**1. Project Objectives**

**2. Task Breakdown**

| **Task #** | | **Description** | | **Status** | | **Assigned To** |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | | Understand class structure and data model | | Done | | John Smith |
| 2 | | Implement core functionalities | | Undergoing | | Lucy Key |
|  | 2-1 |  | Functionality 1 |  | Done | John Smith |
| 2-2 | Functionality 2 | Planned | Lucy Key |
| 2-3 | Functionality 3 | Preparing | John Smith |
| 3 | | Error handling and input validation | | TBD | | Lucy Key |
| 4 | | Test application | | TBD | | Both |
| 5 | | Finalize code and documentation | | TBD | | Both |

**3. Timeline**

Make a tentative timeline to manage the project progress.

| **Date** | **Task** | **Notes** |
| --- | --- | --- |
| 09/15/25 | Finalize project ideas | e.g., plan part 2 above |
| [Date 2] | Task/data flow plan | e.g., with a specific format |
| [Date 3] | Implement main features | e.g. Add/Delete/Search |
| [Date 4] | Testing and debugging | e.g., Done by a date |
| [Date 5] | Submit project + documentation | e.g., double check before submission |

**4. Technical Details**

* **Language:** C++ (Standard: e.g., C++11 or C++14)
* **Development Environment:** [e.g., Windows 11, Visual Studio Code, g++, etc.]
* **Key Concepts Used:**
  + OOP (Classes/Objects)
  + File I/O
  + List
  + Sorting
  + String matching and comparison
  + Efficient manipulation of a customized data type

**5. File Structure**

Example:

/p01\_group01.zip

│

├── p01.cpp

├── p01\_repot.docx

└── README.md

**6. Testing Plan**

* **Manual test cases**
  + Create test cases
  + Input scenarios with expected vs actual output
* **Test in a standard environment**
  + Set up GitHub Actions
  + Compile the code
  + Optional: test cases
    - Duplicate entries
    - Invalid user input

**7. Documentation**

* **README.md** with:
  + Project description
  + How to compile and run
  + Usage instructions
* Code comments for clarity

**8. Completion Checklist**

| **Item** | **Done (Y / N)** |
| --- | --- |
| All features implemented |  |
| Code compiles without errors |  |
| Optional: all test cases pass |  |
| Proper documentation |  |
| Code is commented |  |
| Submitted on time |  |