

# Hostel Management System (HMS)

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The Hostel Management System (HMS) is designed to manage hostel-related activities efficiently, including student registration, room allocation, fee management, maintenance tracking, and leave requests. It ensures streamlined management for both students and admins.

### Features

#### 1. Student Module

##### - Login:

- Students use their ID and password, pre-registered by the admin, to log in.

##### - Fee Payment:

- Students must complete fee payment before accessing room allocation.
- Payment status is tracked for each student.

##### - Room Allocation:

- After payment, students can allocate a room themselves.
- Rooms are automatically assigned in sequence across hostels: A, B, C, G.
- Hostel G is exclusively for females, while A, B, C are for males.
- Each hostel has 100 rooms, each accommodating 2 students.
- The system checks the student's gender before room allocation.

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- Maintenance and Leave Requests:

- Students can submit maintenance and leave requests through their dashboard.
- These requests are visible to the admin.

### **2. Admin Module**

- Login:

- Admins use pre-registered IDs and passwords to access the admin dashboard.

- Student Management:

- View the list of students and search by name or roll number.
- Add or delete student records.
- On deleting a student:
  - Their room is freed.
  - All maintenance and leave requests linked to them are deleted.

- Staff Management:

- Similar operations as with students: add, view, and delete staff members.

- Room and Hostel Details:

- View room allocation and student details for each hostel separately.
- Track the number of students per hostel with filtering options.

- Request Management:

- View all maintenance and leave requests from students.
- Change the status of maintenance requests: Complete / Rejected / In Progress

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- Change the status of leave requests: On Leave / Returned
- Use filters to view requests based on their status.
- Payment Tracking:
  - View the payment status of each student.
  - Keep records of fee payments.

### Technologies Used

- Frontend: React
- Backend: Flask
- Database: MySQL
- Hosting: Local server / Cloud platform
- Version Control: GitHub

### How to Run the Project

#### 1. Clone the repository:

```
git clone https://github.com/kotireddy712/Hostel-Management-System.git
```

#### 2. Navigate to the project directory:

```
cd Hostel-Management-System
```

#### 3. Install dependencies:

```
pip install -r requirements.txt
```

```
npm install
```

#### 4. Run the backend server:

```
python app.py
```

#### 5. Start the frontend:

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npm start

6. Access the system at:

<http://localhost:3000>

### **Contact**

For any issues or contributions, feel free to reach out via GitHub: <https://github.com/kotireddy712>