

Smart Phone Based Student Information

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Abstract

The main aim of this project manages the activity of fees, notes and syllabus details, event announcement etc. Administrator identifies the student details, fee information, event notifications etc. Initially, a student can need to register with the application by submitting details of photo address proof, and required details and submit through online. Administrator has the power to verify the data entered by the student and at the same time the student can view and apply their needed requirements. An authorized user should have a student name and password to access detailed information from the site excluding or accessing general information in shared, public pages. Easily, a student can identify exam date, time table, and results information, book materials etc in department website. Faculties share their subject materials to the students in order to reduce inefficiency. Attendance and leave status for both students and faculties are also maintained efficiently.

Keywords: Android, Student Information System, Maintain records.

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I. INTRODUCTION

Student management Systems provides a complete On-Line solution for college administration. Student Information, Online Results, Question Papers, Online Attendance, Alumni Meetings, Symposiums, Cultural etc are the main of Student management System. Dynamic and highly motivated, with a liberal & modern outlook on education and organization and a contemporary vision and working style, Educational Management are trying to Incorporate modern concepts, amenities & system to create a forward and vibrant institute, comparable with best & most modern in country. Educational Management is able to manage student personal information, Educational statistics and highlight achievements and awards. Fee collection of the students is a cumbersome task and there would be a system in place to monitor the fee collection and report to the account department on regular basis. Finally account department to manage, monitor and generate all account detail during the operation of Educational management. It is a comprehensive system that addresses all functional requirements that can be implementing in operator of College management. Below modules, which scope the entire operational requirement of any Student Faculty Document Sharing System. The design and implementation of the system is to provide service in colleges. The system is to provide comprehensive student information system and user interface is to replace the current paper records. College Staff uploads attendance, notes, results, fees details and college notifications through a secure, online interface using web interface. All data is thoroughly reviewed and validated on the server before actual record alteration occurs. The system plans for student user interface. All data is stored securely on SQL servers managed by the college Administrator. The system decreases paperwork and time needed to access student records. Previously, college relied heavily on paper records for this initiative which had its own disadvantages. This system provides a simple interface for the maintenance of student information. It can be used by educational institutes or colleges to maintain the records of students easily. Achieving this objective is difficult using a manual system as the information are scattered, can be redundant and collecting relevant information may be very time consuming. Our proposed system ensures. to overcome these limitations. The paper focuses on presenting information in an easy and intelligible manner which provides facilities like attendance monitoring, downloading notes, circular notifications, result viewing thus reducing paper work and automating the record generation process in an educational institution. There is an increasing trend for higher education institutions to be expected to monitor student records. Online Attendance and Feedback System is software developed for daily student attendance in schools, colleges and institutes. If facilitates to access the information of a particular student in a particular class. There is another part which is feedback, the student can give the feedback at anytime from anywhere to faculty. This feedback can be reviewed by the admin or the management committee of the institute through which the confidentiality of the feedback of the faculty can be maintained. This application is developed for daily student management in colleges and institutes. It can also be useful in an organization or company at a certain limit not the whole application.

II. LITERATURE SURVEY

Challenges that need to be considered prominently are difficult in implementation of student information system.

All researchers have aimed to develop and provide a generalized solution to monitor the various works that are carried out by a College for automation of various tasks. They provide up to date information of the system which improved efficiency of college record management and decrease the space between student and college. The major contributions to this topic are summarized below:

It is discussed in [1], a mobile solution for those students who are registered with senior design project capstone course of bachelor engineering technology program. During the process of registration, the student likes to choose those projects supervisors who are flexible and committed to them for successful completion of their project at the end of the semester.

It is observed in [2], student information system manages all sorts of student details, academic related reports, college details, fee details, results, batch details, attendance details. It tracks all the details of the student from very first moment to the end of the course which would be utilized for all reporting purpose and all these will be available through a secure, online interface embedded in the colleges student record management system.

It is observed in [3], proposed student information supervision system, that give path for maintaining of student information and also provides the guidelines for students in different areas, and it also provides the different facilities to the student related to the placement exam section details etc. technologies they used are HTML, CSS, JAVASCRIPT, PHP and SQL.

In [4], the authors proposed a system using android operating system and removes all anomalies of existing system, it has various features, e-schools, colleges, attendance information is available 24*7, significantly reduces paper wastage. This mobile application will maintain the student attendance. An attendance system is presented which will greatly reduce the work load, save time for taking attendance at various places like school, colleges.

In [5], proposed an application which provides the respective student details i.e., their internal marks, total number of days they attend the class ,technologies used are android, SQLite, Development tools are eclipse, android SDK.

In [6],they proposed Mlearning environments M-learning has enhanced the e-learning by making the learning process and exam security in Mlearning environments and it provides appropriate security services.

III. EXISTING METHOD

Previously, college relied heavily on paper records for this initiative which had its own disadvantages. This system provides a simple interface for the maintenance of student information. It can be used by educational institutes or colleges to maintain the records of students easily. Achieving this objective is difficult using a manual system as the information are scattered, can be redundant and collecting relevant information may be very time consuming. Fee collection of the students is a cumbersome task and there would be a system in place to monitor the fee collection and report to the account department on regular basis. Finally account department to manage, monitor and generate all account detail during the operation of Educational management.

3.1DISADVANTAGES

- Possibility of error information
- Manual updation
- Difficult to retrieve student information
- Takes More time consuming

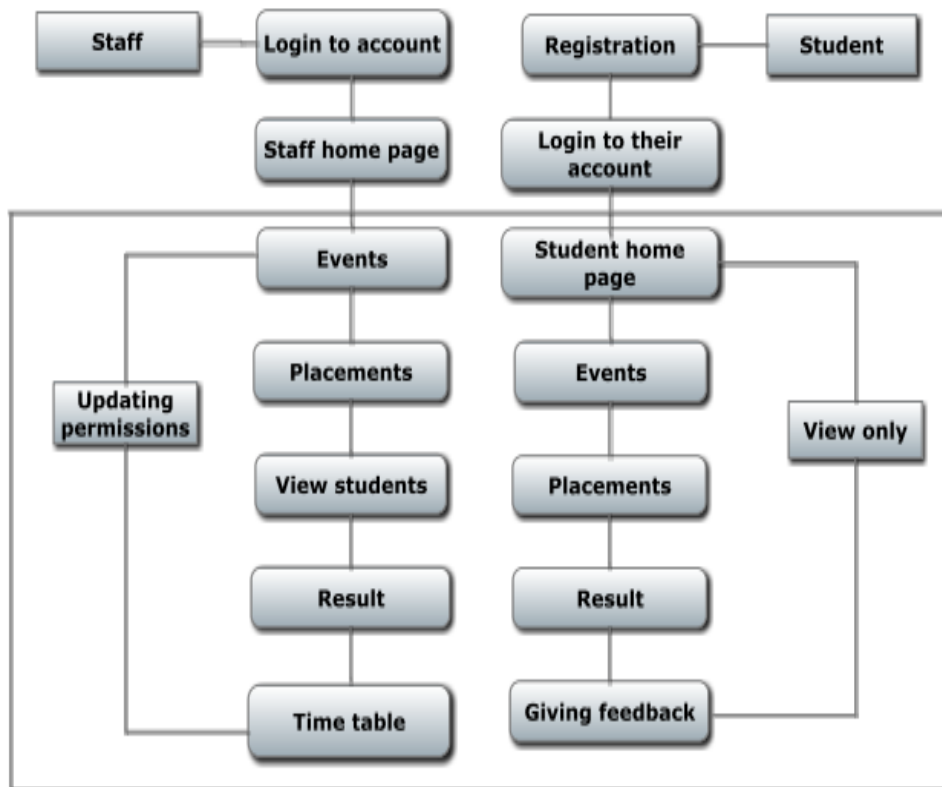


Fig 3.1 Flow Diagram of Existing Method

IV. PROPOSED SYSTEM

There is lots of information required in the education institution but we are concentrating on Student Information System (SIS) using Android, as it is very essential in day to day life in academic. The main purpose of the student management system is to provide student information, like, Student results, Timetable, Exam details, Event details, Placement. In our proposed system there are two phases, Admin and Student. The admin (staff) who has authentication for editing and modifying the details like exam details, event and placement, etc.,. In student phase, they are only eligible for login, register the subjects and also they can view all the details posted by admin. The proposed system is easy to use, it keeps all records, needs less memory space, no need for looking college notice board, create the awareness of permissions to the user.

4.1 ADVANTAGES

- Keep student data updated.
- Efficient allocation of resources.
- Ensure timeline management.
- Easy updating of information.

5. MODULES

5.1 Staff Module

5.2 Student Module

5.1 STAFF MODULE

Academic plans and structures are added by the administrator. Various course details and its structures are planned and intimated to the concerned department HODs. Entire student and faculty information are gathered and maintained for better efficiency of the system. Attendance information are managed for both faculties and students, which provides easy access. Lab events and its requirements are processed by the administrator, which enriches the organization effectiveness. Various events and campus information are notified to all by the administrator. From which eligible candidates of various departments can participate and attain their excellency. Notification related to the institutional functionalities are provided to the staff, students and as well as to the parents in the system. Queries of staffs, students are processed and necessary actions are taken by the superior.

5.2 STUDENT MODULE

After login student can view and gather the shared materials that has been provided by the administrator, which enables to enhance their course structures and subject information. Events that has been organized by the admin and its details are provided to the students to participate or organize or to attend the events that are too conducted in the institution. The fee structures are notified by the admin as well as the HODs to the students. The intimation will be provided earlier to every students in the institution. Prior exam schedules and exam events are notified to the students which provides complete knowledge in a single click. Campus details and the requirements for campus interview are noted and intimated to the eligible students. With those information students can attend the campus events that are organized by the institution. Various queries are processed and needed requirements are provided in a timely manner.

6. SYSTEM REQUIREMENTS

6.1 HARDWARE REQUIREMENTS

- System: Pentium Dual Core.
- Hard Disk: 120 GB.
- Monitor : 15 LED
- Input Devices : Keyboard, Mouse
- Ram : 1 GB

6.2 SOFTWARE REQUIREMENTS

- Operating system: Windows 7.
- Coding Language: Java,xml
- Software : Android Studio
- Database : SQLite

4.4 Architecture Diagram

The architecture diagram is representing how the student database using is works and what are the steps are involved it and functions are explained. The architecture diagram is representing how the student information how to get in android app is works and what are the steps are involved it and functions are explained

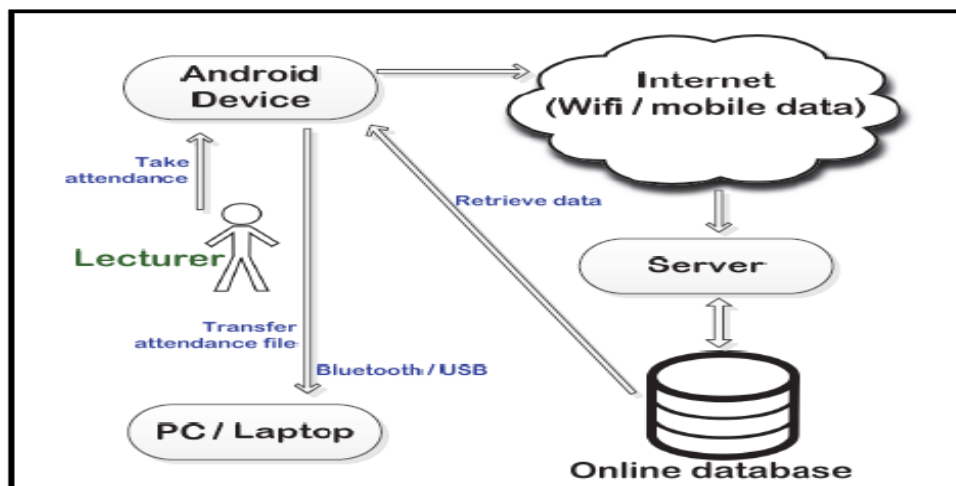


Fig 4.2 Architecture diagram

V.KEY RESULTS

5.1 Admin Home

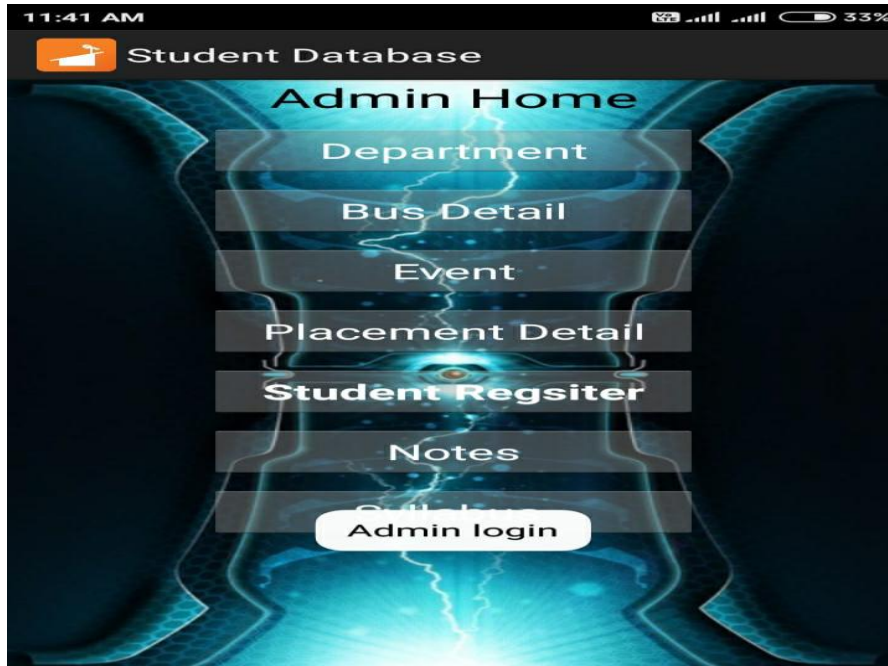


Fig 5.1 Admin Home

5.2 Search Student

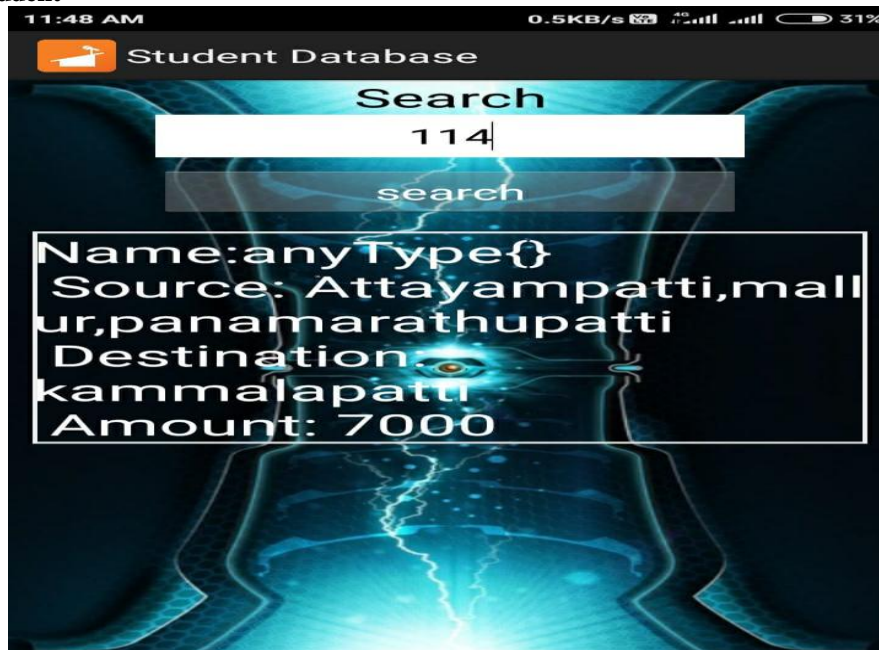


Fig 5.2 Search Student

5.3 Add Event Details



Fig 5.3 Add Event Details

5.4 Add Department Details

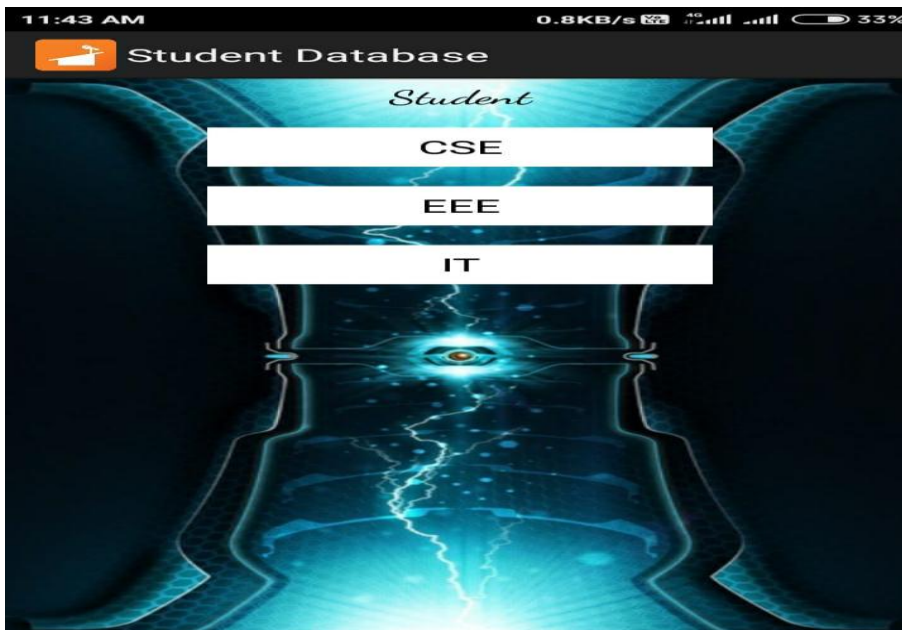


Fig 5.4 Add Department Details

5.5 Student Register

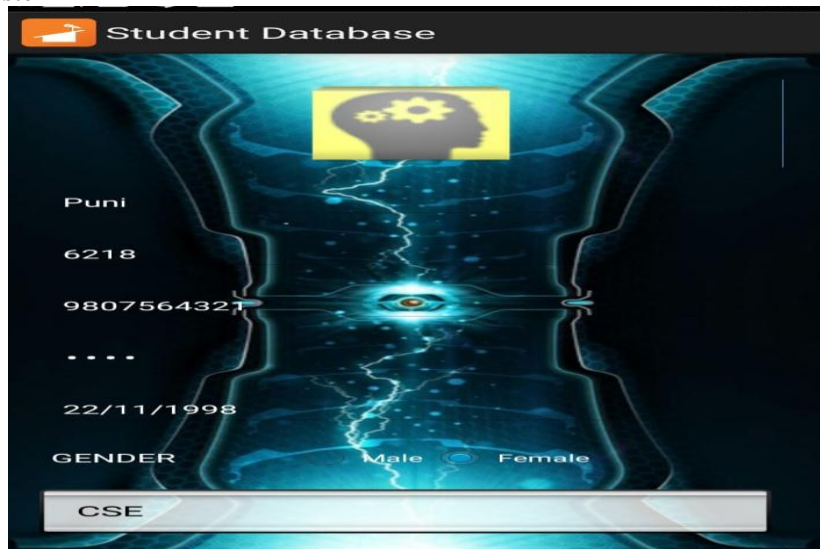


Fig 5.5 Student Register

5.6 Student Login

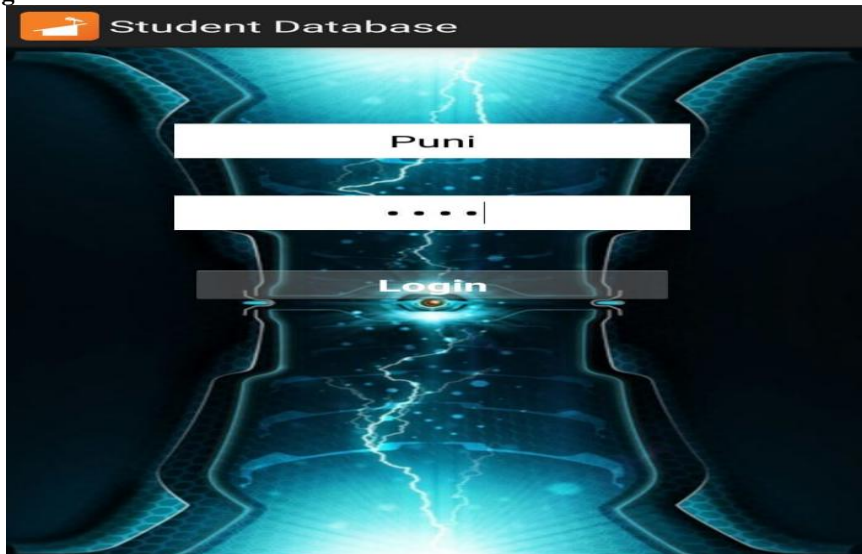


Fig 5.6 Student Login

5.7 Notes

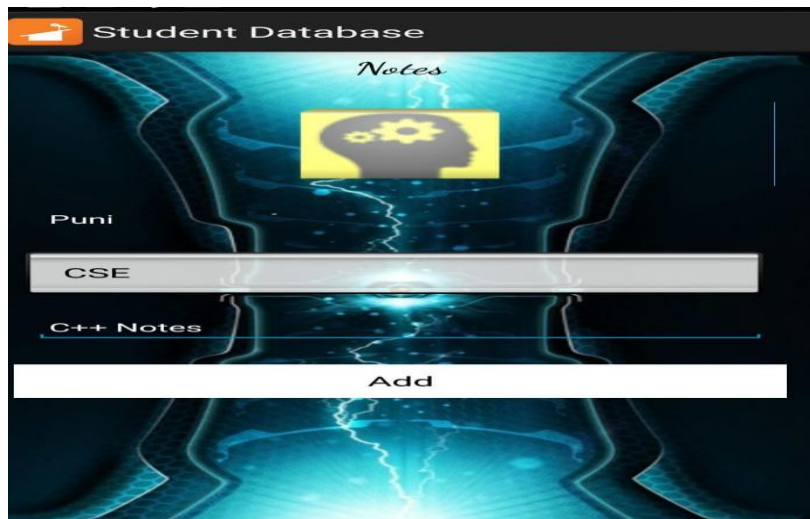


Fig 5.7 Notes

VI. FUTURE ENHANCEMENT

A mobile application for the College Management System based on Android using Firebase Database has been presented. A user-friendly application for students in colleges and universities to address their challenges. This application has been tested on Android handsets running version 5 and above. The application is reliable, saves time, and is simple to use. This app allows students and their parents to check their grades, attendance, and curricular information, as well as submit feedback and pay fees. Information and notifications are also available to students at any time and from any location. It offers high protection as well as a system that reduces the time and resources required for traditional processes.

VII. CONCLUSION

As the work goes manually in all the colleges this application is developed to assure the information about a specified student. The design and implementation of the mobile applications named **SMART PHONE BASED STUDENT INFORMATION SYSTEM** leads to make a system very efficient as well as reliable.

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