Department Application

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ABSTRACT

The venture brings the whole manual procedure of a specific office online which is manufactured utilizing Android studio/java as a front end and MySQL Server as a backend. The fundamental reason for this task is to improve the way toward dealing with all the manual work by giving a web interface to HOD, Faculty, and Students. The HOD part comprises of various modules where Head of the office is mindful to enlist all the personnel of the specific office. The framework enables HOD to allot resources to the regarded subjects appropriately, likewise can see every one of the exercises done by the Faculty. The Faculty part has thought of enlisting the understudies of specific class relegated by the HOD. Educator performs a different errand, for example, taking the participation of the understudies utilizing QR code, transferring assignments and mark sheet for the specific class understudies as relegated. The Faculty can likewise have a balanced discussion over the application for clearing understudies questions. Understudy interface comprises of review the transferred data by the Faculty or HOD with the application and furthermore getting a warning via telephone for the equivalent. Understudies additionally need to examine the Faculty's QR code for participation.

***Keywords*—** *Faculty, HOD, Notification, QR code, Students*

1. INTRODUCTION

The principal reason for office application is to give a stage to the viewpoint in the chain of importance of the division where every perspective will be doled out with a few obligations which should be possible in a simple manner as it wipes out the administrative work. The clients can be HOD, staff and understudies. They can the first login into the application and transparent the data, for example, subtleties and notification transferred according to the entrance rights given by HOD. The personnel can keep the record of the participation, transfer assignments and vital archives which should be imparted to the understudies. The workforce can likewise transfer the mark sheet and furthermore have a coordinated discussion with specific understudy to clear his or her uncertainty. The HOD can log in and enlist himself and furthermore, the personnel of the division, refresh the data, erase any undesirable information, organize the data in like manner which as a rule takes a lot of times while doing physically.

1.1 Objective and Scope

The extent of the task is to convey the appropriate responses as quickly as time permits for the questions of the understudies and teachers. Also, to persuade the understudies to keep up legitimate participation. The extent of this venture is to find solutions for the inquiries about the school exercises and about the subjects from the resources or some other staffs in a simple and quick way. To keep the record of participation in an increasingly exact shape so that there can't be any evil treatment for the non-missing understudy.

2. PROBLEM STATEMENT

In the past framework, all the data needs to see in a hard document, or in the site and furthermore a large portion of the data was on paper. In the meantime, while looking through any data it is too hard to even think about accessing and sets aside a great deal of opportunity to look through the specific site or a pack of papers. Consequently, so as to defeat this issue an advanced mobile phone-based application utilizing Android can be utilized to make this simple. Indeed, even the participation framework before this was all on paper and use to have a great deal intermediary participation which was hard to correct.

The centre thought of this venture is to execute android based division application for progression of organization and instructive framework. The application will be utilized by understudies, workforce and HOD. The understudy should examine the QR code for participation given by the regarded personnel which will be again checked inside by the application with the time and area requirement. Additionally, the understudies will get every one of the notification refreshes as a notice on their telephone which further can be checked in the news feeds. Notice may be obvious by the regarded class understudies to evade the unimportance for different understudies. Here, the understudies just as their parent will be educated straightforwardly by means of Email and SMS specifically if the understudy is in defaulter.

3. PROPOSED SYSTEM
In the proposed system, accurate results are developed and easy to retrieve. Easy for maintaining proper information. No paper works so doesn't take large space. In a short period, the calculation for attendance will be done and preceded for the next operation. Data are well maintained. And if there is a shortage in attendance, information is passed on to the concerned parents/guardians and students to alert them.

4. LITERATURE SURVEY
We have considered a few research paper dependent on school the board framework. The main paper which we contemplated is named as Android College Management System distributed by Vishwakarma R Ganesh in April 2016. As indicated by this paper, the understudies are permitted to see the outcome on their Android handset which can be transferred from the handset itself by the staff. They will likewise get all sort of the notice update on the application itself. The second paper we considered is named as Web-Based Student Information Management System distributed by S.R. Bharamagoudar, Geeta R.B., and S. G. Totad in June 2013. This framework was an online application for understudies worked by the administrator and the personnel. The third paper we considered is named as College Management System distributed by Srikant Patnaik, Khushboo Kumari Singh, Rashmi Ranjan, and Niki Kumari in May 2016. This framework was equipped for dealing with the entire school work inside one framework including school data, understudy data, situation data, and different diverse sorts of occasion going on in our school. It additionally keeps track records of all the data with respect to understudies the individuals who are set in different association.

Table 1: Summary of literature survey

Reference No:	Advantages	Disadvantages
[1]	• No chance of the mistake as calculations for attendance will be automated. • The application will greatly simplify and speed up the result preparation and management process.	• The attendance in manually entered by the admin. • The HOD and the admin are responsible to notify about any update on the app to the students
[2]	• This system provides a simple interface for the maintenance of student information	• This system only contains the data of the students and college excluding other facilities
[3]	• In this system, It manages the college information, student information , placement information , various different types of event going on in our college	• The system doesn't have a attendance module which indeed led to maintain attendance on paper.

5. METHODOLOGY
QR codes have just been surpassed the ubiquity of traditional standardized tag in numerous territories due to a few focal points like increment in the limit, decreased the size, and so on. Joined with the decent variety and extendibility offered, it utilizes QR code more beseeching than that of the scanner tags. Factually, QR codes are fit symbolizing the same measure of information in around one-tenth the space of a customary standardized identification. Data, for example, URL, SMS, contact data and plain content can be encased into the two-dimensional framework. In addition, with the unpredictable augmentation of the pattern to utilize cell phones has likewise assumed a vital job in the fame of QR codes.

5.1 Architecture
A QR code is a two dimensional for example network type image with a cell engineering sorted out in a square. Figure 1shows the QR code design. QR codes comprise of various territories that are held for explicit purposes. Discoverer, separator, timing examples and arrangement designs involved capacity designs.
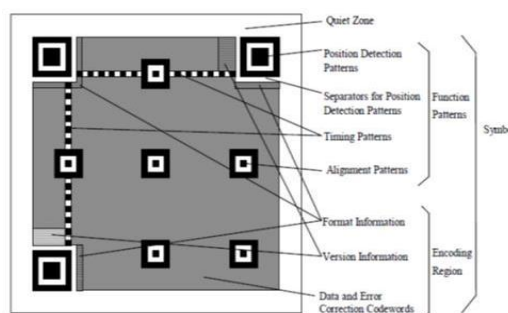

Fig. 1: QR code architecture

Capacity designs will not be utilized for encoding information. The discoverer designs situated at three corners of the image expected to encourage in simple area of its position, size and tendency. The encoding method of the QR Code incorporates after advances. Right off the bat, input information is encoded in as per most productive mode and framed piece stream. The bit streams are separated into codewords.

At that point, codewords are partitioned into squares, and add blunder revision codewords to each square. All these codewords are put into a grid and are veiled with cover design. At last, work designs are included in the QR image. A QR Code image is framed.

5.1.1 Basic qualities:
- Encodable character set
- Numeric information comprises of 0-9 digits
- Alphanumeric information comprises of Digits 0 -
- upper case letters A-Z; nine other
- Representation of data: A dim module is a twofold one and a light module is a parallel zero
- Symbol measure (excluding calm zone):21 21 modules to 177 modules. Renditions 1 to 40, expanding in ventures of 4 modules for each side.
- Data characters per image: Maximum passable information limit with regards to most extreme image measure form 40 and least blunder redressing level L:
- Numeric information: 7,089 characters
- Alphanumeric information: 4,296 characters.

6. WORKING
The admin i.e. HOD and the staff i.e. Faculty register the students using their unique identification number and store their data in the database. In the same way, the faculty is also registered by the respected HOD and the information of them is also stored in the database. The HOD and the faculty keep the track of the attendance record from the database. These both entities are also responsible to maintain the result and update the students with the notice and important information which is visible for the student in the application. All the data will be stored in the database at the backend.
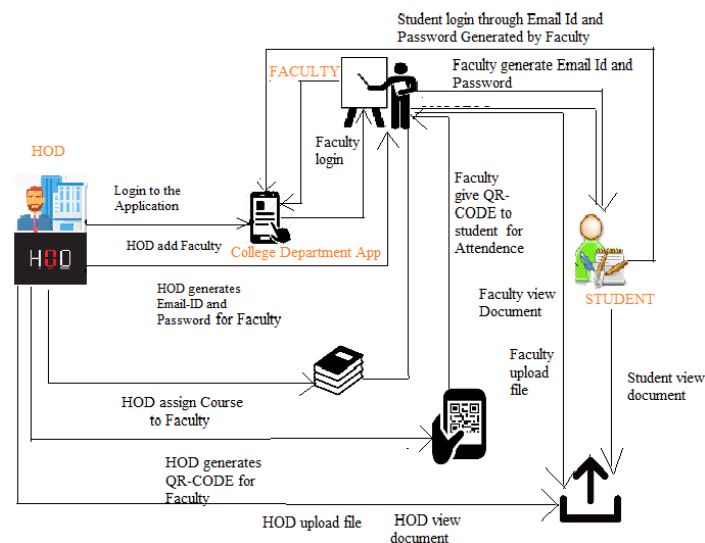

Fig. 2: System architecture

7. CONCLUSION
This venture will help crafted by HOD and Faculty to oversee and computerize to the whole database in the system. The undertaking will decrease the human exertion and make the assignment of Student, Faculty and HOD simpler. It is effective to utilize and simple to chip away at it. Accordingly, remembering, the focal points and applications; we are building up a Department Application which has complete administrative control of Faculty and Student and particular administration. It will reach to the majority of the general population on their portable handsets, by utilizing android application and improve highlights.

Division Application isn't just fulfilling however it likewise causes the Faculty to rapidly achieve the understudies in short interim of time. I for one consider this to be an incredible method to discover much more data for my subject. It will most likely check anything identified with scholastics and a co-curricular notification whenever. Administrative work and manual work is decreased through this framework. The framework is easy to use and simple to utilize. I trust that the client would appreciate this framework, yet additionally, get fulfilment from discovering how every single element of division is executed.

8. REFERENCES
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