



My College Mobile App

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Abstract:

This project mainly focus on the Android Application based on our daily college work. Now a days android phone users are very much. This app is applicable for college faculty as well as student. "Mobile App" is very familiar term in world today. Everyone is using android phone. Everything is become digitalized so this app is very helpful for college work.

The purpose of this project is to make work of college easier for faculty and also student. Everyone in the college can use this application in their android phone. Faculty can take a attendance of student and they can update it. Also all timetable of college schedule can update it and it can be available for student. All the notification regarding college student and faculty can be upload in notification box and also it can be update regularly. Student can use this application for purchasing their documents and important notice. Also they can see their attendance and college fees remaining. College can upload their photo gallery regarding college events. Also student can download their university question paper of their branch. In this way this application is very applicable for to make college work easier.

I. INTRODUCTION

Now days all works is becoming a digitalized. Market of android is changing rapidly. Every Person preferring android phones. The android Mobile phone industry has been developing & growing rapidly during the last couple of years. A mobile application is a software application design to run on smartphone. Mobile app is familiar term for us. The popularity and uses of mobile applications are increasing day by day. There are varies application app available in market for many work application. From small scale industries to big industries every person are preferring this application. So knowing the importance of android application users we have designed a mobile application by keeping in mind the college work of faculty and student. It will very useful for them. This application can minimize work load of the college faculty as well as student.

The mobile phone industry has been developing and growing rapidly during the last few years. A mobile applications (mobile app) is software application designed to run on smartphones, tablet computers and mobile devices. The final part of development process which focuses on deploying the application on mobile devices after it has successfully been tested on virtual devices.

II. SURVEY OF DIFFERENT ATTENDANCE SYSTEMS

Following traditional systems are used to mark attendance in the teaching process.

A. Manual attendance system

It is the conventional method of taking attendance by calling names or signing on paper but it is inefficient due to more chances of malfunctioning and more paper work as well.

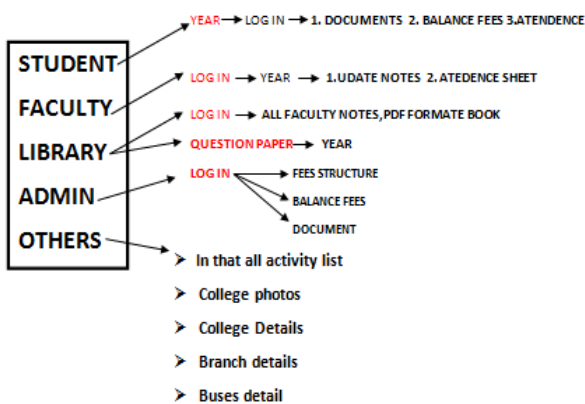
B. RFID with Object Counter

Radio Frequency Identification (RFID) based attendance system is one of the solutions to address this problem, but that is time consuming and unsafe. Anyone can carry others card to mark proxy attendance.

C. Bluetooth Based Attendance System

In this, attendance is being taken using instructor's mobile phone. Application software is installed in instructor's mobile telephone, enables it to query student's mobile via Bluetooth. It transfers student's mobile Media Access Control (MAC) addresses to the instructor's mobile phone and presence of the student can be confirmed. The problem of this proposed system is student's phone is required for attendance. In case of absent student if his mobile is given to his friend and if kept it in coverage area then also his presence would be marked. All the above systems are time consuming and unsafe. In the proposed project Android based attendance system is designed which is less time consuming, safe and easy to implement.

III. BLOCK DIAGRAM OF IMPLEMENTATION



With shown in Figure teacher can take attendance of student with own mobile and upload that record on web server. On the server side, percentage attendance will be automatically calculated and report will be generated accordingly. In the notification module, notification will be shown to students. In

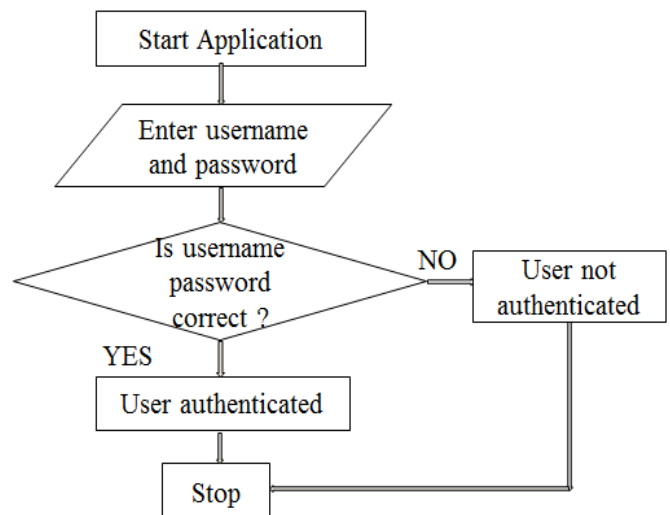
E-learning module notes, time tables can also be broadcast to the student.

IV. SYSTEM DESIGN

The entire system consists of

A. Authentication module

The purpose of Authentication module shown in Figure is to provide security. It is the entry module of application. Each user enters his/her username and password to enter into application. If username and password is matched, application gets started.



B. Student attendance module

This module is specially designed for faculty. After the lecture is done, staff can upload student attendance record in the database created on server. The overall attendance is calculated automatically and message will be sent to the parents whose ward has less than 75% attendance.

C. Database module

The learning material to be shared is stored on server. By means of internet it will be broadcasted to all the registered students.

D. Notification module

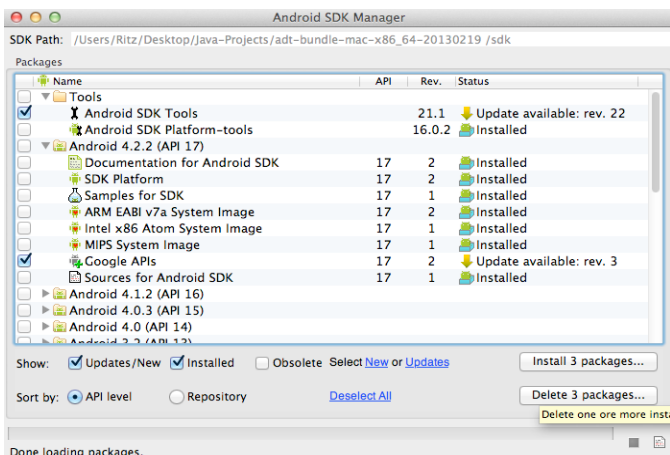
Notification will be sent to students. If student notification option is selected bulk SMS will be sent to group of students which belongs to that particular class. With this module examination reminder, student progress, less attendance intimation and any important notice can be sent. This module can be useful for teachers as well as students.

V. SOFTWARE SETUP

- Setting up environment on own machine. This phase involves installation of Java JDK, JRE, Android SDK, and Eclipse.
- Creation of GUI / Main Forms/ Sub Forms and create activities linked with each other
- Create error logs module which keeps track of non authenticated transactions such as enter wrong password, server network up-downs. Keeps record of network connectivity.
- Service Call logs module which keeps track of all user activities like log in time, logout time, upload and download time, File size.
- Design Web APIs for communication between server and Android smartphone.

ANDROID SYSTEM DEVELOPMENT KIT (SDK)

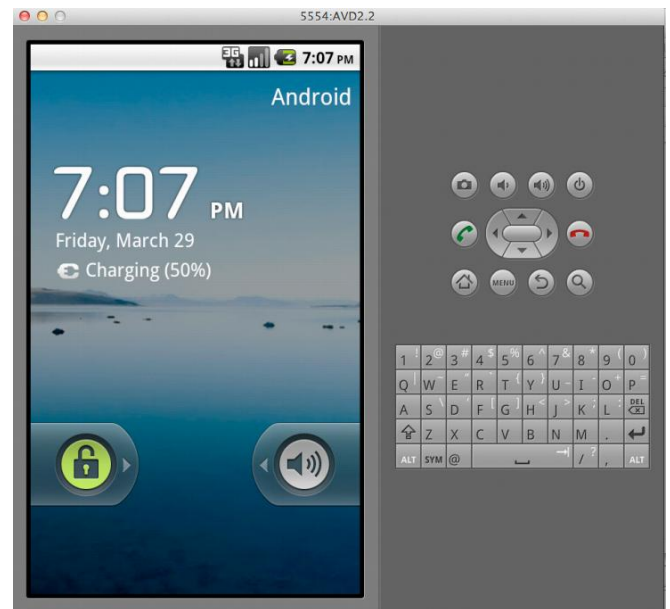
The Android SDK provides all the API libraries and developer tools necessary to build, test, and debug apps for Android. [Get the Android SDK]. The ADT bundle has an IDE already loaded with SDK. By default, only the latest version of Android, API 17, is installed and as the development continues, other versions of Android have to be installed in order to support a wide range of Android mobile devices. Not all of the Android devices use the latest version of Android, so it is important for an app developer to set the API range of an app because some of the class and libraries are depreciated from a certain API level onwards.



ANDROID EMULATOR

An Android emulator is a virtual Android device running on the computer. The Android emulator mimics all of the hardware and software features of a typical mobile device, except that it cannot place actual phone calls. The emulator allows an application developer to test an Android application on different API levels without using a physical device [Using the emulator]. An Android Virtual Device (AVD) is a device configuration that is run within the Android emulator. It works with the emulator to provide a virtual device-specific environment in which to install and run Android apps. The

AVD Manager provides a graphical user interface in which a developer can model different configurations of Android devices, which are required by the Android emulator.



Android Emulator

VI. HARDWARE REQUIREMENTS

- Personal desktop/Laptop -Central server with processing engine.
- The minimum memory size required is 1GB.
- Smartphone-Offers more advanced computing ability and connectivity.

VII. APPLICATION

- a. This app access from anywhere
- b. Also this app is run in android phone
- c. Easy to portable
- d. Easy to upgrade
- e. Reduces the time of working

VIII. CONCLUSION AND FUTURE SCOPE

By this system students can learn anywhere anytime as per their own convenience. Timely updates of student can be sent to students their attendance marking and report generation easy. Less chances of malfunctioning. In future this system can be implemented to automate most of the educational systems and it can be designed for cross platform.

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