

Project Report: Academic Hostel Management System

Group Members information:

Group Leader :

Salha Nazeer

Roll no: 25021519-041

Members

*** Member 1**

Urooj Fatima

Roll no :25021519-152

*** Member 2**

Sobia Batool

Roll no:25021519-221

Project Overview:

The Academic Hostel Management System is a specialized C++ application designed to streamline the administrative tasks of a hostel. The system focuses on maintaining digital records for students, managing room inventory, and handling the allotment process through efficient file handling techniques.

Individual Contributions & Modules:

*** Student Record Management (Member 1): ***

Responsible for developing the core module to add, update, and display student personal details and academic information.

*** Room Management & Database (Member 2 - Leader): ***

Developed the room status tracking system and managed the backend data storage using rooms.txt to ensure data persistence.

*** Room Allotment Logic (Member 3): ***

Designed the algorithm for allocating specific rooms to students based on availability and updated the records in real-time.

Technical Features:

*** File I/O Operations:**

All records are stored in .txt format within the src/ directory for permanent storage.

*** Modular Code Structure:**

The project is organized into a clean directory structure with a dedicated `src/` folder for code and a `docs/` folder for documentation.