scheduling and Batching
9. Optimizing with `useMemo()`

Class-based Components

1. What and why?
2. First Class-based Component
3. Working with State and Events
4. Component Lifecycle (Class-based Components Only)
5. Lifecycle Methods in Action
6. Class-based Components & Context
7. Class-based vs Functional Components
8. Error Boundaries

Building Custom React Hooks

1. What are "Custom Hooks"?

2. Creating a Custom React Hook Function
3. Using Custom Hooks

Redux

3 Projects with ReactJS