



# Smart Dashboard For Managing The Hostel Activities

Abhishek Pundir<sup>1</sup> Akarsh Singh<sup>2</sup> Tanvisha Varshney<sup>3</sup> Tanvi Singh<sup>4</sup> Ayushi Gupta<sup>5</sup>

<sup>1,2,3,4</sup>Student <sup>5</sup>Assistant Professor

<sup>1,2,3,4</sup> Department of Information Technology

<sup>1,2,3,4,5</sup> NIET, Greater Noida

## ABSTRACT

The Smart Dashboard for Hostel Management Activities framework is a web application which is created for managing different activities in the hostel. This project is expected to limit human works and make hostel allocation much easier for student and hostel administrators with the help of the web application to hostel, naturally select the student from the waiting list and mess billing, outpass generation, complaint registration, and so forth. Students will get endorsement notice in their mails. It advises guardians with respect to their wards and their presence in the hostel and their curriculum will be informed to their parents using this model just in one touch. In the last few years the number of educational establishments is expanding quickly. In this way, the quantity of hostels is additionally expanding for the settlement of the student considering in this college as well. Also, henceforth there is a considerable measure of strain on the individual who are running the hostel and websites are not generally utilized as a part of this specific circumstance. This specific project manages the issues on dealing with a hostel and helps to deal with the issues which happen when conveyed manually.

**Keywords :** Hostel, Outpass, Mess

## 1. INTRODUCTION

This project is a customized and user friendly software for hostel activities. It helps to manage the hostel activities and to automate the pen and paper work of the hostel. This system is designed in favour of the hostel which helps them for manual work. This particular project deals with the problem of managing the hostel and avoiding the problems which occur when carried out manually.

## **2. PROBLEM STATEMENT**

We have 3 hostels in the college, which comprises 2 boys hostel, one girl hostel and dormitories. Every one of these hostels are handled through manual operation by the hostel office. The Registration frame confirmation to the various information processing are done physically. In this way, there are a great deal of redundancies which can be effectively avoided. Subsequently there is a lot of strain on the individual who are running the hostel and web applications or software are not generally utilized as a part of these specific circumstances. This project manages the issues on dealing with a hostel and stays away from the issues which happen when handled manually. Designing a computerized system with the user-friendly GUI, and efficient performance by identifying the drawbacks of the existing system will help to overcome the problems of the existing system.

## **3. LITERATURE SURVEY**

We have created source code which would help in building up the Online Smart Dashboard for Hostel Management Activities. It diminishes the efforts made by the hostel chief/warden and hostel proprietor while managing the hostel. It removes the pen and paper idea which has been utilized by us from before. The created framework gives solutions for manual hostel administration issues and furthermore gives data for example- hostel data, hostel room data, and hostel accounts data etc. It is an online programming site so anybody can get to it from anyplace with no unpredictability with the assistance of a working web association. E-registrations outlined were anything but difficult to streamline the student' undertakings/doormen's activity. The stages required with the registration procedure must be reduced to the closest possible if the system needs to be fast and more efficient and convenient. Paper-based procedures of registration are tedious and costly. E-registration for hostel facilities played a major part in the change and thus helped to achieve the following: – Reduced the paper work and redundancy thereby improving productivity and lowering cost of printing and purchasing registration materials annually. Aid the hostel in data management and integration of students profiles. – Provided the hostel's statistics on the needs of students (e.g. tables, chairs, beds etc.). The author talks about how security in this day is one of the major difficulties that individuals are confronting everywhere throughout the world in each part of their lives. Information to any association is a most valuable property. Security of sensitive information is dependably a major test for an association at any level. In the present technological world, databases are helpless against hosts of assaults. In this study, significant security issues confronting databases are recognized and some encryption strategies are talked about that can remove the assaults hazards and ensure the delicate information. To wipe out the security dangers each association must define a security approach and that security approach ought to be strictly enforced. A strong security strategy must contain very much characterized security features, access control, Inference Policy, User Identification/Authentication and Encryption.

#### **4. SCOPE AND LIMITATIONS:**

- Hostel Managements System is intended for Hostel (like schools, colleges).
- There will be pre-characterized criteria for the Reserve to the hostels.
- He checks the bore witness to application types of the student acquired from the web and confirms it with the student database.
- If the students are qualified then they are designated to the hostel Room.

#### **5. OBJECTIVES**

Major objective of the proposed system is to help automate basic hostel management activities. The basic hostel management activities comprise of activities like:

- Admin can send the approval notice to the students through the mail system.
- Insert the student details and other records.
- Students can register their complaints in the complaints page.
- Hostel employees can calculate the hostel accounts in an easy manner.
- Hostellers can check the status of their hostel fee.
- Room Allotment to the hostellers.
- Outpass application for the students.
- Providing data integrity of the student using approved login.

#### **6. EXISTING SYSTEM**

Current situation of the hostel administration framework is that all the work is done physically. Various information or record copies of the hostel and student data are kept in various divisions. Room is distributed by the room necessities and as per requested by the student. Hostel offices and other data are altogether kept in a booklet or are shown on notice board. Student's data, staff data, student registration, room status, complaints, occasions news, outpass application are kept in registers and require manual entry.

## **6.1 Limitations of Existing system**

- The current framework makes the data retrieval very difficult because of the huge volume of documents.
- Data security and Integration are major concerns in the current system .
- Current framework is powerless against natural disasters which causes loss of data. ➤ The current framework does not have a PC based database for storing of documents ➤ The entire process is tedious and a waste of human and material assets.
- Record management and searching is a very difficult job.

## **7. PROPOSED SYSTEM**

To overcome all the limitations of the existing system, a framework called hostel management is proposed which is a web application. This framework automates all the activities occurring in the hostel. The proposed system provides data security and integration which is a major drawback in the current scenario and also provides smooth operation in retrieving data in a more systematic way hence saving a lot of human effort and time. The proposed system being a website runs on a server with robust database which eliminates the problem of data redundancy and helps to store information of students and other hence ensures data integrity and interconnects all those students and management process involved. This framework allows students and employees to manage various activities in a computerized manner.

### **7.1 Benefits of the Proposed System**

- Automates all the activities involved in maintaining hostel administrations.
- The utilization of the database will help in simple retrieval of data and control information concurrency.
- It is cost effective as information is stored online and can be accessed remotely hence eliminating record keepings.
- Mail notification for every event, notice and approval status of various activities( outpass ,complaints, etc).

### **7.2 Limitations of Proposed System**

The above proposed system has some of the challenges listed below which can be addressed.

- Both buyers and sellers should be mobile friendly. If the user doesn't know how to use mobile it will be difficult for the user to use the application.
- As it is an online process, the users must be connected to the internet to access the auction and to buy/sell the product.

- Required product might not be available on time as it depends upon the seller to which product he/she wants to sell.
- Delivering the product might take some time depending upon the address of the buyer and seller.

## **8. Hardware and Software Tools**

1. CPU: Intel or AMD processor with 64-bit support , 2.8Ghz or faster processor.
2. Memory: Min 4GB of RAM.
3. Storage : 1TB Hard Disk or 500 SSD
4. Platform: VS Code
5. Programming Language: Python with Django, HTML, CSS, MYSQL

## **9. CONCLUSION**

In the conclusion of this project , following will be the benefits-

- Out pass (Check-in and Check-out function).
- Students can register their complaints which directly reach to management at the same time. ➤ Creation of guest profile and recording of guest details.
- Maintain and manage the hostel information easily.
- To avoid the complexity and to reduce time in data processing.

## REFERENCES

1. Bikash Choudhary, Deepak Kumar, Deepika Priyadarshini Khatua, Ajit Kumar Patro, “Online Hostel Management System”
2. O. Shoewu; S.A. Braimah; and O. Duduyemi, “Design and Implementation of Hostel Management System (HOMASY): LASU as Case Study”
3. Christoph Jechlitschek, “A Survey Paper on Radio Frequency Identification (RFID)” Iqra Basharat, Farooque Azam, “Database Security and Encryption: A Survey Study”, International Journal of Computer Applications (0975 – 888) Volume 47– No.12, June 2012.
4. Felke-Morris. Basics of Web Design: HTML5 & CSS3, 2nd Edition, Addison-Wesley, 2013. 5. Jatinder Manhas,” A Study of factors Effecting websites page loading speed for efficient web performance”, IJCSE ,Vol 1 ,Issue 3,Nov 2013. 6. Chandra M, Ramani A.V,”A Study on website quality evaluation based on sitemap”, IJCSE, Vol 2,Issue 2,Feb 2014.
7. Roy Want, “An Introduction to RFID Technology”, 1536-1268/06, 2006 IEEE. 8. Ayanlowo, K., Shoewu, O., Olatinwo, S. O., Omitola, O. O., & Babalola, D. D. (2014). Development of an Automated Hostel Facility Management System. Journal of Science and



Engineering, 5(1), 01-10.

9. Radhakrishnan, R. (2014). Online hostel management system (doctoral dissertation, cochin university of science and technology)

10. Wan Jaafar, W.N.H.(2012). HOSTEL MANAGEMENT SYSTEM (HMS), report for bachelor of computer science degree, University Malaysia Pahang, online, accessed on 9-11-2016 11. Segun O. Olatinwo and et al. 2014. "Development of an Automated Hostel Facility Management System". Journal of Science and Engineering. 5 (1)

