

MOBILE BASED NOTICE BOARD & COLLEGE MANAGEMENT SYSTEM USING FIREBASE IMPLEMENTATION

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Abstract: Nowadays Smart phones have become an irresistible part of everyone's life. With these smart phones the human life is changed for better. "Android Based Campus Solution" is a college management application which basically aimed at managing most of the activities of college. The main objective of this app is to make advancement in education system and institutional activities. This application helps in adding mobility and automation in managing the institutional information. The existing system uses website for publishing notices, or peon helps in circulating notices. This is very time consuming process. The android application simplifies this process by giving instant notifications to the students or concerned staff. This application makes this process easier, faster, secure and less error prone.

Keywords: Admin, College management, Students, Teachers, Parents.

1. INTRODUCTION

In today's time the smart phone evolution has changed the lives of every individual drastically. On touch of a button the world is coming to our fingertips. This Mobile era has simplified our life by putting the world in our hands. The heart of these smart phones is their Applications. There are lots of free applications available at our service. We can order food, we can pay the bills, we can monitor our health, and we can have our own personal assistant. So this list is endless. There are different college management applications available in market with the basic functionality of sharing notes, marking attendance, etc. "Android Based Campus Solutions" is the proposed system which mainly connects the students, staff, parents, and alumni with the college using mobile phone. The staff can enter attendance of students, internal test marks, can share notes, etc. The students can get notifications time to time about the tests, events, etc. The parent can anytime check their child's attendance, performance.

The parents get notified with the achievements of college adypu international school of information technology students. The striking feature of this app is that the students or alumni can get their certificates, concession forms using the app. They get notified when their document is ready. The college magazines, journals can be shared on the app hence saving cost of paper and printing. The institutional holiday list can be broadcasted on the app. The different circulars notices can be quickly forwarded. The different events schedule can be notified to the students and reminder can be sent. One more important part of the app is appointment scheduling, anyone can make use of this feature and schedule an appointment with principal and vice principal by checking their availability. Overall this application eases the communication process, institutional activities.

PROBLEM DEFINITION

In today's time most of the colleges have their own websites which displays college information, students can get timetables, test schedules, event schedules on these websites. But for retrieving this information the students have to log in to the website. The students can visit the website if they are having internet connection and these websites can be viewed on mobile phones as well. There is one problem with the websites that if there is no internet connection then these websites cannot be reached. Hence offline connectivity is the biggest issue with the website. The college management involves execution of different activities, using different software for different purposes is very tedious job. So the best solution for this is to make one software for carrying out different activities involves in college management. The software can be made for mobile phones, this is called app. There are different operating systems for different mobile phones but the 83% of mobile users uses android based mobile phones. So this paper focuses on development of Android Based College management system development.

2. LITERATURE SURVEY

There are different applications available for managing college campus activities. Each app has its own features, advantages and disadvantages. These apps are made by considering requirements of that particular institute. Basically these apps serve a single purpose only and we need different apps for different institutional activities. So there is need of official documentation of guidelines for app development, which we have also followed in the app development process. These listings are very helpful as an instructional manual for developing the app. In [2]

The app developers need to consider the security vulnerabilities of the app. The teachers can make use of the presence system to input student's attendance; their marks can be uploaded along with this. The students can check their attendance record at any point of time and they are also able to check their marks. This system also helps the parents to check their child's performance and

attendance record. This Android Based Campus Solution app integrates all these and some other aspects to make it unique and powerful. In [3]

This application provides a solution through a simple interface for maintenance of student information and also helps parents to get detailed information regarding their ward such as attendance, fees due, marks, important notice, event details, etc. It also contains query message option for parents so that parents can interact with the college faculty through this application. It also facilitates parents to gain all the notifications about the activities held in the college. Each individual parent will be provided with the details of his/her ward only. In [4],

College management system focuses on helping the staff's, lecturers who are working in the institution. The android application is focused to help the staff's for the progression and the academic development of the institution. i.e. by reducing the manual labor, checking the performance of the students. In [5],

it is aimed at developing an Android Application on College Management on mobile phones that is of importance to either an educational institution or a college. This Application can be used as a knowledge / information management system for the college. In [6],

Android College Management system is an android application which is helpful for students as well as the colleges. In the existing system all the activities are done manually. It is very costly and time consuming. In their proposed system, students can view results using Android phones. The data will be stored in the college server. The faculty can login into their college account through the app itself and update the academic result. In this system, students have easy access for viewing the marks, provided their authentications are correct and they are not permitted to change/update the marks.

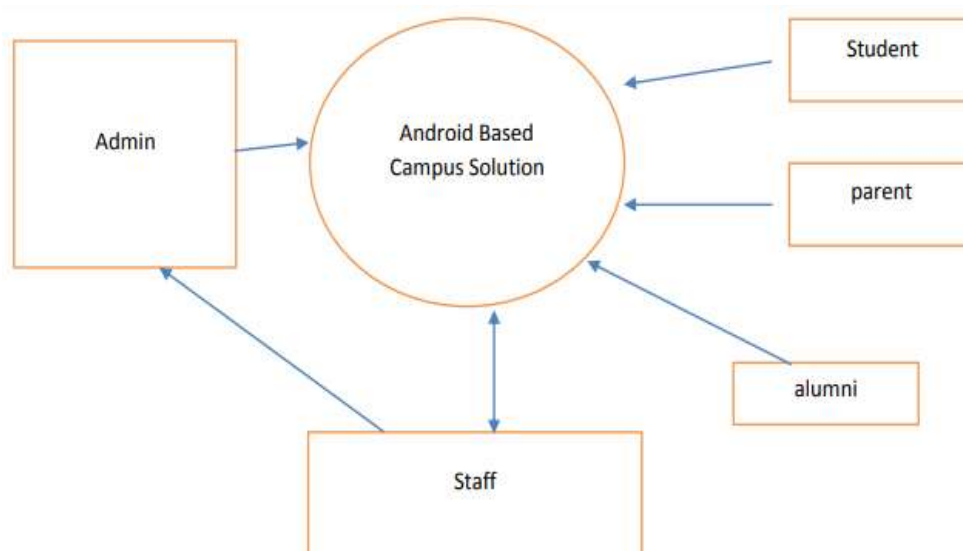


Fig.1 Architecture of Proposed Methodology

3. ADVANTAGES

This app is available in play store and users can download it use it.

- As this is an app, it facilitates the offline data access.
- The different notifications are sent easily and quickly.
- The design is very user friendly
- The app is designed by following the security guidelines hence protects the app from vulnerabilities.
- This app is very energy efficient and doesn't drain the mobile phones battery.
- This app integrates almost all major tasks in college management system hence provides one stop solution for the users
- The data is stored on backend server and can be retrieved at any point of time.

4. CONCLUSION

This app gives the mobility and automation to the institutional activities. This app is completely secure and battery safe. The information can be quickly retrieved from backend server but in a user friendly way. This app helps in saving cost of printing and papers, as most of the paper work is done electronically. So this app helps in keeping pace in this mobile era. College management system focuses on helping the staff's, lecturers who are working in the institution. The android application is focused to help the staff's for the progression and the academic development of the institution. It is easy for parents to get information of students. This application provides a solution through a simple interface for maintenance of student information and also helps parents to get detailed information regarding their ward such as attendance, fees due, marks, important notice, event details.

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