DOM Manipulation with JavaScript

The Document Object Model (DOM) is a programming interface for HTML and XML documents that allows developers to manipulate the structure and style of a webpage dynamically. This document would explain how JavaScript can be used to interact with the DOM, enabling developers to change elements, styles, and content on a webpage without reloading the entire page.

For example, JavaScript can be used to change the color of a button when a user hovers over it or to show/hide sections of content based on user interaction. The document might include examples of common DOM manipulation tasks, such as selecting elements by their IDs, classes, or tags and updating their attributes or inner content. A simple example could be changing the text inside an HTML **<p>** tag when a button is clicked.

The document would also explore how JavaScript events—like **onclick, onchange, and onmouseover**—allow developers to trigger actions when users interact with different elements on the page. Mastering DOM manipulation is essential for creating responsive and interactive user interfaces in modern web applications.