Hostel Management System

Sequence Diagram (Textual & Box Representation)

Programming Language: C++

1. Project Scope

The Hostel Management System is developed using C++ to manage hostel records efficiently. It stores student details, manages room allocation, and maintains fee records. The system allows adding, updating, searching, and displaying student information.

2. Actors

• User (Hostel Staff / Admin)

• Hostel Management System

• Student Records

• Room Management

• Fee Records

3. Sequence Diagram Explanation

The user interacts with the Hostel Management System to manage student records, allocate rooms, and store fee details. The system communicates with different modules and databases in a specific sequence to complete each operation.

4. Sequence Diagram (Textual UML Representation)

```
User
|
| Login / Select Option
v
Hostel Management System
|
| Display Main Menu
|
|---------------------------|
| |
Add / Update Student Allocate Room
| |
v v
Student Records Room Management
| |
| Save / Update Data Check Availability
v |
File System v
Allocate Room
|
v
Fee Records
|
Save Fee Details
|
v
File System
```

5. Sequence Diagram (Box Representation)

User	Hostel Management System	Student Records	Room Management	Fee Records
Start System				
Select Option				
	Request Details			
Enter Student Details				
	Add / Update / Search Student			
		Return Student Data		
	Check Room Availability			
			Room Status	
	Allocate Room			
	Store / Update Fee Details			
				Fee Confirmation
Display Result				