Academic Monitoring System Using Android

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Abstract—

The attendance system consist of many features like taking attendance of student, inserting their marks, adding new student, teacher can view students bunk, sending and retrieving important documents, sending a message to parents whether the ward is present or absent in the college etc. In many colleges attendance is taken manually, to overcome from this problem we can use this android application to reduce the work of teacher and to add mobility to existing attendance system. This android application will be really helpful for the teacher. After taking the attendance on android phone the attendance record will automatically saved in database, so no extra work of storing the record in database is required.

Keywords-Academic Monitoring System (AMS); android platform; database

I. INTRODUCTION

The Attendance Management System is developed for daily students attendance in schools, colleges and institutes. As we know today the number of students per class are increasing. So maintaining the attendance of the student is not easy for the teacher. The purpose of Attendance Management System is to change the way of taking attendance. The paper work will reduce. The teacher can generate the report at the end of the month, this will take less time. The admin can register teachers, students, so no access permission for any students to change any data is given but if required access will be provided by the admin only. The student can only see his/her attendance, marks. The password will be provided by the admin and later on the student can change the password. Staff can upload any information on the blog about question bank, lecture taken, syllabus covered etc, which is visible to student on their smart phones. The students also need to be updated of their performance periodically for their improvement in the academic. Reduction of manual work and more efficient information management will be achieved through this system.

II. LITERATURE REVIEW

Author: Ms.Shweta A.Shaha, Ms. Madhuri V.Gorade, Ms.Nutan T.Shitole, Ms.Swati B.Gawade.
Paper Name: "Smart Attendance Management System", In International Journal Of Advance Research In Technology(IJSART),Vol.1,Issue3, March 2015.

In this paper an author proposed a system consist of many features like taking attendance of student, inserting their marks, adding new student, adding their information, teacher can edit attendance, view students bunk, send and retrieve important documents, sending and important message to parents whether the ward is present or absent in the college. In many colleges attendance is taken manually, to overcome this problem we can use this android

application. Unfortunately there are several drawbacks in this paper.

Author: Brian James Mendonca, Gavin D'mello, Rachel D' souza.
Paper Name: "Automated Attendance using Android Device", In International Journal of Applied Information Systems(IJAIS), Volume 8-No.6, April 2015.

The author proposed in this paper a new, quick and easy way of registering attendance. It tries to reduce the traditional or manual process of marking attendance in which the teacher has to call out the roll number of every student in the class and mark his/her attendance after he/she has responded on it. An online system has been developed which aims to reduce the duration of the entire attendance taking process and reduce proxies entirely. It also include an offline feature which is kept as an contingency palm if the online feature cannot function normally due to some technical difficulty. Teacher will no longer have to carry attendance sheet or register to mark student's attendance. The android application takes in mind all these parameters and tries to ease the activity for the teachers.

Author: P.Jessenth Ebenezer, M.R.Mralidharan, S.Srianth, E.Ramesh, Mr.S.Prabhu.
Paper Name: "Android Application for Student Activity Register",In International Journal of Research Engineering and Advanced Technology(IJREAT),Volume2,Issue 2,May2014.

To reduce the fake attendance the author proposed in this paper integrates the RFID technology which consist of the RFID reader and the RFID tags. RFID reader read the signals from the tags and calculate the total number of counts in class. This count is cross checked with the attendance taen by the lecturers in the application. Mark entry system helps to maintain and update the marks taken by the students. Auto calculation system will help to calculate the cumulative attendance, individual performance, class performance. Website login is provided for the lecturers, HODs and principal to generate reports.

Author: Ankit Bansal, Ajit Rana, Akhil Bansod, Prafulla Baviskar.
Paper Name: "Mobile Based Campus Information Retrieval Android Application", In International Journal of Computer Science and Mobile Computing, Vol.4, Issue.3, March 2015.

This paper enhance the excellence of information in campus environment. It is related to issues in academic with the source of information in colleges. It depict a network for distributing campus information among lecturers and students. The idea of developing campus information via HTTP Internet Technology resulted campus information can be accessed inside as well as outside the campus and even all around the world through internet connected devices. This is an Android platform based mobile application is used to create an efficient environment and make sure that students and teachers can view information at anytime.

Author: Aniket Shah, Amruta Tuptewar, Pradnya Yeole, Prof.L.J.Sankpal.
Paper Name: "Automated Attendance Monitoring and Personal Intelligent System", In International Journal of Advanced Research in Computer and Communication Engineering, Volume3, Issue 11, November 2014.

The author in this paper proposed a approach for making attendance, where the student sign on the attendance sheets. This data is then manually entered in the system. Managing the attendance of the students during lectures is a difficult task and it becomes more difficult durng the report

generation phase and maual computation produces errors and also waste a lot of tme. For this reason, the development of automated attendance monitoring system using android platform is proposed. Additionally, implementation of an intelligent system which will interact with user and provide environment where chatbot will interact to provide dedicated chat.

Author: Mohommad Salah Uddin, S.M.Allayear, N.C.Das, F.A.Talukder.
Paper Name: "A Location Based Time and Attendance System", In International Journal of Computer Theory and Engineering, Volume 6, No.1, February 2014.

The paper enhances the time and attendance system that provides many benefits to organizations. It enables an employer to have full control of all employees working hours. Every organization has a specific location, which is determine by the GPS. The location of an employee can be determined by GPS device. If the location of an employee and the location of organization is same, then it should be said that , the employee is in the office. This paper use location as a proof of attendance and proposed a new time and attendance system based on location. Automated time and attendance system can use electronic tags, bar-code badges, magnetic strip cards, biometric and touch screens in place of paper cards which employee touch or swipe to identify themselves.

Author: Sanjay.T
Paper Name: "Attendance Management System", In International Journal of Emerging Technology and Advanced Engineering, Vol 4, Issue 7, July 2014.

The author in this paper created an application for android OS which is user friendly. This allows faster access of data and also less memory storage capacity. It calculates the attendance percentage of the students in faster time to check and uncheck the attendance of all the students. It is an efficient method to store the attendance in the smart phone rather than wasting the paper. It also updates the students report directly on the server reducing the faculty's time on logging from the computer.

III. PROPOSED SYSTEM

3.1Modules
Proposed system will contain following module:
1] Admin:
The role of admin module is to register student, teacher. To keep security so that no one can use another user name and password. The admin can also post the blog.

2] Teacher:
The role of teacher is to take attendance, insert marks, sending important notice to student on blog, teacher can download or upload the document.

3] Student:
The student can view marks, check his/her performance, status of attendance, student can download the document. He/she cannot have the permission to change any data. If required the access will provide by the admin.

4] Attendance:
It allows the lecturer to enter attendance of the students into the database. After login, the lecturer will select the year and section of the class. The list of students with their roll no. is displayed.

5] Syllabus Coverage:
The syllabus covered by the lecturer is stored in the database by this module. The student will login

select the type of subject in the application which display the syllabus coverage list.

6] Marks Entry :

The marks scored by the students in any exams are stored in the database through this module. The lecturer will login and select the type of exam and marks of each student is entered and submitted and store in the database.

7] Report generation:

This module allows the lecturer to generate various information about the students attendance and marks data. To generate reports user must login through the web portal and select the report type. The reports are displayed.

8] Notification:

This module allows the lecturer to post all the notification on blog.

IV. IMPLEMENTATION OF MODULE

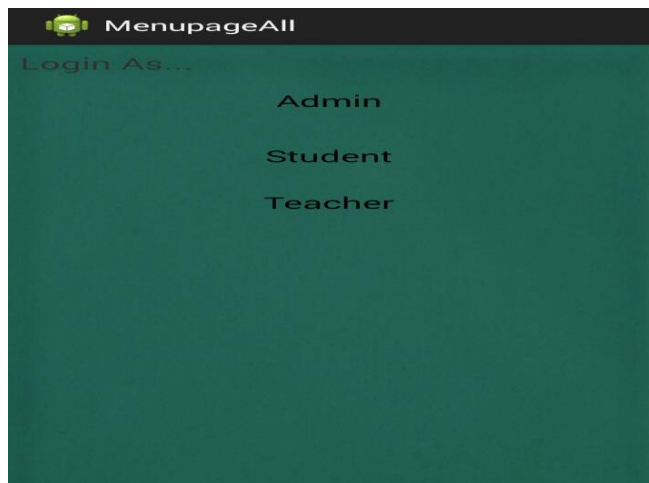The screenshots of the system are as follows. It includes all the activities mentioned in the theory.
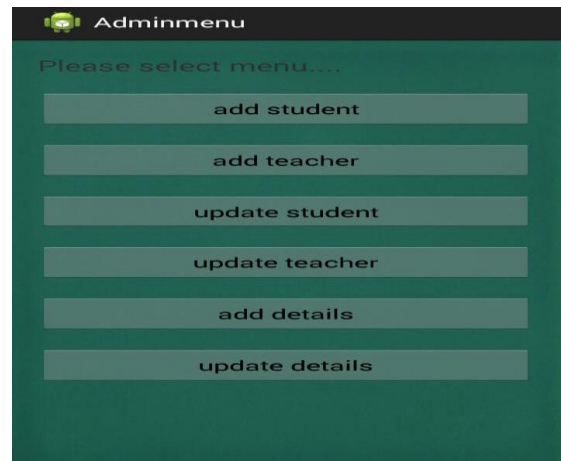

Fig 4.1: Login mode selection screen
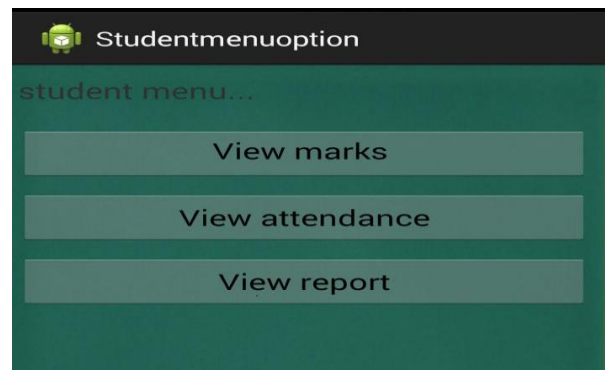

Fig 4.2: Menu screen for admin

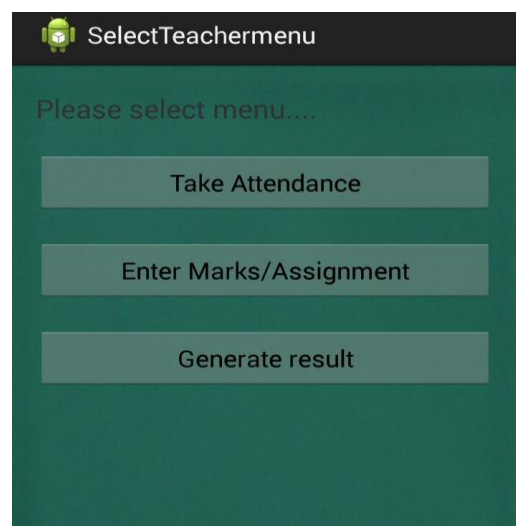**Fig 4.3: Menu page for student**
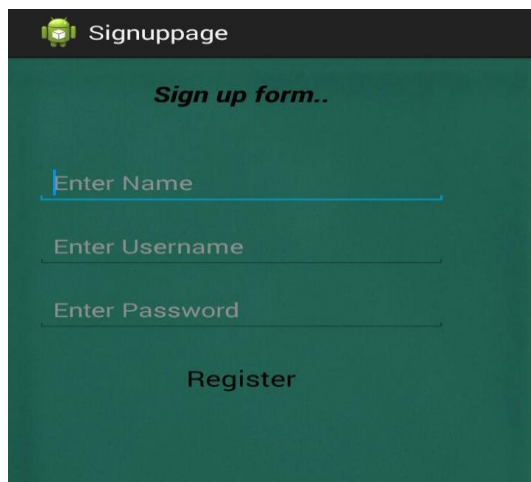

Fig 4.4: Menu screen for teacher

Fig 4.5: Sign up page

IV. CONCLUSION

The system is portable and can be easily installed and used on any mobile phone running android OS. This application helps to reduce time, effort and resources, also it will eliminate the tedious work of teachers. In this paper we have completed admin, student, and teacher module.

V. FUTURE WORK

The system will be further enhanced and several other functionalities will be added such as syllabus coverage information, report generation, sending notification to parents whether the ward is present or absent and sending important documents to students on blog, so that students can download the documents

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