



Mobile Application for the Management System for PSVCET by Using Android Application

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ABSTRACT

Nowadays, Android is the newest mobile device Operating System (OS), which is the more popular in mobile device field than any other mobile OS such as iPhone OS, Windows mobile OS and so on. This has been designed to the best first step toward the exciting new open-source mobile development. In this project, the user will understand about the creation of college information system software such as the java programming coding, google database management and android studio after learning of this application programming coding. This app will be absolutely useful for students, admin and teachers in educational fields because it is included the college information that show in detail. The main aim of this project manages the activity of automatic students' details, fees details, leave and percentage. Administrator identifies the student details, staff details. Initially, a student can need to register with the application by submitting details, and required details of student and staff to submit through online. Administrator has the power to verify the data entered by the student, staff and fees details at the same time the student can view their percent of attendance by uploading. An authorized user can access detailed information from the site excluding or accessing general information in shared, public pages. Easily, a staff can upload fees details, fees details number leaves taken by student, percentage of each student and place details in department website. Attendance and leave status for both students and faculties are also maintained efficiently.

Keywords: Android application, Student details, Staff details, Android studio, Java application.

1. Introduction

Student management Systems provides a complete On-Line solution for college administration. Dynamic and highly motivated, with a liberal & modern outlook on education and organization and a contemporary vision and working style, Educational Management are trying to Incorporate modern concepts, amenities & system to create a forward and vibrant institute, comparable with best & most modern in country. Educational Management is able to manage student information and educational statistics. It is a comprehensive system that addresses all functional requirements that can be implementing in operator of admin management. Below modules, which scope the entire operational requirement of any Student Faculty Document Sharing System. The design and implementation of the system is to provide service in colleges. The system is to provide comprehensive student and staff information system and user interface is to replace the current records. All data is thoroughly reviewed and validated on the server before actual record alteration occurs.

Objectives:

- This module is designed for staff which use mobile phones to upload student details and college notifications.
- The system decreases paper work and time needed to access student and staff records.

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2. Literature survey

[1] Kadam, A. J., Aradhana Singh, Komal Jagtap, and Srujana Tankala. Mobile(2020) Web-Based Android Application for College Management System

The computers and mobile devices are affecting our daily routines in endless ways, including personal and professional. The PC/Laptop/Desktop accessed Web Server applications are gently getting out of the way. Although this mobile phone becomes one of the most commonly used gadgets, it either uses it for business purposes or personal. Moreover, these mobile applications are a cost-effective process, e.g., now a day's most of the colleges and institutions share their college magazines and journals on apps, which help in saving the cost of printing.

[2] Nethaji, T. S., and Suganthalakshmi R., (2021), "Multi Utility Mobile Application." Pacifier.

There are various existing applications for the management of campus activities. Every application has its characteristics, disadvantages, and advantages. These applications (apps) made by taking into consideration the needs of a particular institute. These apps provide a single purpose only, and we necessitate different apps for diverse institutional activities. Android Based Campus Solutions help in the accomplishment of almost all institutional activities using mobile phones.

[3] Xhafa, Fatos, Santi Caballé, Isaac Rustarazo, and Leonard Barolli. Implementing a mobile campus Using MLE Moodle. In 2018.

Presented the various approaches, guidelines, and standards followed while developing an application also listed in the "Mobile application development – a practical approach described and analyzed the learning methods using mobile phones from both learning and technological perspectives.

[4] Kadam, A. J., Aradhana Singh, Komal Jagtap" Web-Based Android Application for College Management System", 2020.

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3. Architecture

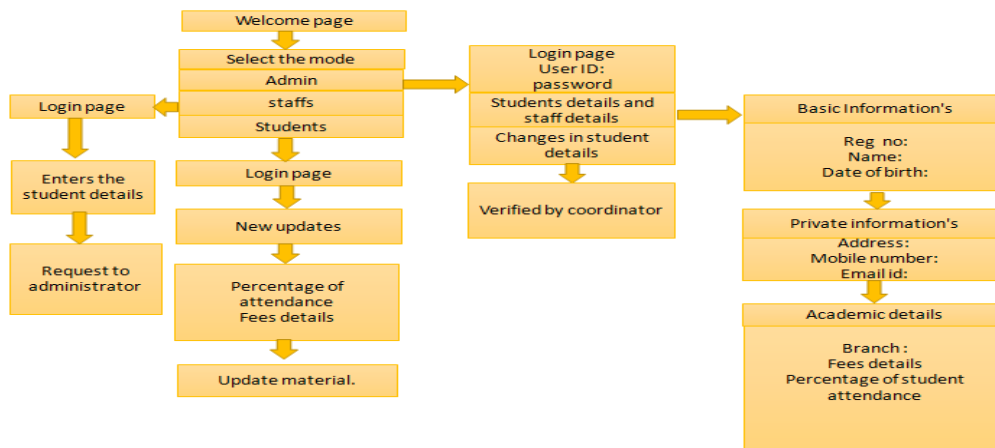


Fig. 1 – Workflow diagram

4. Modules

There are five modules following

- Welcome module
- Admin module
- Staff module
- Student module
- Output module

5. Existing system

- In this existing, we are using page for Admin side to maintain the student details.
- This a centralized one, by which the data updates the each and every detail; the coordination between admin and staff becomes much easier.
- In the existing android app is developed between admin and staff only, which may be difficult for student to keep updates always.
- Building this app will require lot of time and complicated one.
- This system requires lots of pen and paper work so this consumes time and sometime this app is not reliable to use.

6. Proposed system

- The proposed system has an android app and google database, where the user can login to perform operations.
- We propose a schema of maintaining records like student details, staff details by uploading their details and they can even check their details are present or not.
- The staff allotments will be able to enter details of student's activity details, fees issues etc.,
- Using these tools to create apps that look great and take advantage of the hardware capabilities available on each device.
- Admin can easily view staff details and students' details, a quick short analyzes can be taken.
- The proposed system is reliable to work and requires smart way for viewing all the details.

7. Android studio

Android is an operating system and programming platform developed by Google for mobile phones and other mobile devices, such as tablets. It can run on many different devices from many different manufacturers. Android includes a software development kit (SDK) that helps you write original code and assemble software modules to create apps for Android users. Android also provides a marketplace to distribute apps. All together, Android represents an ecosystem for mobile apps. Android is a software package and Linux based operating system for mobile devices such as tablet computers and smartphones. It is developed by Google and later the OHA (Open Handset Alliance). Java language is mainly used to write the android code even though other languages can be used.

8. MYSQL database

MySQL is released under an open-source license. So you have nothing to pay to use it.

MySQL is a very powerful program in its own right. It handles a large subset of the functionality of the most expensive and powerful database packages

MySQL uses a standard form of the well-known SQL data language.

MySQL works on many operating systems and with many languages including PHP, PERL, C, C++, JAVA, etc

MySQL works very quickly and works well even with large data sets.

MySQL is very friendly to PHP, the most appreciated language for web development

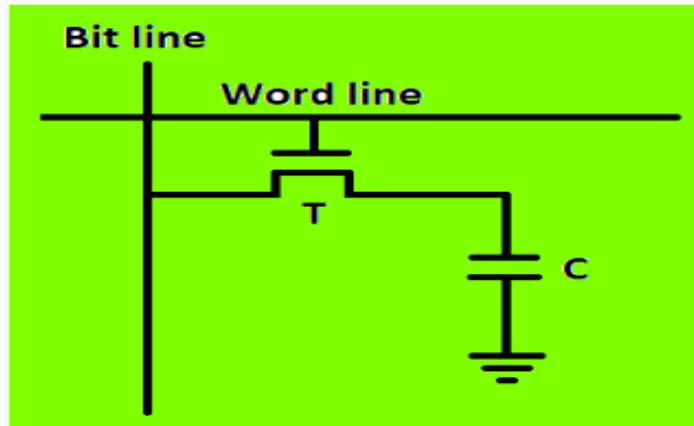
9. I5 Processor

As we all know that Intel is the renowned company that manufactures the processors since 1940s. Every year they introduce different versions of the processors that have more advanced and the new features as compared to the previous one. After the introducing i5 processors, Intel introduced i5 core

processors and increases the family members of I series of the processors. It was invented in 2009 as a result of the advanced theories and for the sake to meet the challenges of the modern and latest technologies.

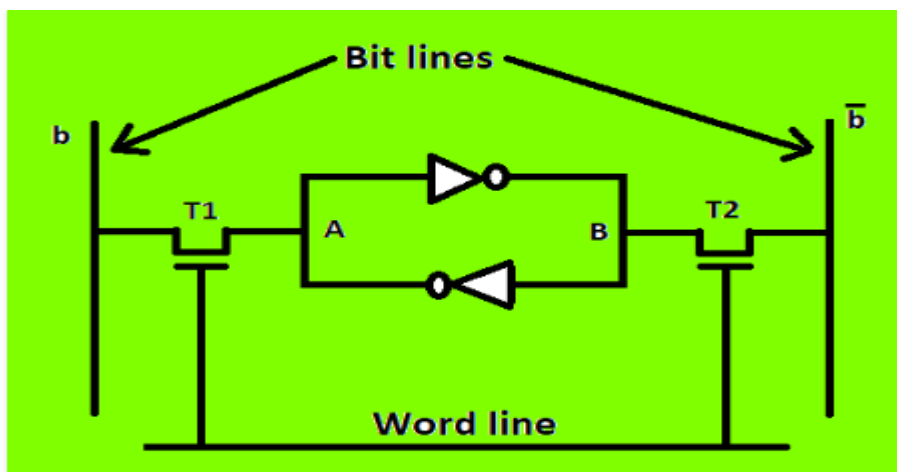
10. DRAM

DRAM stores the binary information in the form of electric charges that applied to capacitors. The stored information on the capacitors tend to lose over a period of time and thus the capacitors must be periodically recharged to retain their usage. The main memory is generally made up of DRAM chips.



11. SRAM

SRAM is used for Cache memory, it can hold the data as long as the power availability is there. It is refreshed simultaneously to store the present information. It is made with CMOS technology. It contains 4 to 6 transistors and it also uses clocks. It does not require a periodic refresh cycle due to the presence of transistors. Although SRAM is faster, it requires more power and is more expensive in nature. Since SRAM requires more power, more heat is lost here as well, another drawback of SRAM is that it can not store more bits per chip, for instance, for the same amount of memory stored in DRAM, SRAM would require one more chip.



12. Conclusion

Applications for viewing details of students, staff and admin will also view, curriculum fees 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 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. As the proposed application is cost-effective, user-friendly, and easy to use so that it can implement under different situations. New features can add to the requirement of users and apps. Due to its various features, reusability is also feasible, and all modules in the application provide flexibility and ease of access.

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