

Mobile Web Based Android Application for College Management System

Mangesh Pramod Patil¹, Pallavi Sunil Sonwane², Sahil Anil Ingle³, Aasha Shamsingh Gautam⁴
 Prof. Yogesh B.jadhao⁵, Prof. Manjiri U. Karande⁶

^{1,2,3,4,5}UG students, Department of Computer Science & Engineering, Dr. V.B.K.C.O.E.,Malkapur,Maharashtra, India

^{6,7}Assistant Prof. Department of Computer Science & Engineering, Padm. Dr.V.B.K.C.O.E.Malkapur,Maharashtra, India

Abstract- *The aim of this project is to add motility and autonetics to the process of managing student information in an institute. In a real world, such as college campus, the data is in the form of notice, written manual, verbal message, is being spread among the students. The approach of communication is Android. The core idea of this project is to implement android based Mobile Campus application for advancement of institution and educational system .The application will be used by students, teachers and parents. In the earlier past system, all the data has to view in a hard file, or in website Apps also exchange sensitive information with remote servers. So now a day this platform provides a number of algorithms for encrypting sensitive data or information. Some of these algorithms provide stronger cryptographic guarantees in protecting data than others. Cryptographic algorithm is difficult to break when there is more unpredictability in the random numbers generated for use in encryption.*

Keywords- Android, motility, cryptography, encryption

I. INTRODUCTION

With the advance technology there is a need for faster dissemination of information .The increasing advantages of automated system now are at highest position thus many manual processes are automated. Since the automated system is required now-a-days, various infrastructures like colleges needed their manual system to function on mobile computing systems. Changes in Information Technology (IT) allow institutes to utilize databases and applications such as Student payment 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. . At the same time while searching any data or info it is very 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. More efficient information's will be achieved through this system.

II. PURPOSE

The main objective of this project is to add mobility and automation to the process of managing student information in an institute .The system bridges this gap between the end-users and the contrivance planning managers by providing centralized control over the entire system. Different departments utilize the system for sequencing different processes that are isolated apart.

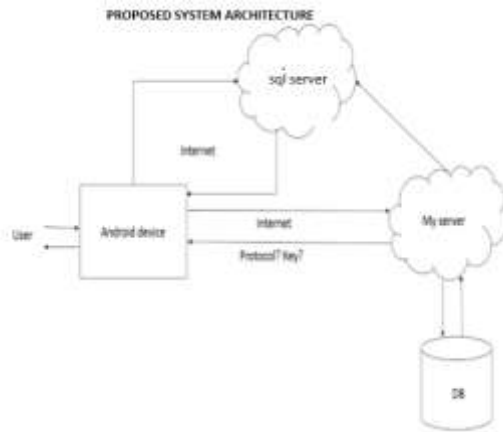
III. SCOPE

The system being designed is economically with respect to the students and teachers point of view .The goal is to extract useful information from an unstructured data using the concept of information retrieval, filtering and secure random algorithms .To develop an enhanced student information management system that can help solve drawbacks of existing ERP system. Our basic approach attempts to develop a smart phone based application using Android which can be used to make this process easier, secure and less error prone. More efficient information will be achieved through this system .To provide access to information related to college ,departments ,uploaded assignments, notes ,news and events, exams , discussion forum and daily time table on the go.

IV. LITERATURE SURVEY

On the basis of a comprehensive investigation and analysis on the student management in higher education, we establish the models of the college students' management information by adopting the notification technology, and construct the student payment platform. This Application includes combination of Web Services and mobile devices will promote the development of mobile applications. This application will help to solve the current problems, while also giving a paperless environment at the same time.

V. SYSTEM ARCHITECTURE



The user will login to the application through an android smart phone. The user-type is verified with the database server and access is given to the appropriate user. 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.

Notification Module:

This module allows the department HOD to update students about any college related information through notifications. The students can view notifications provided by the interface provided by application. HOD can send message to only available options like all student, all faculty, specific faculty and to all.



Feedback Module

This module performs automated calculation of student's feedback of their professors, and then this will be

represent graphically. Student can see only fifteen questions and give feedback by select provided options. This module, stores student feedback into JSON object to provide faster transfer of feedback data to server or client-side.

View notices sent by college

Notices are sent to the students by Head of Department. Useful activities information, college notices, important announcements are received on students registered phone. They can view it anytime

Payment module

This module allows students to make payments of there exam form or collage fees and alumni fees.

Hardware Requirement: 1. Intel Quadcore 1.7 GHZ Processor or above. 2. Minimum 100 GB HD. 3. Minimum 4 GB of RAM. 5. Standard Keyboard and Serial Mouse.

Software Requirement : 1. Android Studio. 2. GCM Server 3. SQL Server (Either on localhost/domain) 4. XAMPP / PHPmyAdmin tool 5. Android SDK (Minimum API 15)

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.

REFERENCES

- [1] S.R.Bharamagoudar, Geeta R.B., S.G.Totad "Web Based Student Information Management System", International Journal of Advanced Research in Computer and Communication Engineering -June 2013, ISSN : 2319-5940.
- [2] Siddhant Gokule, Rohit Jadhav, Mruganayani Mane, Sanchita Chhajed "An Application to Enhance the Admission Process and Communication between Members of an Institute", International Journal on Recent and Innovation Trends in Computing and Communication- ISSN: 2321-8169.
- [3] Suriyani Ariffin, Ramlan Mahmood, "SMS Encryption using 3D-AES Block Cipher on Android Message Application ", International Conference on Advanced

- Computer Science Applications and Technologies May-2013-IEEE 978-1-4799-275.
- [4] Balázs Benyó, Bálint Sódor, Tibor Doktor and Gergely Fordos "Student attendance monitoring at the university using NFC" IEEE on computer technology-June 2010.
- [5] Martin Hellebrandt and Rudolf Mathar "Location Tracking of Mobiles in Cellular Radio Networks", IEEE TRANSACTIONS ON VEHICULAR TECHNOLOGY, SEPTEMBER 1999.
- [6] Sandeep Kumar, Mohammed Abdul Qadeer, Archana Gupta, "Location Based Services using Android", IEEE-2009.
- [7] Penghui Li, Yan Chen, Taoying Li, Renyuan Wang, Junxiong Sun "Implementation of Cloud Messaging System Based on GCM Service", IEEE-2013.
- [8] Zhi-gang YUE, You-wei JIN, "The development and design of the student management system based on the network environment", International Conference on Multimedia Communications, 978-0-7695-4136-5/10 2010 IEEE.
- [9] Siti Aisah Mohd Noor, Norliza Zaini, Mohd Fuad Abdul Latip, Nabilah Hamzah, "Android-based Attendance Management System", IEEE Conference on Systems, Process and Control (ICSPC 2015), 18 - 20 December 2015, Bandar Sunway, Malaysia.
- [10] JinMei-shan, QiuChang-li, LiJing, "The Designment of Student Information Management System Based on B/S Architecture", IEEE Computer Society, 978-1-4799-3134-7/14/ 2014 IEEE.
- [11] Yang Shulin, Hu Jieping, "Research and Implementation of Web Services in Android Network Communication Framework Volley", IEEE Computer Society, 978-1-4799-3134-7/14/ 2014 IEEE.
- [12] Suriyani Ariffin, Ramlan Mahmud, Ratini Rahmat, Nuzul Annisa Idris, "SMS Encryption using 3D-AES Block Cipher on Android Message Application", International Conference on Advanced Computer Science Applications and Technologies 978-1-4799-2758-6/13 2013 IEEE.