PART 2: JAVASCRIPT WITH REACT

Section 2.1: JavaScript With Basic React Integration

2.1.1 Descriptive Task

Introduction to JavaScript

JavaScript is a flexible programming language that makes static content interactive by introducing dynamic behavior and interactivity to web pages. JavaScript gives developers the ability to alter a webpage's structure, design, and content in response to user activities such as clicks, hovers, form submissions, and more by working with the Document Object Model (DOM). With the help of this manipulation, real-time updates are possible without requiring a page reload. Examples of these updates include changing text or graphics, validating form input, and adding animations.
JavaScript does this by selecting, manipulating, and listening for user events on DOM elements using a variety of methods and attributes. It may, for instance, handle user input validation, add or delete styles for a
, and dynamically modify its content—all essential for a flawless user experience.

Introduction to React

Libraries like React have grown in popularity as a way to manage more sophisticated user interfaces and improve development productivity. A robust JavaScript package called React is used to create reusable and dynamic user interface components. Large web apps that can update and render quickly in response to changes in data can be created by developers using it. A virtual DOM, which is a condensed replica of the real DOM, is used by React to optimize updates and guarantee peak performance. React is a great option for developing highly interactive, quick, and maintainable user interfaces because of its methodology.