

# **HOSTEL MANAGEMENT SYSTEM**

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**Category:** Web Application

## **Purpose**

The purpose of developing this software is to manage various activities in the hostel. The project deals with the problem of managing a hostel. It avoids the problems that occurred manually, thereby reducing the warden's workloads in the smooth running.

## **SCOPE**

The proposed project hostel management is a computerised system. This project in the hostel can reduce all the problems faced in the current manual hostel management system. The main objective of developing the hostel management system is to save money, time and paper.

## **Existing System**

1. To get mess bill compensation, all the students have to go for various paperwork which takes lots of time.
2. Emergency medical facilities are always an issue.
3. Schedule of room cleaning and class lecture coincides, thus making the room uncleared.
4. Mess complain issue

## **Proposed System**

- ❑ Student Registration: Administrator can register a student
- ❑ Login System: Users and administrator have to log in using webmail only.
- ❑ Mess bill: Automated mess bill will be generated at the end of the month.
- ❑ Medical: Contains necessary information regarding a medical emergency, services and medicines
- ❑ Student profile: Student can submit a request for leave, mess bill exception and apply for a refund of a hospital bill
- ❑ Complain Management: Lodge a complaint regarding cleaning, food etc.

## **Advantages**

### **For Administrator**

- ❑ Less human error
- ❑ Time and Cost saving: Reduces the burden of admin through the automated system.
- ❑ Data redundancy can be avoided to some extent.
- ❑ Reduces paperwork

### **For Students**

- ❑ Time-saving: Reduces the time spent in getting leave applications approved or in mess bill exemption.
- ❑ Complaint: Lodging a complaint will be confidential and easy.
- ❑ Refund: Apply for a refund of hospital bills etc.

## **Functional Requirements:**

- Users must have webmail and password to log in.
- The administrator can register new students.
- Students can check their mess bill.
- Students can check the status of their application.
- The administrator can update the hostel details.
- The administrator can post news and make changes in other sections.

## **Non Functional Requirements:**

- Secure access to confidential user's details.
- Maximum time availability.
- Flexible service based architecture will be highly desirable for future expansion.
- Teacher registration facility is accessible by the administrator only.

## **SOFTWARE TOOLS**

Database Server: MongoDB

Client: Any web browser

Development Tools: Atom text editor

Programming Language: Javascript

## **Deployment**

Operating System: Windows, Linux

## **System Environment**

Processor: Intel Core i5

Ram: Minimum 4GB

Hard Disk: 500GB +

### **Technology Used**

Scripting Language: HTML, CSS, Bootstrap, JavaScript

Frontend Framework: React.js

Database: MongoDB

Backend: Node.js