

# Student Attendance Management (SAM)

Priyanka Dudhe

Rucha Deshmukh, Rachita Meshram, Tushar Watkar

Department of Computer Science and Engineering, Jhulelal Institute of Technology

**Abstract:-** The project entitled “STUDENT ATTENDANCE MANAGEMENT APP” is android application developed in android platform using java language for front end implementation ,XML for layout designing & manifest file and SQLite as database technology .The main aim of “STUDENT ATTENDANCE MANAGEMENT APP” is to facilitate the work of teachers to record attendance and generate quick reports. It maintains the details attendance of students and also updating for the same. It also stores the details of users of the application his/her information and authentication details for the application.The primary features of the project are good design flexibility and easy availability for intended user.

**Keywords:** Attendance, Security, Automation.

## 1.INTRODUCTION:

In an any educational institutions,colleges maintenance of student attendance is important and also time consuming.The attendance management till today is based on paper work that is difficult to manage boring and many times it is not correct. manually attendance increases the paper work.

We can reduce this work using technology. In our day to day most commonly used technology is mobile phone device. So we design and implement “STUDENT ATTENDANCE MANAGEMENT APP(SAM)” application.This application “SAM” is offline app. This application doesn’t requires GPRS Or WIFI.

SAM application is user friendly and efficient for attendance monitoring.This application is installed on the user’s(in this case teacher)smart phone. This application can also be installed in student’s smart phone for viewing the attendance report.The main aim is to provide an interface that require minimal input for marking attendance of particular class of students and reduces the manual work. The lecturer has a login to the phone application that requires password for accesing student attendance.After login, the lecturer can take attendance using phone itself rather than the manual work.At the end of month monthly attendance report is generated.This report can be access by the students.Students have username and password for login.The students can only view the attendance report generated in order to get an idea of his/her overall attendance and it gives chance to students to improve their attendance.

## 2.PRESENT SYSTEM:

### 2.1. The Old System For Attendance:

Today,the work of attendance is done by storing it on paper of the whole session.It is manually handled by teachers for the particular class of students.Teachers have burden of generating report at the end.It takes a lot of hard work and takes time for calculations.The necessary attendance of a student should be atleast 75%.

### 2.2. Drawbacks of old system:

- Lots of paper work
- Vast calculations
- Time consuming
- Lack of communication
- Manual work

### 2.3. Characteristics of SAM application:

- **User friendly:**This application provides a means that makes storing and managing attendance in easy manner.Also the calculations and chances of errors are reduce.
- **Reduce paper work:**There is no need to maintain big attendance sheets for the whole sessions.The work becomes easy because data can be stored in the mobile or later in computer.
- **Reduce calculatons for reports:**Reports can be generated easily using data stored.There is no need for calculate the attendance from attendance sheet that may lead to incorrect results many times.
- **Less time consuming:**The attendance reports generated also performance in unit test and exams can be calculated in less time and more precise because the computers show precise result.

## 3. IMPLEMENTATION:

Implementation plays an important role in every project where the ideas are brought to real working system.It is important to achieve desired goal and take the project towards the success.To boost the user and ensure success of the new application.

This implementation stage requires intelligent planning, research of the previous system, implementation various methods for change and scope of improvement. There are two main divisions of student attendance management application:

- 1) Faculty login
- 2) Student login

**1)Faculty login:**The faculty members use this app in their smart phones. Faculty have rights to access all features of this application.

**2)Student login:**The students use this application in their smart phones but they don't have rights to access all the features of application. They only view monthly attendance report generated by login using the username and password.

#### 4. IMPLEMENTATION OF MODULE:

Student Attendance Management is divided in following modules:

- 1) Main Module.
- 2) Faculty Module.
- 3) Import Student List.
- 4) Attendance.
- 5) Report.
- 6) Transfer File Attendance.
- 7) Database Handler.

**1)Main Module:**The main activity module shows the first user interface which contains username and password for login. Both faculty and students can be logged in from these main modules. It contains username and password fields. By using faculty username and password, faculty can be logged in and by using students username and password, students can be logged in.

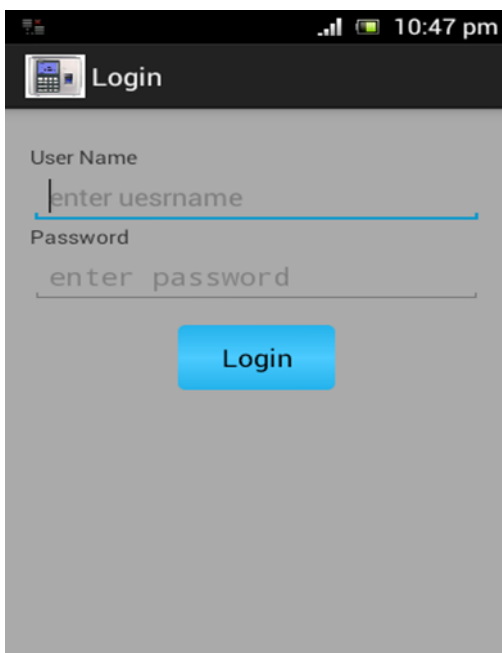


Figure7.1 Main Activity Module (login module)

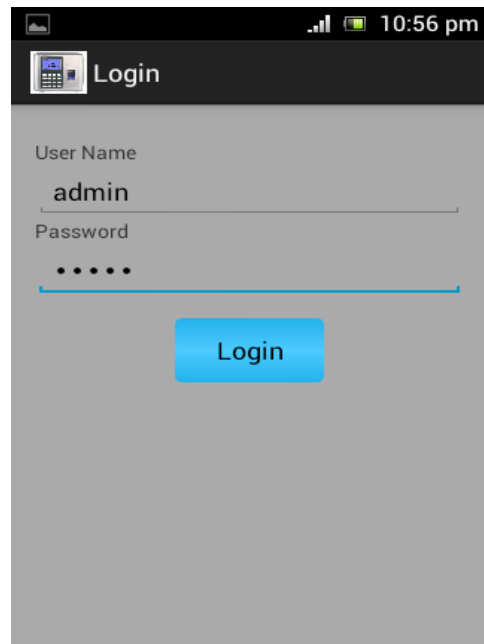


Figure7.2 Main Activity Module (login module)

**2)Faculty Activity Module:**Faculty activity module shows the different features of application. It shows features like import student list, attendance, monthly report, transfer of file attendance, and exit. These all options may lead to that features by clicking on that option.

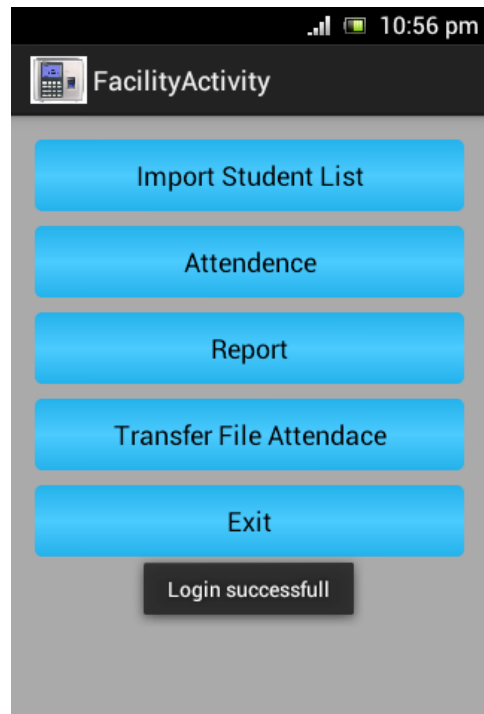


Figure7.3: Facility Activity Module

**3)Import Student List:**Faculty members, teachers more than one section of students so it is obvious to have that number of list. So that the attendance can be marked for

the students where the faculties are teaching. This is possible by importing student list.

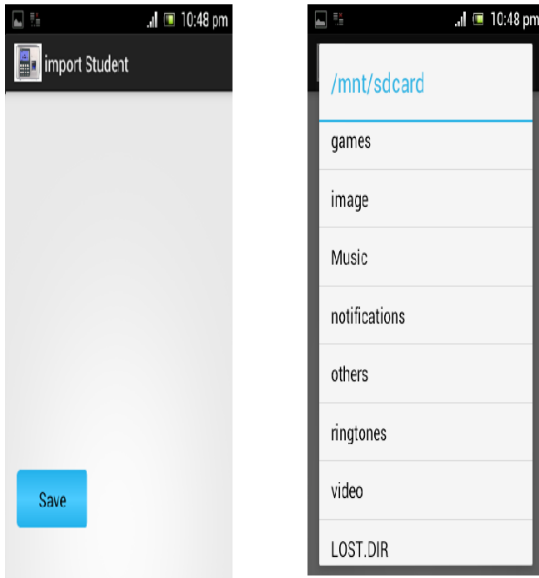


Figure 7.4. Import Student List

**4) Attendance:** In this module the daily attendance can be taken. After importing list of student, teacher choose subject name and date on which the attendance have to be taken. After selecting subject and date the students list will be appear and teacher take attendance.

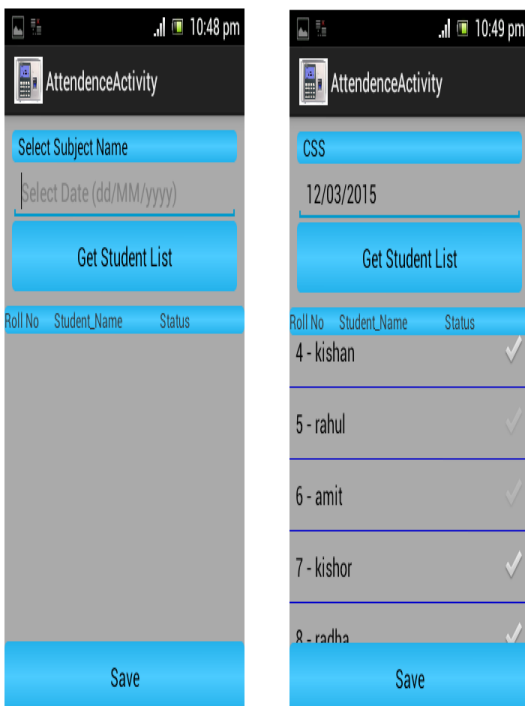


Figure: 7.5. Attendance Activity

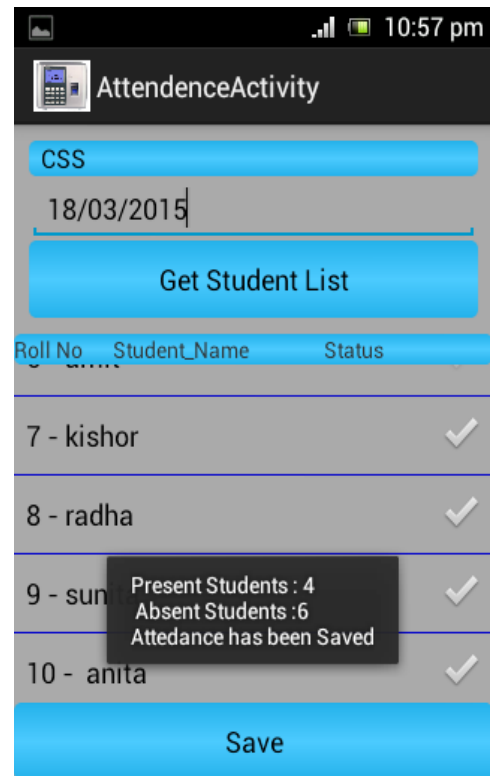


Figure: 7.6. Attendance Activity After Saving

**5) Report:** The report can be generated according to the percentage of attendance of students. Reports can be view by both faculty and students. Reports can be shown in well tabular format. This reports gives students chance to improve their attendance.

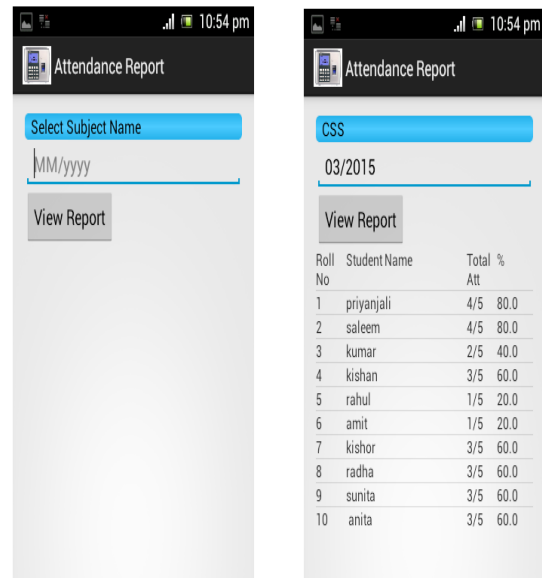
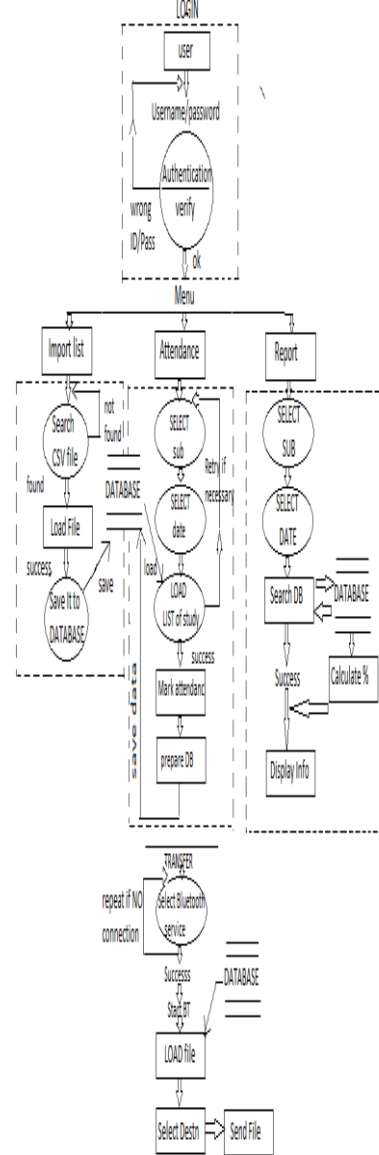


Figure 7.7. Attendance Report



Figure 7.8. Student Login

5. FLOW DIAGRAM:



6. ADVANTAGES:

After implementation of application in the android smart phone. It provides following features-

- It is secure application that can be used by faculty with the help of unique username and password.
- Less scope of mistakes as the manual work is reduce.
- Less labour work.
- Reduce paper work that consumes less time.
- Easy to manage.
- User friendly application.

### 7. FUTURE SCOPE:

- The system can be enhanced by using voice recognition feature of the android. This will take the app to an advanced level.
- The location of absents can be tracked by developing a GPS module.
- Also an additional feature of library management module can be integrated.
- Various numbers of departments can be added in the application.
- Low attendance can be recognized by the student and this helps to cope with it. There is no need to visit notice board to student for checking attendance report.

### 8. CONCLUSION:

The android application is developed using eclipse in JAVA SDK and Android SDK fully meets the objective of the application needed to be developed. The system has reached a steady state where all bugs have been eliminated. The application is operated at high level of efficiency and all the teachers and users associated with application and its advantages. Attendance app provides better way to mark the attendance, and also manipulates the information to generate the report for selected lecture. It has information regarding each student that can be monitored by the teacher.

We also devised an android application that can be used to harness resources from the system that normal application wouldn't have access.

### 9. REFERENCES:

- [1] Whipple, J., Smartphone's and the Android Operating System. In: Proceeding of the 2009 IEEE International Conference on Systems, Man, and cybernetics, pp. 2059-2061. IEEE Press Piscataway (2009).
- [2] Whipple, J., Smartphone's and the Android Operating System. In: Proceeding of the 2009 IEEE International Conference on Systems, Man, and cybernetics, pp. 2059-2061. IEEE Press Piscataway (2009).
- [3] Android Design Patterns: Interaction Design Solutions for Developers by Greg Nudelman.
- [4] Programming Android: Java Programming for the New Generation of Mobile Devices by Zigurd Mednieks.