Android Based ERP System

Rahul Khambankar¹, Mangesh Dani², Praneeta Chimurkar³, Gayatri Borkute⁴, Prof. H.V. Gorewar⁵
¹, ², ³, ⁴, ⁵ Department of Information Technology, Karmaveer Dadasaheb Kannamwar College of Engineering, Nagpur, Maharashtra

Abstract: In today’s corporate world, most of companies work on ERP (Enterprise Resource Planning) systems. These systems are based on local area network. Now if the director of the company wishes to access any data or reports at remote location, it is not possible. To overcome this problem a new approach called Android based ERP system is presented here, which would help to maintain the data of ERP at centralized location and can be accessed from anywhere in the world through Android Application. The application will be used by students, teachers and parents. In the previous system, all the information has to view in a hard file, or in website. At the same time while searching any information it is too difficult to access and takes a lot of time to search the particular website. Hence, in order to overcome this problem a smart phone based application using Android can be used to make this process easier, secure and less error prone.

Keywords: Android; ERP system; secure system (key words)

I. INTRODUCTION

The proposed system is an application that is designed to manage and handle the operation of an institution. It is a simple yet powerful integrated platform that connects the various entities of the institution, namely Administration, Staff, Students and other specialized modules. It is a handy application that can be used by the students, staff and the administrator to facilitate communication. The application introduces portability as it is used on a mobile device and can be carried anywhere. Since the application is used on a mobile device with Android OS, it improves connectivity between the students and the staff. It reduces the paperwork that is involved in carrying out confidential works, and it provides sufficient accessing for the students. It is aimed on reducing the workload given to the staff’s. Altogether it is a simple, efficient tool for the staff’s involved in this organization. The system plans for student user interface, allowing students to access tips and tricks as provided by their seniors. Changes in Information Technology (IT) allow institutes to utilize databases and applications such as Student Information System thus, making the accessing of records centralized. One of the changes that came about is web based applications. These applications are an improvisation to the traditional transaction processing systems. All data is stored securely on SQL servers managed by the college Administrator. The system decreases paperwork and time needed to access student records. This software generates reports on the results of research that considered the effect of attendance on student performance; surveyed planning students about attendance issues, shared the results with colleagues including agreement on a Departmental policy change, and assessed the approach academic staff should take towards poor attendance.

II. LITERATURE SURVEY

The development and the design of the student management system based on network and environment are increasing day by day. This paper describe the process of college automation and working system institute. The purpose of this application gives boats to access and manage all the features which are been useful for the authority and students. Basically the application is used to retrieval or update the information for the particular use. This android application can only be used by the privileged person to fetch out the data. The database plays the most important role in dealing with the maintenance of data. ERP system is the most important factor related to the organizations data point of view. Firstly there were ERP systems installed in the organization. These system works on local area network. Maintain the integrity of the application it provides the less load towards environment which will be easy to use. Hence the application is a portable management system. Managing the database the person should be authorized by the college management system. So that the approval of that person is important to fetch the data from the database. By this process the system become safe and secure. Because of this security given to the system the assurance for the better performance increases.

III. EXISTING SYSTEM

Proposed system for college information system is fully an automated one using Wireless Android. In this system, we are using PHP Page for Admin side to maintain the student details. Admin can register the student details and requirements such as attendance, exam details are added into the database. Parents can login to the system as student name and then batch number as password. This a
centralized one, by which the data server updates the each and every detail; furthermore, the coordination between server and client becomes much easier.

When we are talking about the android based college management system there is a smart phone with android OS. The smart phone should be connected to 3G or Wi-Fi network for better performance. The current proposed system favors the staffs of the institution in terms of their works such as updating the attendance of the students, internal marks, exam time table, leave approval and leave apply, any change in the schedule etc.

The system architecture has a smart phone with android OS, a web services, a database server and the user as its components. The android smart phone or tablet must use 3G or Wi-Fi network for internet connectivity to ensure better performance however 2G should also satisfy user request with added disadvantage of time lag. The user will login to the application through an android smart phone.

![Proposed System Diagram](image)

**IV. MODULES**

**A. User Module:**
In this module the authentication of user is done by providing username and password. If the user name and password is invalid, then they were taken to the next level. Administrator is the super user of the database he is highly privileged to work and view the database. Every one of the data that is subjected to modification can be done only by the admin. Administrator can likewise do the transferring of the data from database. Administrator can view the developed records and give the approval.

**B. Student Module**
The student module will be used by the student to view all the result, notifications. If the password is invalid, then they were taken to the next level. Administrator is the super user of the database he is highly privileged to work and view the database. Every one of the data that is subjected to modification can be done only by the admin. Administrator can likewise do the transferring of the data from database. Administrator can view the developed records and give the approval.

Accessing of the personal profile, attendance record, assessment marks, everyday schedule of the class and the remaining events are eventually managed by the admin. Hence, it is apparent that the profile can be viewed and accessed only by the student.

**C. Staff Module:**
The module is design for the staff which will provide various services. The smart phone will be used to take attendance, upload result and upload college notification. As the all-important notification is been uploaded in smart phone the work become easy for student and staff to exchange information.

Staffs are the approved peoples to enter the details of each individual student’s marks and their respective attendance. They can view the academic performance of each student and their attendance and later record them in the database. Staff individuals are liable to literally warn each of the students regarding his/her performance.

Staff can give out the day by day, each month or the annual report of the respective classroom and their students provided the exact information that is recorded can be produce. This Module helps the staff to upload results, view result and check notifications by teachers. Staff can give out the day by day, each month or the annual report of the respective classroom and their students provided
the exact information that is recorded can be produce. This Module helps the staff to upload results, view result and check notifications by teachers.

V. FACILITIES

A. Generates automated reports for attendance.
B. The main application is paper free is ease to handle and maintain.
C. Notification of events can be done.
D. Upload of documents can be done.
E. Access to authorized persons only.
F. Many algorithms work together to give best results.

VI. CONCLUSION

An Android based mobile application for College Management System is presented. The application offers reliability, time savings and easy control. It can be used as a base for creating and enhancing applications for viewing results, tracking attendance for colleges or any workplace. Students and their parents will also view results, attendance and curriculum details using this application. Also students can view details, notifications anywhere and anytime. The application will greatly simplify and speed up the result preparation and management process. It includes advertisement of the college thus satisfying the marketing criteria to showcase its facilities to the HSC and diploma students. It provides high security and a system that reduces the work and resources required in traditional process. The proposed system provides the new way of computing and displaying an operation with responsive and attractive user-interface.

REFERENCES


