

## HOSTEL STUDENTS SMART TRACKING SYSTEM

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### ABSTRACT

The main goal of this project is to develop a mobile application for the Hostel Warden and students and for the Hostel security guard for outing management for the students who live in hostels. To implement an Application of the hostel students, A request is sent to the hostel warden regarding the students outing by the student, the request is confirmed by the warden and notification is sent to security guard of hostel. Status is shown to the security and also gives the details of each student outings. In this work we are going to develop application for the hostel with the features of Student in/out detail information, student contact data base.

**KEYWORDS:** Smartphone, Security , Android, Firebase, Hostel Out pass Application.

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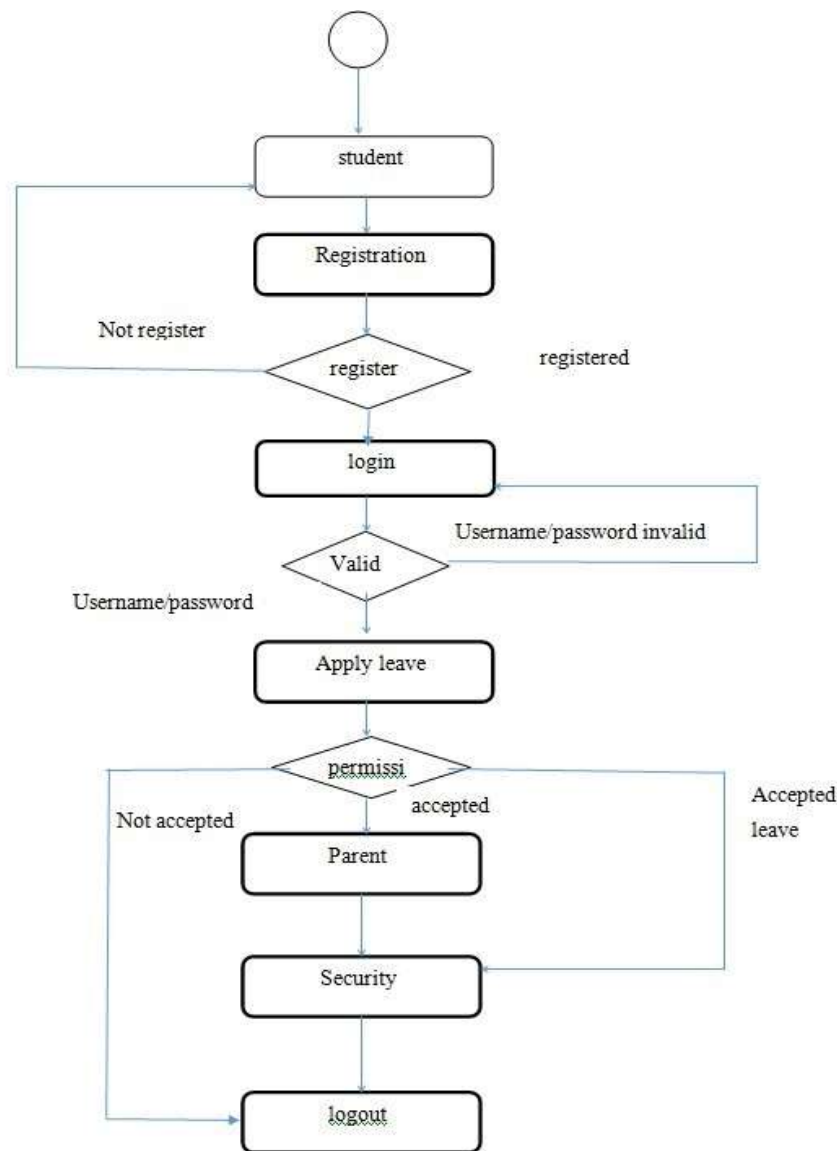
### I. INTRODUCTION

The Hostel Students Smart Tracking System for the hostel students is the project developed for the students and Warden and for the security guard and integrated all three applications. The students who live in hostel who wish to go for outing either within the city or to their hometown need to send an notification to the hostel warden. The hostel warden enquires with their parents and permit them. And send the notification to the hostel security guard about the students who got permission for outing, so he can make a note of those students. This application consists of unique number when the student fill the details and that notification is send to warden by seeing application warden will grant the permission. The application number should be maintain by the student when they are return to the hostel. By showing their application number to hostel guard they should verify that they are return to the hostel. Smart hostel is a intellectual way of approving the leave request and intimating the hostel inmates in out details from the hostel to the guardian.

### II. METHODOLOGY

In today's scenario, safety of the girl inmates is a major concern. The system allows an easy way to receive approval and inform them about in-out details of hostel inmates to their parents. Security in the organization is one of the most persistent problems that organization needs to address. For this research we visited several organizations to understand how this problem could be solved.

In the existing system students used to write a letter to the warden if they need to go for their hometown or outing. The current system is a manual based which is not computerized especially for hostel students outing process. The system takes lots of time for performing different activities and difficult to maintain the students outing records. In order to remove this manual work the proposed system has the application is designed.



**Fig-1:** Activity diagram of proposed system

The proposed application for hostel will have following modules:

- 1. Student:** In this module the student need to enter all the required details after entering details they need to send the request to warden. Every student should follow this process for permission.
- 2. Warden:** warden receives the request from the student who are willing to go out of the hostel premises, Warden should make a call to their parents and ask for the permission from them. If the parents permits or rejects, a notification along with unique number is sent to the ward.
- 3. Authentication:** Students are given with user name, password and unique number for the verification.
- 4. Hostel security guard:** He will make a note of unique number from the students.
- 5. Real time Database:** Firebase provides a real time database and back-end as a service. The service provides an application developers an API that allows application data to be synchronized across client, it also helps processing Images and Videos and stored in firebase’s cloud.

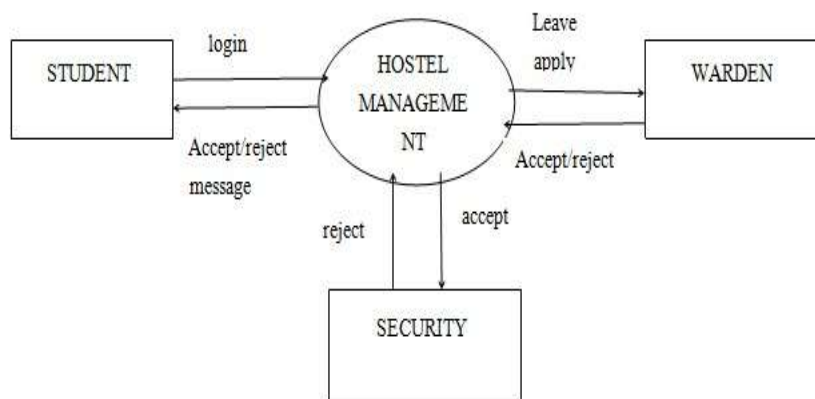


Fig-2: Block diagram

### III. RESULTS AND DISCUSSION

The results of this application implementation will remove the manual work. The proposed system has the application where the hostel students can send notification regarding their outing through application and then warden will get approval from their parents and accepts the request and send the notification to the security guard in order to make note of their departure and arrival time. For further development of the application many advanced features can be added like adding finger print of students. As we used google firebase in this application to record the activity.

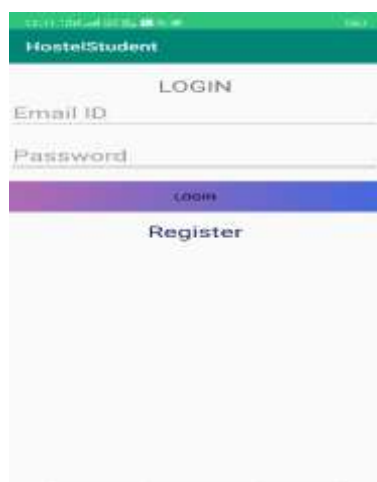


Fig-3: Student Login

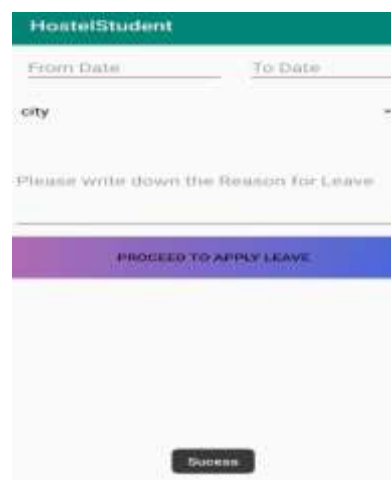


Fig-4: Outpass form

### IV. CONCLUSION

This research proposes an android application, designed specifically for hostel students. This System helps the hostel Students get the Automatic permission to leave the Hostel without the wastage of time. Warden also gets the whole day report of all the students in the hostel.

### V. REFERENCES

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