

A Mobile Based College Application for Managing Records Based On Random Secure Procedure

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Abstract— In our day to day life, we come across many schools and colleges that mainly depend on paper work for storing the details of both students and faculty. The main aim of the project is to create an android application that holds the details and information about the staff present of their respective department. This project acts as a platform that creates a healthy relationship between the staff and students. This android application acts as an interface for faster and easier way of approach among the students. The Department Staff Management System is an android application which would be helpful for students as well as the technical and non-technical college management. This application contains the staff, the subjects they teach, their daily schedule and leisure time .Encryption and Decryption algorithms are difficult to crack when there is more unpredictability in android. This paper discusses the development of a computer-based system using android application along with the database designed on Random Secure procedure using MySQL. It will also accelerate the most time consuming aspects of the organisation which is processing and maintaining accurate staff information, secure and provide ways to access the staff record

Keywords— *Android; Encryption; Secure Random; Mobility.*

I. INTRODUCTION

The title of the project is “A Mobile Based College Application for Managing Records based on Random Secure Procedure”. This can be defined as a solution based on all the problems that aim to all the levels of management providing information within an organization. This project can be helpful as an information management system for an institution.

The public and private organizations generate staff records. Staff records play an imperative role in providing the information needed by

organizations to manage their staff members, plan their workforce requirements and monitor staff performance. Ultimately, any organization’s development and sustainability will effective human resource management, and the approaches it chooses to follow will be derived in part from an analysis of the information contained in staff records. The goal of staff records management is to ensure that a complete and comprehensive employment history of each employee is readily available for as long as it is needed, and that the information contained in staff records supports the management, deployment, and development of staff.

A. Purpose

Due to the rapid development of technology most of the youth have been addicted to many social networking sites, for which many students have been far from studies with or without their knowledge. The main objective of this project is to get students more interested in academics and self-management skills. This helps the students to view their academic information along with their personal information with no or very less wastage of time of the student. With no or very less wastage of time of the student. Academic information along with their personal information with no or very less wastage of time of the student.

B. Scope

The access and utilization of technology varies from person to person .The scope of the project lies on the proper utilization of the resources for the enrichment of the student throughout his college life style.The main requirement for the user is to search and access the information of the faculty as well as college administration . The utilization of the system helps the student to view all the features of the system environment system..

II. LITERATURE SURVEY

A. A mobile social App for College Students Based on Perceived Similarity and Trust

Authors: Liu Jianglong, Xiong Ming

This paper discusses the method of the management information in higher education. 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 advanced information technology, and construct the student management information platform. Moreover, this paper analyzes the characteristics of the information management in higher education, and elaborates the methods to solve the difficulties confronting in the students management of the higher education. Finally, the key method and technology to carry out the information management platform are presented.

B. Mobile Web based Android Application for College Management System

Authors: A.J.Kadam, Aaradhana Singh, Komal Jagtap, Srujana Tanakala

This paper presents a new way of marking attendance of the students by using an application that runs on the Android base. This application, once installed can be used to download the students list from a designated web server. based on the downloaded list of students, the device will then act like a scanner to scan each of the student cards one by one to confirm and verify the students presence. The devices camera will be used as a sensor that will read the barcode printed on the students cards. The updated attendance list is then uploaded to an online database and can also be saved as a file to be transferred to a PC later on. This system will help to eliminate the current problems, while also promoting a paperless environment at the same time. Since this application can be deployed on lecturers own existing Android devices, no additional hardware cost is required.

C. Developing an Android Application for college management system Authors: D.Vimala, S.Manikandan, A.Sindhu.

This paper uses the B/S structure to design the student information management system, and explains the system design principle, system plan and structure, the function module of information system according to current university student information management needs. It provides an interactive students management platform for the information of a large number of students and the management of students.

D. Android Application for College Website

Authors: S.Sangeetha, G.Kirubhakar.

This paper includes combination of Web Services and mobile devices will promote the development of mobile applications. Volley framework Google 2013 proposed has the advantages of convenient use and network request faster, but it does not support Web Services. Extension of Volley, to support the Web Services, which can facilitate the Web Services application development, but also can improve the access performance of Web Services.

The scheme uses JSON format to transfer data, support SSL/TLS protocol requests, custom parameter, sets or gets the request header. This scheme is good compatibility, easy to use, suitable for application on Android platform.

E. Android College Management System

Authors: Vishwakarma R Ganesh

This paper presents an Android based mobile application for Information Management System in an organisation. The application offers reliability, time savings and easy control. It can be used as a platform to view the results, take care of the attendance of students and the curriculum details. The application helps the students to keep track of their details at any place and time.

It includes advertisement of the college thus satisfying the marketing criteria to showcase its facilities to the students. This system offers not only security but also reduces the work that has to be done by paper work. This system provides a better way of operating with a responsive and attractive user-interface which would be easy for user to use.

Table: 2.1. LITERATURE SURVEY SUMMARY

SNO.	TITLE OF THE PAPER	YEAR OF PUBLICATION	DESCRIPTION	DRAWBACKS
1.	Mobile Web Based Android Application For College Management System	February 2017	Helps To Digitalize The System And Help To Deploy Resources	Downright Waste Of Time In Generating Reports

			Efficiently	
2.	A Mobile Social App For College Students Based On Perceived Similarity And Trust	July 2016	Both Online And Offline Accessing	Trust Is Not Well Used In Some Of Campus Mobile Social Apps
3.	Developing An Android Application For College Management System	June 2016	On Time Circulars Have Been Distributed To Students	Designing The Frame Work For System Is Challenging
4.	Online College Management System	April 2016	Monitoring The Actions Of The Users Date And Remarks	The Service Servers Can Have Their Own Technology To Make It Really Secure
5.	Android College Management System	April 2016	Notification Regarding Admin Office Will Be Send	System Need To Be Handle By Specialist For Maintaining Secured Data
6.	Android Application For College Website	March 2016	Friendly Interface, Easy To Operate	Lack Of Security Because No Login Is Provided
7.	A Research Paper On College Management System	July 2015	Deals With Issues And Problems Faced By A College In Day To Day Life	A Deep Knowledge And Complicated Work On DBMS Is Required
8.	The Development Of Computer Based Staff Management System	November 2013	Providing A Dependable Report Of Staff Profile	Designing The Frame Work Architecture For System Is Challenging

III. Analysis of management system

In the previous system all the information has to be viewed in a hard file or in a website. At the same time, while searching any information it is too difficult to access and takes a lot of time to search a particular task. Hence in order to overcome this problem, a smart phone based application using android can be used to make the process easier.

A. Solution

To overcome the problem of student interaction with staff personally, we have proposed this system where the student gets a chance to express their problem or query with the respective staff.

The central objective of this project is to provide an android app that helps the student about the leisure period of staff. Through this we will try

our best to satisfy the students and make them stress free in their carrier.

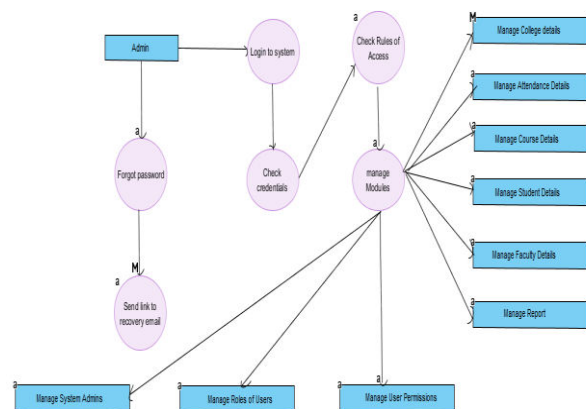


Fig.3.1 Layout of Module Management in the Application

Initially, the user has to logon to the application, using his user id and password. If the entered details are correct, he will be redirected to the main page where there will be a list of faculty from their respective department. This service is for both staff and students, however both have different usage of this feature. Students - will be able to view the following information which is critical about assignment and notes.

Students can edit their profile and update them constantly. Students can very flexibly search for the respective staff and view college schedule and details and also interact with the teacher via messaging. If possible, they can also send their feedback to the higher officials. The student messenger application is mainly designed for the students to know the updates of the events that are going to be held in the particular organization. So, the student need not search their staff members in the surrounding places when they need assist from them. Due to this, student can easily check or know status of their staff members and reduces time consumed by the student for searching and also reduces the physical work

IV. Expected Outcome

This system will help to simplify and boost up the process of managing the records. It includes advertisement of the college thus satisfying the marketing criteria to showcase its facilities. As the system is being developed on Android OS, it would be very comfortable and friendly for user to use as there would be no web related issues and problems.

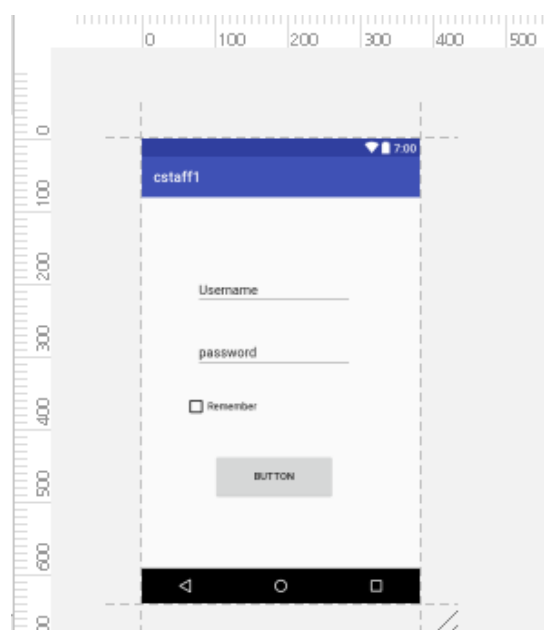


Fig.4.1 Login Page

In this page, the user need to enter the login credentials i.e., their username and password. If the entered details are correct, then he will be redirected to the next page.

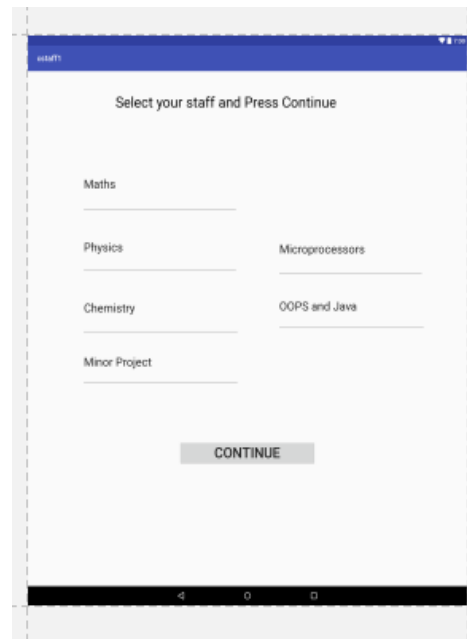


Fig.4.2 Staff Selection Page

In this page, the student is allowed to select his staff providing necessary details like the subject the staff handles and the subject the student wants to clarify.

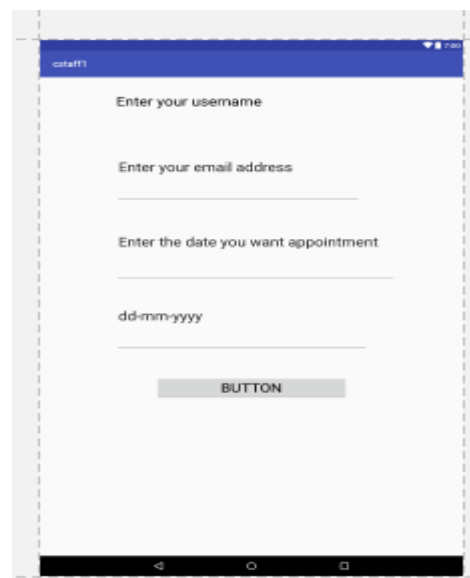


Fig 4.4 Appointment Page for Students

This page provides the student to make an appointment with the staff he needs to meet. This page is further developed to be given reply by the staff to the particular request given by the student.

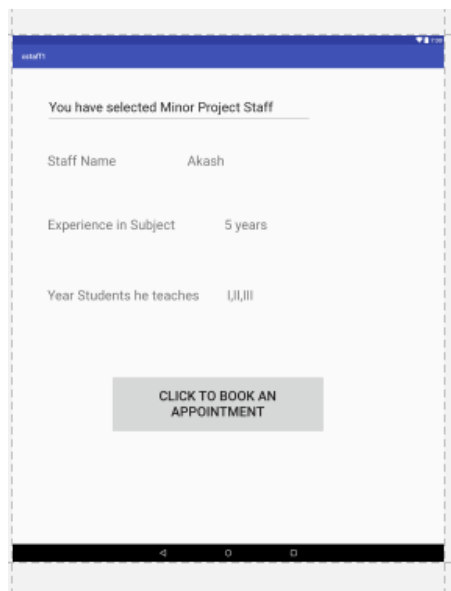


Fig.4.3. Subject Staff Details

In this page, the student would be able to see the details of the professor or the faculty which he chose in the previous page.

a. REQUIREMENTS:

Android Studio is an android application development software that by default consists of all the languages that are essential for developing an application. The major languages that are required for the development are HTML, MySQL and CSS for database creation. For the application to run, the user must have a smartphone with API more than 25. A software development kit is required in order to create an emulator or a virtual device.

V. Conclusion

Android application for College through mobile devices is a very effective tool which can be used to a great extent. This application is portable and can be easily installed and used on any mobile phone supporting android OS. The use of this application in a mobile can result in reduction of number of hours spent than in PC. This project is designed keeping in view of the day to day problems faced by an institution.

Thus this project mainly focuses on the development of an application in an organisation environment that supports details, profiles and services in that particular organisation. It reduces the man power and updates the information from time to time and immediately if required. It allows students to check their respective faculty and clarify their doubts also. This system can be further enhanced to

become a more powerful and sophisticated system. There are still many aspects and areas for improvement and enhancement for system can be made in the future to meet changing needs of the students.

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