Web Services Based Student Outing System

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Abstract*- The existing hostel system still requires a lot of manual efforts and to reduce it we have implemented an application which digitalizes the process. The student submits a request to the hostel warden about the students' outing. The warden approves the order, and a notice is sent to the hostel's security. The status is displayed to security, as well as the specifics of each student's outings. In this initiative, we will create a website for the hostel that includes features such as student reviews, student in/out details, and a student contact database. The aim of this project is to create a web-based system that can handle a student's outing application and provide an integrated view of their records while also reducing the amount of time spent handling student in/out information. When a student's out-pass has been accepted, this system will inform parents, ensuring that they are aware that their child is not in hostel on that particular date.*

Keywords—   Authentication, Authorization, Security,Web application, Outing.

1. INTRODUCTION

 Authorization is the process of specifying access privileges to resources related to information security and computer security. Authentication is the way of determining individual identity. The two terms seems to be similar but differ in the process. The objective is to provide more secure, authenticated and authorized environment to hostel students regarding their out-in permission which reduce pen paper work, frauds and also saves time. The traditional approach uses manual process and may not be secure and most of the guardians using fax based approach which cannot provide best authorization. This application provides more secure way to guardian to permit their ward to go out of college campus through a message from register login. It also helps the hostel warden to manage the outing record information.

2. RELATEDWORKS

Norarina Ezzati (2017) discussed the case study conducted on E- Outing system at Sekolah Menengah Sains Dungun School where his school management is currently using manual procedure system. The paper also has outline development approach of E-Outing System that has implemented record management system using adopted prototype design. Two types of evaluations are conducted, where the first is based on the expert evaluations and the other is on user acceptance. With evaluation outcomes, EOS is redesigned and redeveloped. Final user acceptance evaluation provided that, EOS is rated highly consistency, perceived usefulness, ease of use, efficiency, satisfaction, and user interface with minimum mean score of 4 as per the data collected.Thus it can be the paper finally concluded that EOS has improved the usability of e-outing management system in Sekolah Menengah Sains Dungun.

Sudhakar Avareddy (2016) C proposed web based application for outing system to the hostel students.The authors discussed about the permission procedure to leave the campus. In this paper student sends request to warden for outing and warden provides remark on the request. The data record is saved and a notification is sent to food manager of the hostel. This notification helps the manger to suggest the cooking people about the strength of the students who are going to dine on the particular instant.

WBA enables information management system for organization makes easy accessible.According to Cho (2009), record management system is a management system used to direct and control an organization with respect to records. Record management activities include organizational structure, maintaining, planning activities, and improving record keeping policies and etc. Incredible volume of record and various formats requires an organization to manage it effectively (Porter, 2006). Record management system services are applicable to any organization. Record management ensures the rapid availability of the information where and when it is needed. Besides, it also helps free flow of record through an organization (Makhura, 2005). In addition, by allowing only authorized operations and actions against them, record management systems can secure records properly (Porter, 2006). [3][4]

The official integrated development environment (IDE) for Google's Android operating system is Android Studio. It takes the place of the Eclipse Android Development Tools (ADT) as the primary IDE for creating native Android apps. The features provided in the current stable version: Gradle-based build support, rich layout editor that allows users to drag-and-drop UI components, refactoring capability, Pro Guard integration and app-signing capabilities Support for building Android Wear apps and etc.

The existing system consumes time as the requests for outing circulate all the way around management because the process is not digitalized. Moreover there were also chances of missing records.

The system takes lots of time for performing different tasks at the same time. The disadvantages of the existing system are

- Time consuming procedure.
- Existing system is completely hardcopy.
- Tracking of the student outing details is difficult.

3. PROPOSED SYSTEM ARCHITECTURE

The proposed system in enables multiple students to access the system, request for outing simultaneously and also includes hostel student details, outing details.

System includes:

- Student information
- Parent/guardian information
- Student tracking
- Request /Approvals
- Tracking latitude and longitude.

The advantages of Proposed System are:

Since it is a web application, it is user friendly and no manual Work.

Easy to track the student outing details.

No more third party apps or installation is required for the application

MODULES

The different modules involved in the proposed system includes

- Admin

- Warden

- Parent / Guardian

- Student

- Security

Admin Module

The person who will control this system and update the system based on situation. People who are in charge of registering students, parents, and new administrators. Every week, people who update the student outing record.

Warden Module

Warden Module consist of the interface of system function that can be access by warden through the system. The requests for outing sent by the students were received by the warden. And now, based on response by the warden, the system grants permission or rejects the outing. He / She send Notification to parents, students and security regarding outing. After receiving the guardian's message, Warden has a choice with options approve and reject. Based on the purpose of out campus, Warden Selects approve or reject. If approves then the message with the ward details are sent to security check which indicates the request made by the guardian is permitted.

Student Module

User need to log in to the system first. Then, before and after the outing, incorporate the outing activity. This device also allows users to display approval from the warden. In this module student can send request for outing to warden, can view outing details and can give feedback regarding the hostel or warden.

Parent/Guardian Module

Parent module allows the parents to access the data logs of students outing records. They need to sign in using login id provided to check the records of their children. Interface also allows parents to receive the notifications sent by the warden. If the ward wish to go out from campus for any purpose, the guardian will login through the registered login then the guardian will send the permission request to warden's android phone by specifying the purpose and also duration. After successful sent, the message is available in the warden login for further action.

Login/Authentication

a) Email, a username, and a password are required to sign in.

b) All future authentications are done through the email address and password provided at the time of sign in.

Security Module

The security module consists of the transaction details like approved time, approved officer which are verified by the security office manually. The security will cross check the approvals of outings. After getting permission from warden student go to security check then the security will check the details through their registered login. The security checks for the approval and if it is found then the security records the details manually in a register. Here security after entering the record, they select checked option provided. With this action, an acknowledgment is sent to the requested guardian.
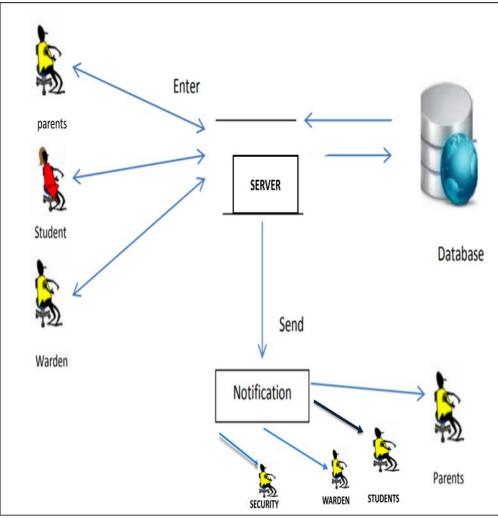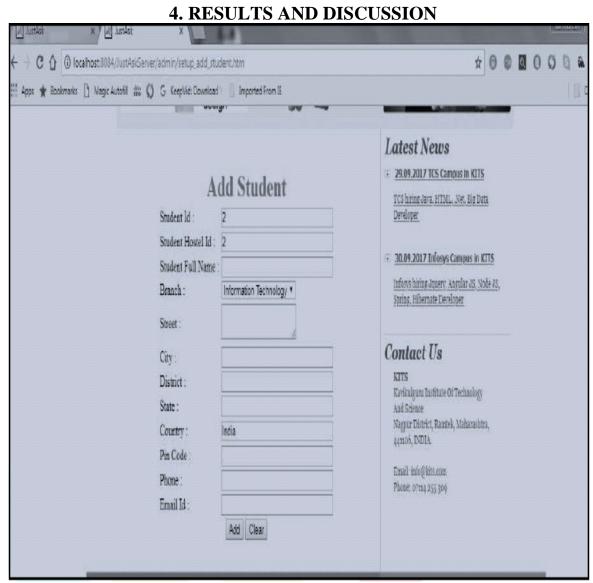

Fig.1: Proposed System Architecture

4. RESULTS AND DISCUSSION

Fig 2: Student Registration screen

In Figure 2, Admin Adds the Student details by entering their Name, Full-Address, E-mail and phone number. After adding the Full-details of Student the E-mail will be sent to the particular student's Resgistered mail ID. i.e UserName & Password.
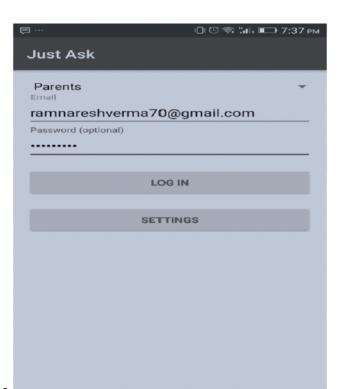
Fig3

Fig 4: Guardian request screen

In Figure 4, Guardian seeks permission by entering the respected details of student and submit request form and after it reflects on warden database.
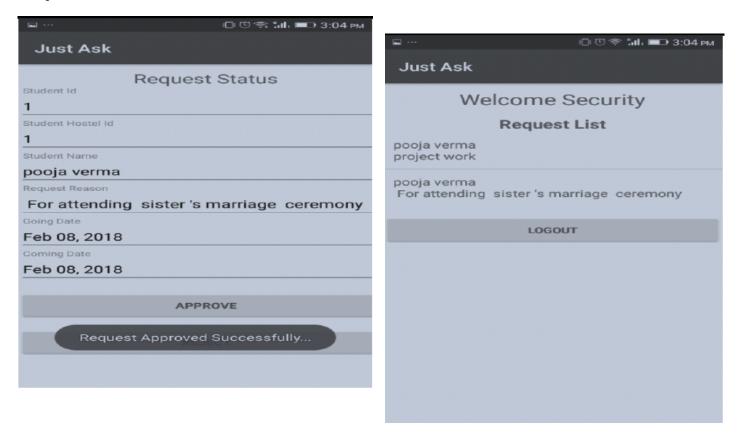

Fig 5: Warden Approval screen   Fig 6: Security authentication screen

In Figure 5, warden notifies the guardian request in text format and then approves or reject the request. The notification will reflect on the security database. In Figure 6 Security watches the approval from warden and allows the student to leave the campus.

5. CONCLUSION

The application offers reliability, time savings and easy control. application will greatly simplify and speed up the preparation and management process. The application provides high security and a system that reduces the work and resources required in traditional process. This web based can further be implemented as a mobile app which can be accessed by the students to apply for outing. The paper discussed E-outing procedure using web application. It also explains the drawback in the existing system. users are authenticated through valid logins which are maintained by admin department. This application is a user friendly application which has flexibility to change the scenarios.The application provides a watch on the ward who leaves the campus out.The data of outing students can be used by food management department in making meals. The sample data collected from technical educational institute that has hostel facility. This can be further extended as per the requirements of any educational institute.

6. FUTURE SCOPE

More Functionality can be added depending upon the user requirements and Specifications. The project can be expanding as per the need of the company and if there will any more requirements that can be satisfy. We are trying to increase software performance by using maximum use of core.

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