

**College ERP System Based on Android Application**Wagh Pratik E¹, Mande Abhishek S², Hande Abhishek D³, Thorat Rutik⁴

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Abstract — Our objective of this project is to add mobility and flexibility to the process of managing student information in an institute. This system is an android constructed application that can be retrieved throughout the institution or a identified department. This system can be preferred for monitoring attendance for the colleges. Students as well as staffs login may also access or can search any of the information concerning college. Attendance of the students along with their marks will be updated by staff. This system is being developed for an institute to maintain and ease easy access information. For this the users must be enumerated with the system after which they can access as well as modify data as per the authorizations given to them. It is an android constructed application that aims providing information to all the levels of management within an organization. A way of announcing unpredictability in Android is to use the Secure Random class. This system can be used as a knowledge/information management system for the college. For a student/staff(technical/Non-technical) can access the system to either upload or download some information from the database.

Keywords- Mobility, Android, Secure Random, Database, Attendance, Unpredictability.

I. INTRODUCTION

Since few decades, attendance monitoring and other similar college functions has been most important activities of any school, college to keep records. This record helps the organization in generating their month-end progress report etc. Such system may be manual or automated. In this project, an endeavor has been made to develop and deploy College ERP system application on Android mobile phones. The aim of this project is to create an android mobile application for ERP system that will integrate various the college register activities in a single system with a common database that can be used by teachers and other staff members of educational College. In other hand the rapid development in operating system of the mobile phones gives rise to the application development on large scale. The main reason behind the remarkable development in the android application development is that android is an open source operating system. As well as software development kit provides tools to build and run android applications. This paper will be describing the basic idea of the project College ERP system on android, its advantages, disadvantages, and applications.

II. EXISTING SYSTEM

The methods which we are using now a day have some drawbacks which should be enhanced for better enactment. The visions of each and every student are not conveyed through these methods. As the technology is developing day by day we need to keep ourselves up to date so that we can get an efficient result in ample time. For example attendance management in the existing organization is done on paper sheets. The whole session attendance is stored in either register or record books and at the term end reports are generated. We are not able to spawn report in the middle of the session or as per the requirement because it takes more time in scheming. It is a very time intense process. In the present system the results are viewed on the notice board in the form of paper sheets which requires lot of paperwork and is time consuming. Moreover, there is no system still existing through which students can take a look at their own progress and analyze themselves. Even college cannot provide vital notifications to students in case of emergency.

III. PROPOSED SYSTEM

The system architecture will be having an android smartphone, a web services, a database server and the user as its components. The android smart phones or tablets must use 4G or Wi-Fi network for internet connectivity to ensure better performance however 3G should also satisfy user request with additional hindrance of time lag. The user must login to the application through an android smart phone. The user-type is approved with the database server and access is given to the appropriate user as per their privileges. The web application also can be used to login and perform certain operations such as registration of users, generation of reports. The web application and the android application access data from a common Database server

through the internet. The “College ERP System” is based on managing the records of a College and managing the records of all the students. The first activity is based on entering the students as soon as their admission is done. A unique register number is given to that particular for his identification. The system also maintains attendance details of a particular student. At the end of each month, the number of classes attended by each student is displayed. The system also manages in storing students marks separately for each semester. The student can ask about any of his marks or attendance report for verification. At the end of each semester, the results are displayed by calculating his/her semester marks and also including his/her internal marks. It also manages the awards gained by each student. Notes and timetable is the most important part of the College especially to students. In this system notes will be available to each and every student which will be helpful in every aspect ex. Model answer papers, Also timetable will provide the schedule, important dates, events, annual academic calendar.

IV. SYSTEM ARCHITECTURE

- (a) **User Module:** In this section authentication process will take place for users by providing user name and password. If user name and password is legal then they will be taken to their standing screens. When they get matched with each other, system will check their status and allocate the control to respective user-interface.
- (b) **Notification Module:** This section will allow the Head of Department to update students about any important notices, events, academic related information through notifications. The students will be able to view notifications provided by the interface provided by application. HOD can send message to those who are users of the provided application such as all students, all faculties, specific faculty or to all.
- (c) **News and Event Services:** The news service is for all students as well as staffs. As soon as news about the university/college is released on the university/college website, a notification will be delivered to all the students and respective staffs.
- (d) **Assignment and Notes Module:** This section is for both the staff and students; however both have different usage of the feature. Students can view the following information which is critical about the Assignment and Notes; the number of assignments given, upon the analysis using this data, the system will inform the students if they have got the new assignments and notes uploaded by the faculties. Staff can upload the notes helpful for students and the new assignments using the mobile devices.
- (e) **Model Answer Papers:** This section is for students where they can easily refer model answer papers provided by respective staff for better understanding.
- (f) **Performance:** This section includes throughout semester performance of each and every individual student such as attendance, submissions, class tests, etc. uploaded by respective staff for students to analyze themselves to keep track on their academics.

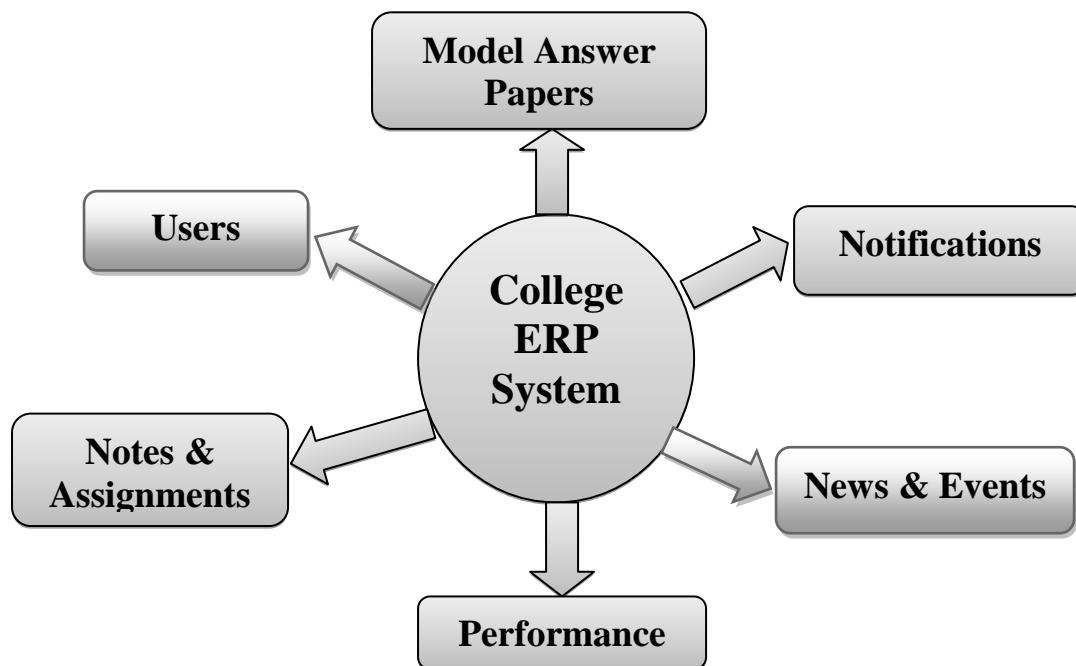


Figure 1. System Architecture

V. ADVANTAGES

- Mobility and flexibility is added to the method of managing student information in an institute.
- The application will prominently make things easier and speed up the result preparation and management process.
- Multiple algorithms working together to produce best results.
- The system is easy to organize, safe with convenient operations.
- Access to sanctioned personnel only.

VI. DISADVANTAGES

- Designing the framework architecture of the system can be perplexing part to make framework dynamic.
- The service servers can have their own technology to make it really secured.

V. CONCLUSION & FUTURE SCOPE

“College ERP System” software developed for an Institute has been aimed to achieve supreme productivity and reduce the time taken to handle the storing activity. It is designed to replace an standing handbook record system thereby sinking time taken for scheming and for storing data. The system uses Asp .Net as front end and Microsoft SQL as a backend for the database.

This system is going to bring a more user welcoming and a heightened system which shall meet out all the needs of the staff members involved in the organization. But hereby encouraging that there may be additional updates on this application and unique enlargements are to be made to it in the days to come countering on the needs of the staff members and the students.

The system is resilient enough to endure deteriorating daily maneuvers under situations where the database is upheld and cleared over a assured time of span. The execution of the system in the organization will significantly reduce data entry, time and also provide readily calculated reports.

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