**ABSTRACT**

**Topic: Hostel Automation System**

Hostel Automation System (HAS) is web-based system for managing various activities in the hostel such as admission, out pass, room allocation and fee management. For the past few years the number of educational institutions are increasing rapidly. Thereby the number of hostels are also increasing for the accommodation of the students studying in the institution. And hence there is a lot of strain on the person who are running the hostel and software’s are not usually used in this context. This particular project deals with the problems on managing a hostel and avoids the problems which occur when carried manually. This system helps to keep a track of Student and faculty details, rooms allocated to them, out pass approved or rejected. This system automates the room allocation process during admission and calculates fees for each Student and Faculty in hostel. The users of the system include Student, Faculty, Warden, and Administrator. This particular project deals with avoiding the problems which occur when carried out manually, thereby improving the efficiency of the system and reducing the overall workload.

**Existing System**

The existing system is a manually maintained system and need lot of efforts and consume enough time. It involves managing and controlling the various aspects of hostel such as admission, out pass, room shuffling, complaints and request and vacation. The hostel management has to keep a list of room numbers, keeping record of staff and student and maintaining complaint register, etc. In the existing system the hostel running authority has to do all these things manually. All these details are entered and retrieved manually. It is a time consuming process and there is a chance of inaccuracy of data. In the existing system we can apply for the hostels online but the allotment processes are done manually. It may lead to corruptions in the allocation process as well as hostel fee calculation. The existing system does not deals with mess calculation and complaint registration. It is a time consuming process and there is a chance of inaccuracy of data.

**Proposed System**

The proposed system is having many advantages over the existing system. The proposed system offers facilities for manage a Hostel remotely and automates many works used in managing the Hostel and we can easily give personalized important notification to each member. The all data and information are stored in digital format so accessing the information and finding the relevant information is easy. It requires less overhead and very efficient. The proposed system deals with the fee calculation include mess, room rent and laundry and allotment process efficiently. The primary users of the system are the Student, Faculty, Warden and Administrator who are provided with different interfaces based on their role.

**User Module**

1. **Admin Module**

The admin is the overall controller of the system. The admin can add wardens, blocks, and approve or reject students to the hostel. Admin can manage fee, foods, Events and rooms.

1. **Warden Module**

The warden can view the details of all students and faculty in the hostel and add room. Also the warden can give the Outpass to the students and faculty.

1. **Student Module**

The student can view or edit profile himself. Also request or view outpass, generate feedback and complaints, fee payment, request room vacate and room shift.

1. **Faculty Module**

The Faculty can view or edit profile himself. Also request or view outpass, generate feedback and complaints, fee payment, request room vacate and room shift. Also view room allocation.

**Functional modules**

1. **Outpass**

In this modules the inmates, apply the outpass by filling the details in its online form. The details like where they are going, purpose, when they are going and when they will return are asked in the form. Once the request is made, the warder can see it. The warden approves or rejects the outpass.

1. **Room Management**

It handles the allocation of rooms and vacating rooms by the students.

* Room Allocation

During admission procedures according to the room vacancy and the hostel

Preferred each applicant is admitted to the hostel by allocating a room.

* Room Vacate

Room Vacate can be done in two ways, either individually or batch wise.

To vacate an individual, the warden enters the loginid of the student or faculty. It is also allows to vacate a whole batch after completing the course.

1. **Fee Management**

This module done by the Administrator. This module deals with fee processing of the student felt like,

* Monthly Fee
* Yearly fee, by using E-pay system. Warden generates pdf of the corresponding

Fees and email it to the bank.

* Hostel Fee
* Mess Fee
* Laundry Fee
* Additional Fees (Paper, Net etc.)
* Fines

In this module Fines can be charged to inmates because of their misbehaviour.

* Concessions

Concessions can be granted to inmates because to any genuine reason of inmate.

1. **Student Ratings**

Student rating done according to the number of warnings, number of suspensions and rating provided by the warden.

1. **Complaints and Requests**

In this module the students can login into their account and make complaints or requests. The warden looks into these complaints or requests and takes necessary steps and provides feedback to the student.

1. **Laundry Management**

It management all the laundry services of student.

1. **Registration**

There is a Registration for Student and Faculty includes name, address. personal details etc.