Week 2 - Javascript Fundamentals

🎯 Learning Objectives

By the end of Week 2, students will be able to:

- Understand the core concepts of **JavaScript (ES6+)**.

- Manipulate the DOM using JavaScript.

- Work with variables, functions, arrays, objects, and loops.

- Handle events and perform basic form validations.

- Use `fetch()` API for simple data retrieval.

- Strengthen problem-solving skills with coding exercises.

📌 Weekly To-Do

- **JavaScript Basics**

  Learn variables (`let`, `const`), data types, operators, conditionals, loops, and functions.

- **Arrays & Objects**

  Work with arrays and objects, including iteration methods (`map`, `filter`, `forEach`).

- **DOM Manipulation**

  Select and modify elements, handle events like clicks and keypresses.

- **Form Handling**

  Perform basic validation and dynamic updates.

- **Fetch API**

  Make a request to a public API and display results dynamically.

- **Problem Solving**

  Practice JavaScript exercises (basic algorithms, small coding challenges).

- **Progress Sharing**

  Share project learnings and GitHub repo link with a LinkedIn post.

🛠️ Tools & Technologies

- **Language:** JavaScript (ES6+)

- **Editor:** VS Code

- **Version Control:** Git, GitHub

📌 Week 2 Project – *Interactive To-Do List*

- Build a **To-Do List App** that allows users to:

  - Add new tasks.

  - Mark tasks as complete.

  - Delete tasks.

  - Store tasks in **localStorage** so they persist after reload.

- Enhance UI with basic CSS styling.

Deliverables:

- GitHub repo link

- Live deployment (GitHub Pages)

- LinkedIn post showcasing project features

📚 Suggested Resources

- Js W3

- JS Crash Course

- DOM manipulation