Evolution of Virtual Notice using Android Platform (December 2017)

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Abstract*:- Evolution of Virtual Notice mechanical man Platform is associate mechanical man application that is useful for college students, student's folks and faculties. Within the existing system all the activities square measure done manually that takes countless efforts and time to urge updates concerning notifications promptly. It's more durable to manage notices daily thus students don't get correct notifications. In our planned system, victimization mechanical man phones, students will read notification, teacher rating, job update from mentors and department. The relevant information are hold on within the college server. {The faculty, the college, the student} will login into their college account through the app itself and update the educational standing. During this system, students have quick access for viewing the notices provided their authentications square measure correct and that they aren't allowable to change/update the notification. Our planned work has 2 modules: I. Student 2.Admin. Within the student's module, student ought to register their roll no, college license number, student name. Admin module maintains the student's performance skills. Aside from this the advanced options are: just in case of natural calamities like floods, etc. notifications to students are sent from admin workplace through app directly. Any new notice for a specific semester will be uploaded by Faculty member through application notifying to several semester students. Application conjointly includes logic to support higher than mentioned facilities to its students.*

Keywords:- Teacher Rating, Notification, Android, Paper Saving, Job Notification, Decrease paper work.

I. INTRODUCTION

This project provides an in depth plan of the varied aspects of maintaining method in a company conveyance out the correct information for college students and to permit concerned Head to speak with students directly. The unique design and implementation of the system is to supply services throughout the institute and the Colleges. The proposed system is to supply comprehensive student information system and programme is to exchange the paper records. Faculty members can uploads performance of student by giving rating (from 1-5 star), and college notifications through a secure, on-line interface exploitation on automaton devices. All information is totally reviewed and valid on the server before actual record alteration/ updating. All information is hold on firmly on dedicated SQL servers managed by the college Administrator .The system decreases work and time required to access student records. Previously, college relied heavily on paper records for this initiative that had its own disadvantages. This technique provides a straightforward interface for the upkeep of student information. It is often utilized by academic institutes or faculties to keep up the records of scholars simply. Achieving this objective is troublesome employing a manual system because the information square measure scattered, are often redundant and collection relevant information is also terribly time intense. Our planned system ensures to beat these limitations. The paper focuses on presenting information in a simple and intelligible manner that provides facilities like on-line registration and profile creation of scholars, teacher rating, circular notifications, and job notification so reducing paper work and automating the record generation method in an academic establishment. There would be an associate degree of increasing trend for instruction establishments to be expected to watch student records. The code generates reports on the results of analysis that thought of the impact of group action on student performance.

II. EXISITING SYSTEM

The system that is employed these days has some drawbacks which require to be improved for higher performance. Because the technology is developing day by day we'd like to use latest trending technology to reduce the degree of economical burden and in adequate time. For collage management within currently existing system all work is finished on paper or perhaps processed however it is terribly not economical & no reliable. Before applications accustomed have only a few options that doesn't offer all capabilities to archive all tasks at one place. Today's system have difficult programme that will deliver correct data to user. The system through that the feedback is taken isn't adequate. The views of each and every student aren't expressed through these systems. We've used repetitive and progressive Development model (IID) for our project development. This development approach is additionally spoken as repetitive water Development approach. repetitive and progressive Development may be a computer code development method developed in response to the additional ancient water model as shown in figure plan behind repetitive sweetening is to develop a package progressively, permitting the developer to require advantage of what was being learned throughout the event of earlier, incremental, deliverable versions of the system. Learning

comes from each the event and use of the system, wherever doable. Key steps within the method were to begin with an easy implementation of a set of the computer code needs and iteratively enhance the evolving sequence of versions till the total system is enforced. At every iteration, the procedure itself consists of the initialisation step, the Iteration step, and also the Project management List. The initialisation step creates a base version of the system. The goal for this primary implementation is to form a product to that the user will react.

III. DRAWBACKS OF EXISTING SYSTEM

A. The existing system isn't user friendly as a result of the retrieval knowledge of information} is incredibly slow and data isn't maintained with efficiency. The employment of the some technology is difficult and time intense. These systems have to be compelled to handle by specialist for maintaining and update the system which might once more be terribly expensive.

B. It needs a lot of calculations to get the report therefore it's generated at the tip of the session. the prevailing system exploitation the deprecated strategies as new JSON and GCM is a lot of versatile then previous algorithmic program. Therefore needs longer to show the report.

C. All calculations to come up with report is finished manually thus there's bigger likelihood of errors. Here the college should suffer plenty through the calculation and if there's a loss of some report then it's going to cause plenty of drawbacks. This can be time intense additionally as a result of exaggerating calculation. Even then there area unit some fault that is extremely frustrating for the college. These calculations additionally affect the marks of the scholars which can finally junction rectifier to their share.

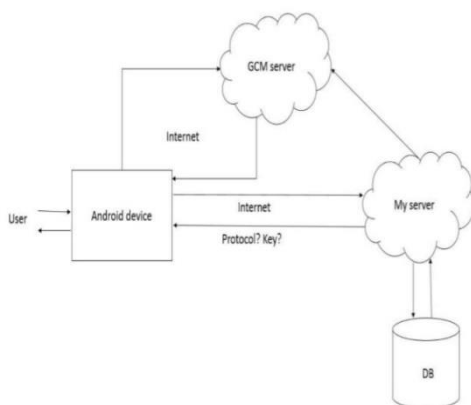### IV. IV.PROPOSED ARCHITECTURE

Fig 1:- Proposed Architecture

The system design incorporates a good phone with humanoid OS, an online service, a information server and also the user as its elements. The humanoid good phone or pill should use 3G or Wi-Fi network for net property to confirm

higher performance but 2G ought to conjointly satisfy user request with supplementary disadvantage of your time lag. The user can login to the applying through associate humanoid good phone. The user-type is verified with the information server and access is given to the suitable user. The online application can also be wont to login and perform sure operations like registration of users, generation of reports. The online application and also the humanoid application access information from a standard information server through the net..

V. MODULES

A. User Module

In this module we tend to square measure authenticating the users by providing username and positive identification. If username and positive identification is valid then they're going to be taken to their screens. to spot user we tend to square measure victimisation distinctive IMEI range of mechanical man device with the amount keep at server. After they get matched with one another system checks the standing of that device and transfers the management to several user-interface

B. Database Module

The projected system used MySql as its information as a result of their simplicity and adaptability. This module stores each single data concerning students, college and models their knowledge on such as operations. This operation will be storing student attending, result knowledge or will be authentication credentials.

C. Staff Module

This module is intended for employees, that uses movable to require group action, transfer result and transfer faculty notifications. The entered admin details square measure encrypted and sent to server for verification. Solely when successful authentication the operations square measure performed. If username and countersign cannot match, he/she will enter in to group action page.

D. Attendance Module

The purpose of Attendance Entry Module is to enter the attendance using cell phone. In this module Lecturer takes the attendance using the cell phone. Lecturers select the branch, semester and year. After this session he enters in to attendance page. Here staff makes a mark on the absentees. Lecturers are only allowed to take attendance during their lecture time. In case of swapping of lecture or extra lecture, HOD can allow other faculty to take attendance of students by swapping the logic of time-table permanently.

E.   Feedback Module

This module performs machine-controlled calculation of feedback of their professors, and then this can be representing diagrammatically. Student will see solely fifteen queries and provides feedback by choose provided choices. This module, stores student feedback into JSON object to

produce quicker transfer of feedback knowledge to server or client-side. Next we tend to extract string from the JSON to use algorithmic rule over and choose the results of feedback.

F. Result Generation Module

This module permits the box and Lecturer to come up with numerous reports on the scholar attending and marks knowledge. To come up with reports, the user should login through app and ensures that net is on. During this module, application generates PDF file dynamically victimisation java program.

G. Notification Module

This module permits the department box to update students concerning any faculty connected data through notifications. The scholars will read notifications provided by the interface provided by application. Box will send message to solely offered choices like all student, all college, specific college and to all or any.

VI. WORKFLOW

The detailed workflow of this application is as follows: The application is divided into 3 sub groups:-

A. Admin/Head of Department

- Admin Registration

The first step during this application is to urge the box, workers members and teaching college to register. They have to initial register their phone's IMEI variety within the information. The individual person can then offer his or her phone's e-mail id and watchword for registration. Associate degree OTP would be then sent via e-mail address on the phone by the admin or college.

- Admin Login

After registering the admin is allowed to log in. He or she will be able to currently read admin homepage wherever there square measure choices to require attending, transfer results, send notifications to student. He may also read the attending taken and uploaded results.

- *Take Attendance*

Here, system can validate admin to examine whether or not admin is applicable to require attending for any subject that he/she elite from the applying when validation is success. Next perform of this module to examine the time-table information to understand once to permit admin to transfer attending. If admin is legitimate to require attending and applying the operation at correct lecture time, currently he will take attending.

- *Upload Result*

Admin can upload student's term test through application. The same authentication will be performed by system as Take attendance module. This will not be complete without permission as HOD can only allow faculties to upload marks.

- Upload Final attendance sheet

A report is generated which has the student's name, roll no., his or her attendance. This module categorised student according to their attendance.

- Send notification to students/faculty

HOD can send notification to students or teaching faculty or some selected faculty or that faculty he wants to communicate his message to. Notifications related to college meeting, important information, training and placement related information.

B. Faculty/ Teaching Staff

- *Take Attendance*

Teaching faculty can take attendance of students during the lecture i.e. within that time frame. If he or she takes attendance anytime else he is not allowed to do that. After taking attendance he can view it in the PDF file generated and keep it for future use.

- *Upload Result*

Faculties can even upload results of the students. PDF is generated of the same and it can be viewed by the faculty in future.

- *View Uploaded Result*

Result that is been uploaded can be viewed by the professor through the PDF file generated. This PDF file can be used in future.

- *Check notifications*

Faculty can receive important announcements, information regarding meetings from the HOD or admin through these notifications.

C. Student

- *View Attendance*

Students can view attendance uploaded by the faculty or HOD. They receive a PDF file and can view it anytime.

- *View Results*

Students can even view results uploaded by the HOD. A PDF file is received and students have to first download it and then view it.

- *Give Feedback*

Students have the facility to give feedback about the faculty or the teaching staff. This is an additional advantage provided to students by the college staff.

- *View notices sent by college*

Notices are sent to the scholars by box or admin. Helpful data, faculty notices, vital announcements are received on students registered phone. They'll read it anytime.

VII. REQUIREMENT SPECIFICATION

A. *Hardware Requirement*
- Intel Quad core 1.7 GHZ Processor or above.
- Minimum 100 GB HD.
- Minimum 4 GB of RAM.
- Standard Keyboard and Serial Mouse.

B. *Software Requirement*
- Android Studio.
- GCM Server
- SQL Server (Either on local host/domain)
- XAMPP / PHP myAdmin tool
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VIII. BENEFITS OF PROPOSEDSYSTEM

- The application will greatly simplify and speed up the result preparation and management process.
- It includes advertisement of the college thus satisfying the marketing criteria to showcase its facilities to the HSC and diploma students.
- It overcomes the limitations of the web based system as our proposed system is developed on Android OS.
- As the current system is manual it does not require any sophisticated training for the User of the system.
- This project will cater facilities to all the existing versions of android devices.

IX. CONCLUSION

An Android based mobile application for College Management System is presented. The application offers reliability, time savings and easy control. It can be used as a base for creating and enhancing applications for viewing results, tracking attendance for colleges or any workplace. Students and their parents will read results, group action and course of study details victimization this application. Additionally students will read details, notifications anyplace and anytime. The appliance can greatly modify and speed up the result preparation and management method. It includes advertising of the college and it is promoting the college in smart way to attract more number of students. It offers highly secure system that reduces the work and resources needed in ancient method. The proposed system provides the new approach of computing and displaying operations with responsive and enticing computer assistance.

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BIOGRAPHY

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