Week No:1 Assignment Plan (Tue–Fri)

Tuesday: Git, GitHub & JS Basics

Topics Covered:

- What is Git? What is GitHub?

- Installing Git and VS Code

- Basic Git Commands: `init`, `clone`, `add`, `commit`, `push`

- Creating and pushing to GitHub repositories

- JavaScript Basics:

    - Variables (`let`, `const`)

    - Data types and operators

    - Function types: declaration, expression, arrow

Assignment:

- Create a GitHub repository named `portfolio`

- Add a `README.md` with a short intro and push it

- Build a calculator using JavaScript functions (add, subtract, multiply, divide)

Resources:

- GitHub Docs, Git Cheat Sheet

- MDN – Grammar and Types

- YouTube: Git & GitHub Crash Course

Wednesday: JS Control Flow & Arrays

Topics Covered:

- Conditional Statements: `if`, `else`, `switch`

- Loops: `for`, `while`, `for...of`

- Arrays: declaration, iteration, common methods (`push`, `pop`, `map`, `filter`)

Assignment:

- Build a basic console-based to-do list using arrays and control structures

Resources:

- MDN – Control Flow & Arrays

Thursday: JS Objects & DOM Manipulation

Topics Covered:

- Object Literals and Nested Structures

- DOM Selection: `querySelector`

- DOM Events: `addEventListener`, `innerHTML`

Assignment:

- Build a DOM-based counter or a dynamic form handler

Resources:

- MDN – Working with Objects

- YouTube: DOM Manipulation for Beginners

Friday: Node.js & File System

Topics Covered:

- What is Node.js? Setting up Node and npm

- Running JS in Node (`console.log`, `require`, `module.exports`)

- Using the `fs` module

- Creating and importing custom modules

Assignment:

- Write a CLI-based note-taking app that:

    - Accepts input

    - Saves data to a file

    - Uses modular JS code

Resources:

- [Node.js Guide](#)
- YouTube: Node.js Crash Course