**React Js**

**(Web Development)**

**40 Hours**

**1. Introduction to ReactJS**

| **1.1** | **Library vs Framework** |
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| **1.2** | **What is React JS** |
| **1.3** | **Why we required React JS** |

**2. React Components**

| **2.1** | **Class Component** |
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| **2.2** | **Functional Component** |
| **2.3** | **React Component with JSX** |

**3. State and Props**

| **3.1** | **What is State ?** |
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| **3.2** | **What is setState and How setState is going to work** |
| **3.3** | **What is Props** |
| **3.4** | **Usage of state and Props in React Component** |

**4. Forms**

| **4.1** | **Creatinging Forms** |
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| **4.2** | **Handling the Event in React** |
| **4.3** | **Validations** |

**5. Axios**

| **5.1** | **Introduction to get().post() methods** |
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| **5.2** | **How to use axios in the React JS** |
| **5.3** | **How to Handle promise** |
| **5.4** | **How to fetch data from server using axios** |
| **5.5** | **How to create table and cards dynamically using map** |
| **5.6** | **Dynamically Rendering Data in the view** |

**6. Conditional Rendering**

| **6.1** | **If with Logical && Operator** |
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| **6.2** | **If-Else with Conditional Operator** |
| **6.3** | **Preventing Component from Rendering** |

**7. Lists and Keys**

| **7.1** | **Rendering Multiple Components** |
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| **7.2** | **Embedding map() in JSX** |
| **7.3** | **Keys Must Only Be Unique Among Siblings** |

**8. Life Cycle Methods**

| **8.1** | **What are the Life Cycle Methods** |
| --- | --- |
| **8.2** | **Phases of Life Cycle Methods** |
| **8.3** | **Usages and Purpose of Life Cycle Methods** |

**9. React Routing**

| **9.1** | **How to install react-router-dom** |
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| **9.2** | **How to use Components from react-router-dom library** |
| **9.3** | **How to implement Routing in React application** |

**10. Code-Splitting**

| **10.1** | **What is import() and How to implement it** |
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| **10.2** | **React.lazy** |
| **10.3** | **Error boundaries** |
| **10.4** | **Route-based code splitting** |

**11. Components Communication**

| **11.1** | **How to pass data from Parent Component to Child Component** |
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| **11.2** | **How to pass data from Child Component to Parent Component** |

**12. Context API**

| **12.1** | **When to Use Context** |
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| **12.2** | **Before You Use Context** |
| **12.3** | **React.createContext** |
| **12.4** | **Context.Provider** |
| **12.5** | **Context.Consumer** |

**13. Higher-Order Components**

| **13.1** | **What is HOC** |
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| **13.2** | **How to immplement Hoc** |
| **13.3** | **How pass dynamic data to HOC Components** |

**14. Integration with Different Libararies**

| **14.1** | **Bootstrap** |
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| **14.2** | **Jquery** |
| **14.3** | **Material UI** |

**15. Redux with React**

| **15.1** | **What is Redux and Why we required Redux** |
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| **15.2** | **Redux Flow** |
| **15.3** | **How to implement Redux in react** |
| **15.4** | **Redux logger** |
| **15.5** | **Redux thunk (MiddleWare)** |
| **15.6** | **Redux Saga** |
| **15.7** | **React+Redux (Client) + Fectching Data From External API** |

**16. React Hooks with Examples**

| **16.1** | **useState() Hook** |
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| **16.2** | **useEffect() Hook** |
| **16.3** | **useRef() Hook** |
| **16.4** | **useContext() Hook** |
| **16.5** | **useReducer() Hook** |
| **16.6** | **useMemo() Hook** |
| **16.7** | **useCallback() Hook** |

**17. How to fetch data from server using React Hooks**

**18. Redux with React Hooks**