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**React JS Hands-On by Prasad**

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Time: 60-75 Days

**Module 1: Getting Started (2 hours)**

* Introduction to React (30 minutes)
* Setting Up Development Environment (30 minutes)
* Creating Your First React App (30 minutes)
* Exploring React Components (30 minutes)

**Project:** Basic React App (30 minutes)

**Module 2: JavaScript Refresher/Revision (4 hours)**

* JavaScript Basics (1 hour)
* ES6 Features (1 hour)
* Functions, Scope, and Closures (1 hour)
* Arrays, Objects, and Data Manipulation (30 minutes)
* Asynchronous JavaScript (Promises and Async/Await) (30 minutes)

**Project:** JavaScript Basics Exercise (1 hour)

**Module 3: React Basics and Working with Components (6 hours)**

* JSX (JavaScript XML) (1 hour)
* Functional Components (1 hour)
* Class Components (1 hour)
* Props and State (1 hour)
* Component Lifecycle (1 hour)
* Component Composition and Nesting (1 hour)

**Project:** Building a Simple React Component (1 hour)

**Module 4: React State and working with events (3 hours)**

* Managing State (1 hour)
* Handling Events (1 hour)
* Stateful vs. Stateless Components (30 minutes)
* Forms and Controlled Components (30 minutes)

**Project:** Interactive Counter (30 minutes)

**Module 6: Rendering Lists & Conditional Content (3 hours)**

* Mapping and Rendering Lists (1 hour)
* Conditional Rendering (1 hour)
* Keys and Lists (30 minutes)
* Lists with State (30 minutes)

**Project:** Dynamic List Rendering (30 minutes)

**Module 7: Styling React Components including Tailwind (2.5 hours)**

* Inline Styles (30 minutes)
* CSS Modules (30 minutes)
* CSS Frameworks (e.g., Tailwind CSS) (1.5 hours)

**Project:** Styling React Components with Tailwind CSS (2 hour)

**Module 8: Debugging React Tools (1.5 hours)**

* Debugging in React (30 minutes)
* React DevTools (30 minutes)
* Common Debugging Techniques (30 minutes)

**Project:** Debugging Practice (30 minutes)

**Module 9: Hooks & Context API (5 hours)**

* Introduction to Hooks (1 hour)
* useState, useEffect, and more (1.5 hours)
* Context API for State Management (2.5 hours)

**Project:** Building a Context-Driven App (3 hours)

**Module 10: Custom Hooks (1.5 hours)**

* Creating Custom Hooks (1 hour)
* Reusable Logic with Custom Hooks (30 minutes)

**Project:** Custom Hook Implementation ( 1 hr )

**Module 11: Http Requests & API (3.5 hours)**

* Fetching Data from an API (1 hour)
* Axios for HTTP Requests (1 hour)
* Handling API Responses (1.5 hours)

**Project:** Building a Data-Driven App (1 hour)

**Module 12: React Forms (3 hours)**

* Controlled Components (1 hour)
* Form Validation (1 hour)
* Form Submission (1 hour)

**Project:** Building a Form (30 minutes)

**Module 13: React Router (3 hours)**

* Navigation in React (30 minutes)
* Route Configuration (1 hour)
* Nested Routes (1 hour)
* Route Guards (30 minutes)

**Project:** Creating a Multi-Page App (1 hour)

**Module 14.: Authentication (2.5 hours)**

* User Authentication Concepts (30 minutes)
* Implementing Authentication in React (1.5 hours)
* Securing Routes (30 minutes)

**Project:** Implementing User Authentication (1 hour)

**Module 15: Libraries like Material UI/Tailwind CSS (2.5 hours)**

* Introduction to Material UI/Tailwind CSS (30 minutes)
* Integrating UI Libraries (1 hour)
* Customizing UI Components (1 hour)

**Project:** UI Library Integration(1 hour)

**Module 16: Complete Project (3.5 hours)**

* Building a Real-World React Application (3.5 hours)

**Module 17: Deploying React App (1.5 hours)**

* Preparing for Deployment (30 minutes)
* Deployment Options (e.g., Netlify, Vercel) (1 hour)
* Project: Deploying Your App (30 minutes)

**Module 18: Animations in React (2.5 hours)**

* CSS Transitions (30 minutes)
* React Transition Group (30 minutes)
* Animate.css and Other Animation Libraries (1.5 hours)

**Project:** Adding Animations to Your App (1 hour)

**Module 19: React with Typescript (4 hours)**

* Introduction to TypeScript (30 minutes)
* Adding TypeScript to React (1 hour )
* Type Safety in React (1 hour )

**Project:** TypeScript Integration (2 hour )

**Module 20:**

**An introduction to Next JS & MERN Stack (3 hours)**

**Combining All Concepts into a Final Project (3 hours)**

**Course Recap and Q&A (1 hour)**