CUSTOMIZE JAVASCRIPT & REACT

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Duration: 5 days

Java Script programming essentials

- **Data and data types**
- **Logic operators, logic structures, functions**
  - Functions are First-Class Citizens
  - Anonymous Functions
  - Understanding Pass-By-Value in JavaScript
  - Recursive Functions
  - Default Parameters
- **Java Script and HTML, interaction with the DOM**
  - Understanding the Document Object Model in JavaScript
  - **Selecting elements**
    - Select Element By Id
    - Select Elements By Name
    - Select Elements By Tag Name
    - Select Elements By Class Names
    - Select Element By CSS Selectors
  - **Manipulating elements**
    - Create Elements
    - Append Child Nodes
    - Get or Set Text of a Node
    - Get or Set HTML of an Element
  - **Working with Attributes**
    - HTML Attributes & DOM Properties
    - Set Value of an Attribute
    - Get Value of an Attribute
    - Remove an Attribute from Elements
    - Check if an Element has an Attribute
  - Working with Events

- **Working with REST API in Java Script**
  - **PROMISES & ASYNC/AWAIT**
    - Promise Chaining
    - Promise.all ()
    - Promise.race()
    - Promise Error Handling
    - async/await

- **Introduction to mapping libraries: drawing map and charts on a web page**
- **Debugging tools: console**
- **NPM package manager**

Introduction to React Framework

Getting started with React

- Creating a React Project
- Creating a function component
- Component Props
  - Props with basic data
  - Props with Object
  - Props with Array of Object
  - **Labs**
- Event Handling

State management with React Hooks

- useState Hook
  - useState with primitive value
  - useState with Single Object
  - useState with Array of Object
  - **Labs**

- useEffect Hook
- useContext Hook

Working with REST API in React

- Install axios library
- CRUD operation with local json server
- **Labs**

React with Router

- Overview of Routing
- Route Parameter
- Nested Route
- NavLink Component

Compilation tools: Webpack

Drawing maps and charts in React