

WEEK 2: ASSIGNMENT TASK 2

Data Structure Design and Pseudocode Development

Objective :

This task focuses on designing the internal working of your project using appropriate Data Structures. Every group member must contribute. This week includes a short live class activity but no formal presentations.

1. Data Structure Planning Table :

Create a Data Structure Planning Table with at least five operations. Each group member must add at least one row.

Include:

- Operation
- Data Structure used
- Reason for choosing the DS

Save this file as: DS-Plan.md

2. Operation Flow Explanation :

Choose any three operations from your table and explain:

- What the operation does
- Which Data Structure supports it
- Why the Data Structure is suitable
- How the user interacts with it

3. Pseudocode Writing :

Write pseudocode for at least five functions from your system.

Each group member must contribute at least one function.

Save this file as: Pseudocode.md

4. Visual Diagram (Optional) :

Create a simple flowchart or diagram showing how one major operation works. You may draw it on paper. Upload the image with a clear name.

5. GitHub Activity :

Each member must contribute to the repository.

Required updates:

- Upload DS-Plan.md
- Upload Pseudocode.md
- Upload the diagram image
- Use meaningful commit messages
- Each member must make at least one commit

6. Live Class Activity (No Presentation Required) :

During class this week, your group will participate in a short Data Structure Movement Activity. When I out a Data Structure, your group will act out its shape or behavior at your desks. Mini Skit. * I call out

Examples:

- Queue: students form a mini line
- Stack: notebooks are stacked on top of each other
- Tree: students extend arms to show branches
- Linked List: students connect shoulders to show next pointers

After class, upload one photo of any Data Structure movement your group acted out inside the folder named: week2-live-class

Deliverables :

- DS-Plan.md
- Pseudocode.md
- Operation flow explanation
- Diagram image
- GitHub repository showing active commits from all members
- One photo inside the folder week2-live-class