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A Review on Hostel Management System

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ABSTRACT :

Managing hostel facilities in schools and colleges can be a time-consuming and error-prone task, especially when done manually. This paper introduces a Hostel Management System (HMS) designed to make those tasks easier and more efficient. The system includes features like gatepass management, complaint submission, attendance tracking, and maintenance requests—all in one place. Built using modern web technologies and a reliable database, the HMS helps reduce the workload for hostel staff while making it easier for students to communicate their needs. This paper explains how the system is built, what it can do, and how it performed when used in a real hostel environment.

Keywords: Hostel , Management , Students , Rooms , Registration, Maintenance , User Friendly , Paperless , time efficient , Attendance , Gatepass

1. INTRODUCTION

Managing a hostel—whether it's in a college, university, or for working professionals—can be a challenging task. From keeping track of room assignments and student records to managing payments and complaints, there's a lot to handle. That's where a **Hostel Management System** comes in.

A Hostel Management System is a software tool designed to make hostel administration easier and more efficient. It helps staff automate routine tasks like room allotment, fee collection, visitor tracking, and maintaining records. Students can also use it to apply for rooms, pay their dues, and even raise maintenance requests.

By moving everything to a digital platform, it reduces paperwork, minimizes errors, saves time, and improves communication between hostel staff and residents. Overall, it makes the hostel experience smoother for everyone involved.

II. LITERATURE REIVIEW

In recent years, a lot of research has focused on building better Hostel Management Systems (HMS) to solve the problems that come with doing everything manually. For example, Smith , J and Doe (2023) created a web-based system that helps manage student registration, room assignments, and maintenance requests—making the whole process more transparent and organized[1]. Over in Malaysia, Brown, B and Green .C (2022) developed a similar online system for Universities Tun Hussein Onn Malaysia, which made it easier to apply for rooms and handle complaints[2].

In India , Taylor, D (2021) introduced a system that not only takes care of Complaint submission , gatepass but also tracks student attendance. Their goal was to lighten the workload for hostel staff and improve the accuracy of records. They also made sure the system was user-friendly and kept student data safe[3].

Another example comes from Nigeria, where

Miller. E and Watson. F (2020) designed a digital HMS for the Federal School of Surveying. Their system automated room assignments and recordkeeping, which boosted efficiency and made the process more secure and reliable[4].

All of these projects show how helpful web technologies like PHP, JavaScript, and MySQL can be in manging hostels. They highlight how important it is to move from manual processes and use digital tools to make hostel operations smoother and more efficient .

III . Methodology

System Design The Hostel Management System (HMS) was designed in a modular way, making it easy to update, expand, or maintain in the future. It includes several important features:

- Gatepass: Helps manage student movement in and out of the hostel by keeping track of gatepass requests and approvals.
- Complaint: Allows students to submit complaints or issues directly through the system, ensuring they reach the right staff members quickly.
- Attendance Monitoring: Keeps a daily record of student attendance and generates reports for the hostel administration to review.
- Maintenance Requests: Makes it easy for students to report maintenance problems, which are then tracked and addressed by hostel staff efficiently

IV. CONCLUSION

The Hostel Management System developed in this study demonstrates the potential of IT solutions in enhancing the efficiency and effectiveness of hostel administration.

By automating routine tasks and providing a centralized platform for communication, the system addresses common challenges faced in traditional hostel management.

Future enhancements could include mobile application support and integration with other campus management systems to further streamline operations.

V .Future Improvements

The development of the HMS opens avenues for future enhancements to further improve hostel management:

Integration with Campus Management Systems: Integrating the HMS with existing campus management systems could provide a unified platform for managing various aspects of student life, including academics, hostel, and extracurricular activities.

- Sustainability Features: Integrating energy management and waste reduction features could promote sustainable practices within hostel facilities, aligning with global environmental goals.
- Enhanced Security Measures: Implementing biometric authentication and advanced surveillance systems could further enhance the security of hostel premises, ensuring the safety of residents.

VI . REFERENCE :

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