

Day 13

Today's session introduced how JavaScript interacts with the HTML structure of a webpage using the Document Object Model (DOM). We explored how to access, modify, and respond to user actions on elements, making websites dynamic and responsive to events.

What is the DOM?

- The DOM is a programming interface for HTML and XML documents.
- It represents the structure of a web page as a tree of objects.
- Allows JavaScript to dynamically access and update content, structure, and styles.

Selecting Elements:

1. By ID
2. `document.getElementById("taskInput");`
3. By Class
4. `document.getElementsByClassName("task-list");`
5. By Query Selector
6. `document.querySelector(".add-icon");`

Manipulating Elements:

- Changing Text:
 - `element.textContent = "Task Completed!";`
- Modifying Attributes:
 - `element.setAttribute("class", "done");`
- Changing Styles:
 - `element.style.color = "green";`

Handling Events:

- Listening to user interactions like clicks, input, or form submissions using:
- `element.addEventListener("click", function () {`
- `alert("Task added!");`
- Used anonymous and arrow functions for event handling.

Summary:

Today's class made the connection between JavaScript and HTML/CSS much clearer. DOM manipulation is an essential skill for making interactive apps like task managers, calculators, and more. It was both technical and exciting to see live changes on the webpage in response to code.