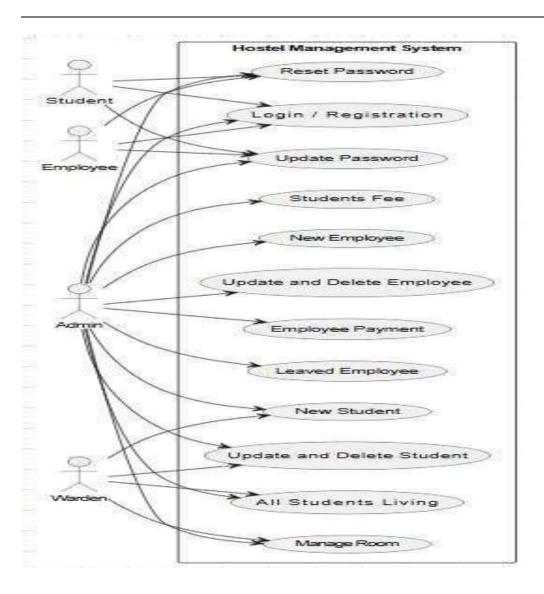
PROJECT TITLE: HOTEL MANAGEMENT SYSTEM

Contents

Nouman Khan Sardar Zain Abdullah sajid Daniyal Murtaza Kazim Shaukat Sayyam Tahir Uzair Arif Adil Bashir

NAME: Nouman Khan

REGISTRAION NO: SP23-BSE-012



NAME: Uzair Arif REGISTRATION NO: SP23-BSE-168

Use Case: New Student Admission in Hostel

Primary Actor: Hostel Warden Secondary Actors: Admin, Student

Preconditions

- Student has been institutionally admitted.
- Required documents have been submitted.
- System is operational with valid warden access.
- Rooms are available, or a waiting list is active.

Post conditions

- Student is registered in the hostel system.
- Room assigned and marked as occupied.
- Attendance record initialized.
- Welcome notification sent.

Main Success Scenario

- 1. Admin logs in to the system and navigates to the "Student Management" section.
- 2. Selects "New Admission" and enters student details along with submitted documents.
- 3. The system verifies institutional admission.
- 4. Room is auto-assigned or manually selected.
- 5. Hostel ID card is generated.
- 6. System sends confirmation to all parties involved.

Alternative Flows

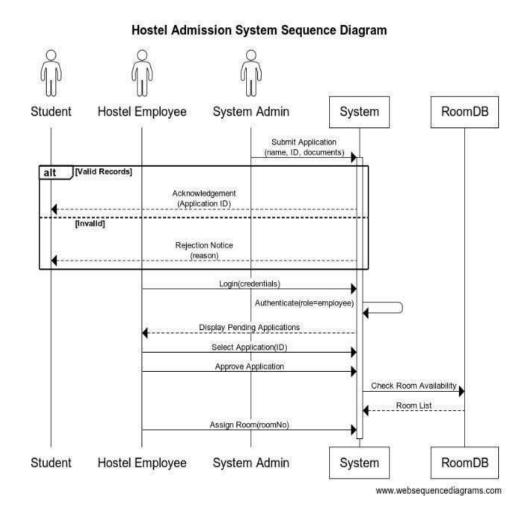
- A1: No rooms available → Student is placed on a waitlist.
- **A2**: Missing documents → System flags for completion.

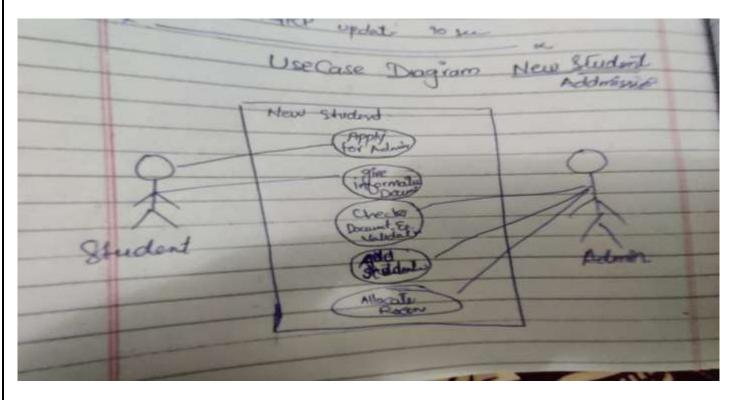
• **A3**: Duplicate entry detected → System alerts warden.

Exception Flows

- E1: System crash during entry → Data recovery protocol is activated.
- E2: Unauthorized access attempt → Incident is logged and admin is alerted.

System sequence Diagram



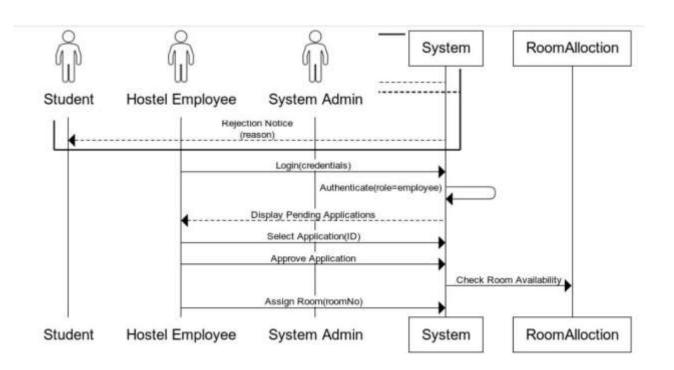


Class Diagram

```
Student
                                   roomNumber
                                                                  - rollNo
  address
                                 - capacity
  totalRooms
                                                                    contactNo
+addRoom()
+registerStudent()
                               | +allocateRoom()
+assignWarden()
                               | +vacateRoom()
                                                                 | +payFees()
                                            Warden
                                       employeeID
                                       contactNo
                                     +checkRooms()
```

Update & Delete Student

Use Case Element	Update Student Details	Delete Student Record Student Record Removal	
Use Case Name	Student Information Update		
Primary Actor	Hostel Warden	Hostel Warden	
Secondary Actors	Admin	Admin	
Stakeholders	 Student: Needs accurate records Warden: Requires edit permissions Admin: Audits changes 	Warden: Needs verification authorityAdmin: Ensures data compliance	
Preconditions	 Student exists in system Warden has "Edit" privileges Original records accessible 	 Student marked for departure All dues cleared Backup exists 	
Postconditions	 Records updated with timestamp Change log entry created Notifications sent if critical field modified 	 Record moved to archive Room status updated All accesses revoked 	
Main Success Scenario	 Search student by ID Select "Edit" Modify fields (contact/room) System validates changes Save with digital signature 	 Verify student eligibility for deletion Confirm room vacated Execute soft-delete Update inventory 	
Alternative Flows	A1. Room transfer → Update both room records A2. Contact change → SMS verification	A1. Outstanding fees → Block deletion A2. Shared facilities → Cascade update	
Exception Flows	E1. Concurrent edit conflict → Merge protocol E2. Invalid data format → Rejection	E1. Dependent records exist → Partial delete E2. System archive full → Alert admin	



Student Delete & updat

