

# Gate Pass System



V. Sellam, Medha Shree, Shreya Chopdar, Shambhavi

**Abstract:** The objective of this work is to make the hectic process of getting a gate pass easier and less stressful. This also saves time and is paperless unlike the traditional method. It uses the modern technology and is handled online. The process involves registration, verification and granting permission to the students on the same platform. Thus saves the legwork. It's a faster process. And various measures are taken to make it foolproof. This project helps the hostellers in SRMIST to apply for gate-pass. The goal is to create an easier platform to manage the out pass request rather a traditional method of writing in papers. The goal of this project is to create a user friendly application which will be time saving for both student as well as the authorization.

**Keywords:** Gate-pass, paperless, permission , online

## I. INTRODUCTION

Over the last few years security of personals has been one of the major concerns to companies and institutes in every sector. In learning institutes, the institute takes responsibility of the student's welfare. So, permission is required to go in or out of a campus in order to ensure security. In the last few decades not much has changed in the entire process that involves in getting the permission. A request letter is drafted by the concerned party which is then filed for processing. On manual verification, a written permit is handed out which can be used at exit and entry points. The cloud database maintained for the same ensures that if required, the concerned faculty can look up to any particular student's record of any dated gate pass issued to her.

The process can contain more than one levels of human verification. This tedious procedure involves a lot of physical work involved. This project aims at making this system automatic and online. This will save both parties' various resources. Also, this project reduces the discrepancies and maintains a transparency among the student coordinator, student and the warden.

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## II. LITERATURE SURVEY

University Campus Online Automation Using Cloud computing is discussed in [1]. They proposed the system by adopting technology model (UTAUT) to determine the user acceptance of visitor application system. Gate pass Management System is discussed in [2]. The objective and the scope of this paper is to record the details, various activities of the students. Face matching recognition system is discussed in [3]. This application enables capturing new visiting record by auto-clock in/out, and assignment of visitor pass. Gate Pass Management System is discussed in [4]. The objective is to record the details and various activities of the user. It simplifies the task and reduces the paperwork. Online Gate Pass Application form for Hostel Students is discussed in [5]. The objective is to record the details and various activities of the user. It simplifies the task and reduces the paperwork. Web-Based Hostel Management System For involving Sustainable Performance of Educational Institutions, is discussed in [6], which encourages them to spare the records of the students about their rooms and other things. Visitor Gate Management System to record the details and various activities of the users is discussed in [7]. The objective is to reduce the paperwork. RFID Based Campus Management System: Access Control System is discussed in [8]. It consists of mainly two parts transponder and interrogator for access control. Solving hostel student issues using mobile application is discussed in [9], is an application for solving Student daily life issues through mobile application. Mobile application for out pass generation is discussed in [10], is an application for creating gate pass ticket for entering into the university campus.

## III. EARLIER SYSTEM

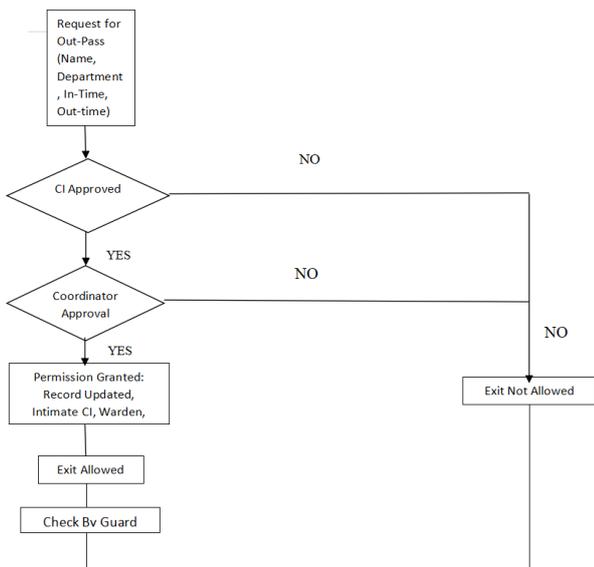
Traditionally the process of getting a gate pass involved the students residing in the hostel to manually submit their request for acquiring permission to leave the hostel premises on weekends or any other day for personal purposes. These requests were first submitted to their respective class in charges. Upon receiving their approval, the application must be further submitted to the coordinator of their respective department on whose approval, it is forwarded to the warden of the girl's hostel who then issues a gate pass depending on the approval. If the request involves the involvement of further higher authority people, the request is forwarded again in the same manner. The entire process of gaining permission requires students to manually do the whole process. This tedious process has gives way to many human errors. Also the record maintained for the same constitutes to a lot of errors and creates inconvenience to all the parties involved.



Teachers are often disturbed during class hours or have to take out separate time after college to do all these tasks in midst of their hectic schedule. This process is dependent on the availability of the faculty in charge, thus making it difficult for the students to track their requests and get them approved.

**IV. SYSTEM ARCHITECTURE**

The proposed system included first sending the request seeking permission to go out and gather a gate pass for the same. The request should contain the details of the students which include their registration number, class, department, year and section and the reason stating behind obtaining the gate pass. It is first sent to class in charge, if the class in charge approves, it is sent to the coordinator. If any of the above mentioned parties involved deny giving the permission, the exit from the hostel is not allowed. Otherwise, on the approval, the warden gets a notification that the student has been granted the permission. The warden then issues the gate pass to the students and the database is updated with the date, in time, out time. The parents are intimated the same information. The exit is allowed on the gate pass being checked by the guard of the hostel.



**Fig. 1. Flow Diagram**

**V. IMPLEMENTATION**

**A. User Authentication**

The first step includes user Authentication, in which students have to register through their valid email id which is provided by the organization already. Once the registering process is completed the user will get a unique password and username through which that particular user can access it. Hence unauthenticated people can't use this as for each and every user a unique password will be generated.

**B. Gate Pass Generation**

This process includes the approval and verification done by the authorized members once the request has been sent by the user. The first step includes the approval process by the authorized members based on whether the reason for out-pass

request is valid or not. Once it gets approved the second step includes verification process done by the warden.

**C. Email Alert**

It includes the email generated by admin after getting approved and verified by authorized members and warden respectively. Once this email is generated then user will get a notification through the registered email-id. VI.

**VI. RESULT ANALYSIS AND DISCUSSION**



**Fig.2. Welcome page**



**Fig.3. Login**



Fig.4. Type of pass

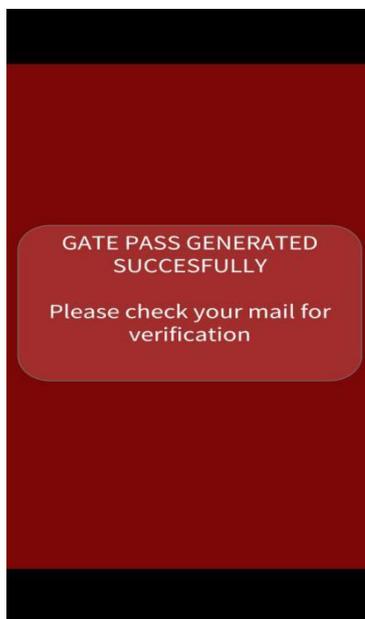


Fig.5. Confirmation

## VII. CONCLUSION

The creation of a user-friendly online gate-pass application system is generated which helps in reducing manual paperwork and saves time. This system also helps to keep a track of user in the database.

By using “Online Gate-Pass Application”, the organization can create an easier platform to manage the out-pass requests for the hostellers. It gives more secure way of handling the data as only registered people can use it. It avoids wastage of time for both students and authorized people. Hence we can conclude that “Online gate pass application System” helps to keep the whole out-pass request and approval process more safe as unauthenticated and unwanted users cannot enter the commercial space. It also helps to keep the track of the users safely.

## VIII. FUTURE WORKS

Future works includes generation of out-pass through biometric features. To detect facial features accurately for applicants Initially when the person need to go out from their campus the digital image of the person is captured by the camera and the facial details are extracted and matched with the image from database , once both are matched then out-pass will be generated otherwise it will be rejected. The goal of this system is to generate gate-pass through facial recognition. Also, the level of hierarchy can be increased by adding further number of faculty in charge which will help in times when a certain faculty is unable the respond to the requests. Also the further notifications (Such as: Laundry services, Food related issues and schedule changes for mess, maintenance regarding water and electricity supply, hospitality) related to hostel can be provided to the students on the same platform. This integrated version will facilitate easier hostel management.

A separate complain portal can be provided for students to register hostel related issues and inconveniences caused to them.

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