



## Android App for College Management System

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### ABSTRACT

In a real world scenario, such as college campus, the data is within the sort of notice, hand-written manual, verbal message, is being unfold among the scholars. These days it's of the essence to not solely use the foreseeable styles of statement, however conjointly new forms like telephone technology, for quicker and easier communication among the scholars. The core plan of this project is to implement robot primarily based collage Management application for advancement of establishment and academic system. During this paper we tend to develop associate degree application that provided info like assignments, result and attending, notices and also the department details. Here we tend to conjointly use Authentication, just the once passwords (OTP) play a significant role for authentication and wont to give higher layer of security over static passwords. Student's attending is additionally monitored by the applying. We tend to conjointly propose the notification that send notification of recent activity to the scholars, workers or box whether or not them area unit on-line or offline.

**Keywords:** Forum, Group Face Attendance System, Shared Data, Access Data using Attribute, OTP Login, Share Post

### I. INTRODUCTION

Today, mobile devices became a crucial a part of human life. Users access their e-mails, social networks, bank accounts, and varied alternative websites via mobile devices. However still some areas that don't seem to be upgrade with mobile devices. ancient approach employed in faculty wherever college use board to share any info and teacher dictates the notes ahead of scholars and students conjointly write notes in their notebook. This method is time overwhelming for

teacher and students. Just in case any pressing notices by higher management like box or principal take time to achieve everybody. These days it's of the necessary to not solely use the certain sorts of statement, however conjointly new forms like telephone technology, for quicker and easier communication among the scholars. The approach of communication is humanoid. During this paper we tend to develop AN application that provided info like assignments, timetables of examinations, result and group action, notices and therefore the department details. Here we tend to conjointly use Authentication, only once passwords (OTP) play a significant role for authentication and wont to give higher layer of security over static passwords. Student's group action is additionally monitored by the applying. We tend to conjointly propose the notification that send notification of recent activity to the scholars, workers or box whether or not they square measure on-line or offline. In [1] is being developed for AN engineering faculty to keep up and facilitate quick access to data. For this the users should be registered with the system when that they'll access still as modify information as per the permissions given to them. In [2] assists in automating the present manual system. This is often a paperless work. It may be monitored and controlled remotely. It reduces the person power needed. [4] Discusses the tactic of the management info in instruction. On the idea of a comprehensive investigation and analysis on the scholar management in instruction, we tend to establish the models of the school students' management info by adopting the advanced info technology, and construct the scholar management info platform. Moreover, we tend to analyze the characteristics of the knowledge management in instruction, and elaborate the strategies to unravel the difficulties braving within the students

management of the upper education. Finally, the key methodology and technology to hold out the knowledge management platform square measure given

## II. LITERATURE SURVEY

### **Paper1: Research Paper on College Management System**

In this Paper is being developed for associate degree engineering faculty to keep up and facilitate quick access to info. For this the users should be registered with the system when that they'll access further as modify information as per the permissions given to them. CMS is associate degree computer network primarily based application that aims at providing info to any or all the degree of management with in a company. this method is often used as a knowledge/information management system for the school. For a given student/staff (technical/Non-technical) will access the system to either transfer or transfer some info from the info.

### **Paper2: Web Based Student Information Management System**

In this paper assists in automating the present manual system. This can be a paperless work. It is monitored and controlled remotely. It reduces the person power needed. It provides correct info invariably. Malpractice is reduced. All years along gathered info is saved and may be accessed at any time. The info that is keep within the repository helps in taking intelligent choices by the management. Therefore it's higher to possess an internet based mostly info Management system. All the stakeholders, school and management will get the desired info directly. This method is crucial within the colleges/hostels and universities.

### **Paper3: Android College Campus**

In this Paper the robot primarily based Mobile field is developed to supply students with info concerning library due dates, any placement activities, general notices, attending and marks details. This info ought to be provided to students in an exceedingly price effective means. Therefore to realize an equivalent, we've got developed this application, whereby students will access this info victimization their robot enabled mobiles. The mode of communication is robot. Students needn't line up close to board / go surfing to varsity web site for any of the higher than mentioned details. Simply acquire the proximity limit of 1 of the numerous out there robot points and explore the service

### **Paper4: The development and design of the student management system based on the network environment.**

In this paper discusses the maneuver of the management data in instruction. On the thought of a comprehensive investigation and analysis on the scholar management in instruction, we have a tendency to tend to ascertain the models of the varsity students' management data by adopting the advanced data technology, and construct the scholar management data platform. Moreover, we have a tendency to tend to investigate the characteristics of the information management in instruction, and elaborate the ways to unravel the difficulties endeavor at intervals the scholars management of the higher education. Finally, the key methodology and technology to carry out the information management platform unit given

### **Paper5: Mobile Web Based Android Application for College Management System**

The system offers responsibility, time savings and straightforward management. Students and their oldsters also will read results, group action and information details mistreatment this application. Additionally students will read details, notifications anyplace and anytime. The applying can greatly change and speed up the result preparation and management method. It provides high security and a system that reduces the work and resources needed in ancient method. The projected system provides the new means of computing and displaying operations with responsive and enticing user-interface. Thus, on the idea of literature survey and by analyzing the prevailing system, we've got come back to a conclusion that the propose system won't solely aid the automation to the faculty, but also will facilitate to digitalize the system and successively facilitate to deploy resources with efficiency.

## III. EXISTING SYSTEM

Traditional approach utilized in faculty wherever school use bulletin board to share any data. And teacher dictates the notes before of scholars and students additionally write notes in their notebook. This method is time intense for teacher and students. Just in case any imperative notices by higher management like box or Principal take time to achieve everybody. Your time few students out of school premises in order that they don't get that imperative notices. This might be making some downside to it Student.

**Existing System Disadvantages:**

1. Existing System is not efficient because sometimes it is time consuming.
2. Existing system fails in case of any emergency to HOD and principal.
3. Staff communicates with HOD by meeting face to face.

**IV. OBJECTIVE**

1. Providing the online interface for students, faculty etc.
2. Increasing the efficiency of college record management.
3. Decrease time required to access and deliver student records.
4. To make the system more secure.
5. Decrease time spent on non-value added tasks

**V. PROPOSED SYSTEM**

We proposed an android App for collage activities. This innovative system permits Faculty College to share vital information additionally as notifications with students through our App. It consists of OTP based mostly Teacher, box and Principal login in conjunction with student login. Since faculty teacher operates through Mobile App and document uploading is less complicated through a mobile, the teacher login is to be performed through a mobile App. teacher might transfer documents of subject information, notifications, e notes and update attendances etc through their provided login. The documents square measure uploaded by teacher to totally different corresponding Departments. Here students solely read group action and transfer information of their specific semester. Teacher might access and upload/edit

documents to any semester or add any Post as desired. Teacher additionally updates student group action by exploitation mechanical man Application. Box additionally login through its mobile device, his role is to observance specific division activities and share document, notes like timetable document. and also the role of principal is to watch overall activities perform by totally different departments.

**Proposed System Advantages:**

1. OTP based Login that permits registered user to login an preventing unauthorized access.
2. The android mobile user will be able make quick download from anywhere using internet.
3. Usage of application can greatly cut back time in document sharing.

**VI. ALGORITHMS****Algorithm 1: K-means Algorithm**

1. Initialize cluster centroids  $\mu_1, \mu_2, \dots, \mu_k \in \mathbb{R}^n$  randomly.

2. Repeat until convergence: {

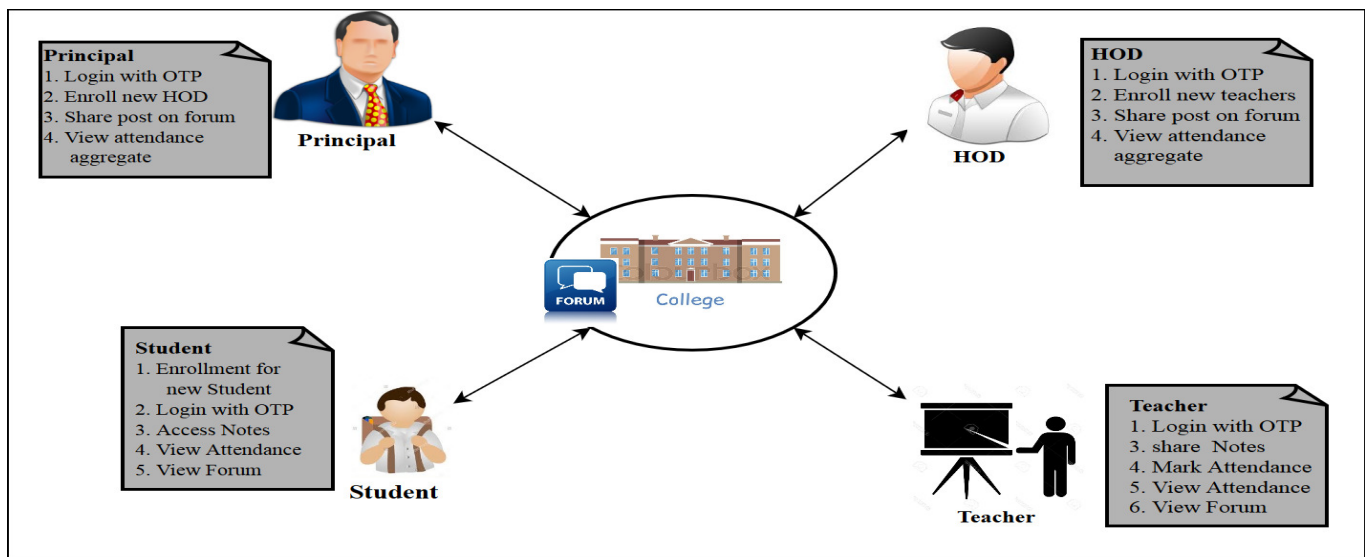
For every  $i$ , set

$$c^{(i)} := \arg \min_j \|x^{(i)} - \mu_j\|^2.$$

For each  $j$ , set

$$\mu_j := \frac{\sum_{i=1}^m 1\{c^{(i)} = j\} x^{(i)}}{\sum_{i=1}^m 1\{c^{(i)} = j\}}.$$

}



**Algorithm 2: Authentication Process**

1. During authorization, besides a user’s login and password, a user will be asked for a one-time password that he/she will have to enter in the form after generating it with one of our tokens.
2. The one-time password is sent through the API to Protectimus.
3. In real-time mode, the OTP and the user are verified, and your application instantly receives a positive or a negative response.
4. Your application responds to the authentication attempt based on the response received.

**System Requirement and Specification**

**Hardware resources required**

1. Processor : Pentium –IV
2. Speed : 1.1 GHz
3. RAM : 256 MB(min)
4. Hard Disk : 20 GB
5. Key Board : Standard Windows Keyboard
6. Mouse : Two or Three Button Mouse
7. Monitor : SVGA

**Software resources required**

1. Operating System : Windows 07/08/Above
2. Programming Language : JAVA/J2EE/XML
3. IDE : Android Studio,

**SDK**

4. Database : MY SQL

**VI. CONCLUSION AND FUTURE SCOPE**

We proposed system on on-line server that enables teacher to transfer notes and updates Attendances and students could read own group action, transfer needed documents through their automaton device. owing to this faculty activities and spot share with student directly. we offer OTP based mostly authentication to forestall unauthorized access.

In future we introduce, Parent Teacher Communication may additionally be developed. Attendance proportion calculators are often introduced. Assignments are often submitted through on-line and mail etc. Online library system is often introduced.

**VII. ACKNOWLEDGEMENTS**

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