Developing Digital System for College Faculty, Students and Parents to Work Efficiently

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Abstract

Nowadays every field is getting digitize. Recently our colleges are also going through online lectures, exams, and even online practical due to the corona crisis. But if we notice carefully there are many fields like education where many things are still colleges and students doing offline and using traditional methods. Where all these things always go through complicated processes and required multiple platforms, apps and software. When the number of records data increases, it is difficult to maintain the information of each student in the old manual system. Maintaining the records using registers and papers may lead to loss of accuracy in data and required more manpower and it consumes more time for processing the records. Also, sometimes parents of some students remain unknown from their activities and notices from college due to lack of communication between college-students-parents. So, to overcome all these we are going to developing the current project is to build an effective system which is fast, accurate, reliable and flexible enough. Time and manpower can be more effectively utilized and online information can be easily available to the user and at the same time, we can maintain a higher level of security. Every user such as student, staff administration and parents can able to access the information anytime and from anywhere.

I. INTRODUCTION

College Digitization System will be consisting of different modules such as student, faculty, admin, parents, etc. In which students are admitted by admin only to the system. When the student will get admitted and the username and passwords are generated by students which can be managed by admin afterwards. Student will be having access to the personal profile, current attendance record, Unit Tests records, Daily Class Routines and all the notifications and upcoming events which are managed by admin. We can also provide one more facility to students to view the notifications according to their class or department only. This was for student module, we can also provide one module for parents as well, so they can check their ward progress report without visiting to the college also. For staff or faculty module we can give access to the staff to manage all the data of their subjects of respective class. They can also manage all daily attendance of all the students of respective subjects and classes. As staff members will be able to give the notifications and upload there notes according to their respective subjects. Staff can also generate the daily, monthly or yearly report of each and every student as well as class. They can also generate the Mark sheet and time table also. And at the last Admin can be able to manage all the accounts of the all the students and staff members. All the student logs and their information can be view and manage by Admin itself. He can also upload notices regarding admission forms and etc. He can

view all the modules of students and staff and approve it. We will also give role-based access to our system. Every student and a faculty member will be having their username as email id and password with which he or she can be able to access the system. The main purpose of this Digitization system is to create a system which will manage the working of these different modules. Which will reduce the paperwork and the time to perform different operational task.

II.   LITURATURE SURVEY/BACKGROUND

Generally, many people have done research on collage management system. There are some systems already implemented by using various techniques in this paper we are studying those techniques and systems.

1. Traditional System: As Now-a-days, our education is playing a very significant role in the society. So day-by-day, the percentage of illiterates are decreasing and the percentage of literates is increasing. In Modern days education will change the society in each and every aspect and Now-a-day everyone wants to study the higher professional degrees. As, a result Admissions are also increasing day by day. Hence, Ratio of establishment of the new colleges and schools are also increasing. But the actual main challenge is starting from now. As Most of the schools and colleges have to maintain their student information in the forms of records. When the number of students increased, the number of records is increased, and it became difficult to maintain the information record of each student in the old manual system. So, maintaining the records manually leads to an error and required more manpower and hence it is more time consuming for processing the records.

2. Existing System: The existing system software do not provide any integration and cannot interact with other computers. Due to the lack of infrastructure the whole process takes too much time and hard work. The existing framework is not user friendly. Addition and retrieval of data is not maintaining efficiently. If student wants to know their remaining fees due then it becomes challenging part to the administrator to find all record from paper and it also takes too much time. In the existing system all the events and timetable seen on notice board. There might be a chance that admin makes a wrong entry on someone else record. Due to the integration and interaction in proposed system work becomes efficient and mistakes can be avoided.
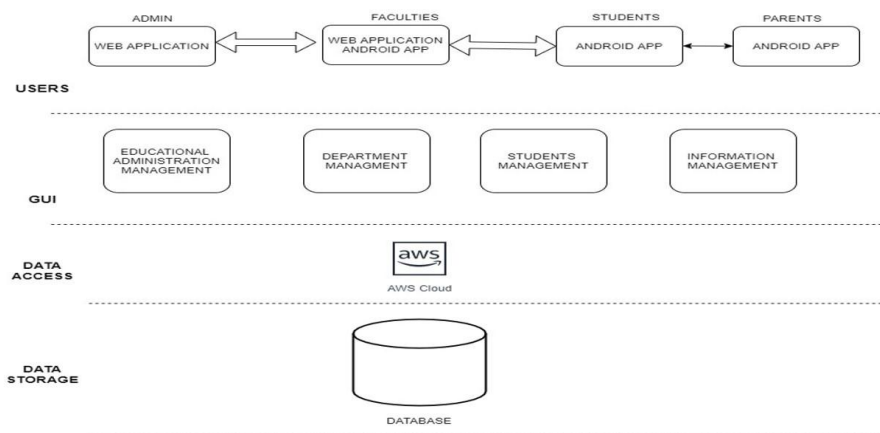
III.   PROPOSED WORK/SYSTEM

Figure 1: System Architecture

1. Users: Admin, Faculties, Students and parents will be the users of the system. Users is the first layer of the system on which they can access their logins by their priority. Admin can use web application to manage profiles and administrative work. Faculties can view and access their work-related data according to their convenient. Faculties have both web application and android support to manage their data.

2. GUI: Graphical user interface is the second layer of the system. GUI is also based on user's priority. Only admin and faculties can access both web application. Because of the higher priority only admin can manage administrative work. Admin has more functionality to manage data like administration, accounts, employees and more office related work. Teachers can view all the student's related information in their login. Students can access their information like attendance, marksheet, notices, through the android devices.

3. Data access and storage: Data access and storage is the third and fourth layer of the system. Here we are using cloud services to store and access the data. Data will be in database format which will be easy to manage collection of data. Data access and storage is a common part and integrated with each other. Cloud services provides convenient way to store and access the data and database manage collection of data in structural format.

IV. RESULT AND DISCUSSIONS

V. Administration: In the college Office domain, we have added some very useful key features by using which we can reduce repetition of same work of college office staff which will save much amount of time of office staff as well as students.

VI. Staff: The teacher domain is the second most important domain in this project. We have provided many key features to teachers as well which reduces teacher's efforts in most of their tasks. We can divide teacher domain in 3 subdomains in which all three domains will have different functionalities as per requirement.

VII. Student: The most important domain in our project is here that is the student domain. If we use this domain effectively, we can make our project full of features.

VIII. Parent: The parent domain is newly introduced by us in which parents of the students can track some academics related activities which should be tracked by parents.
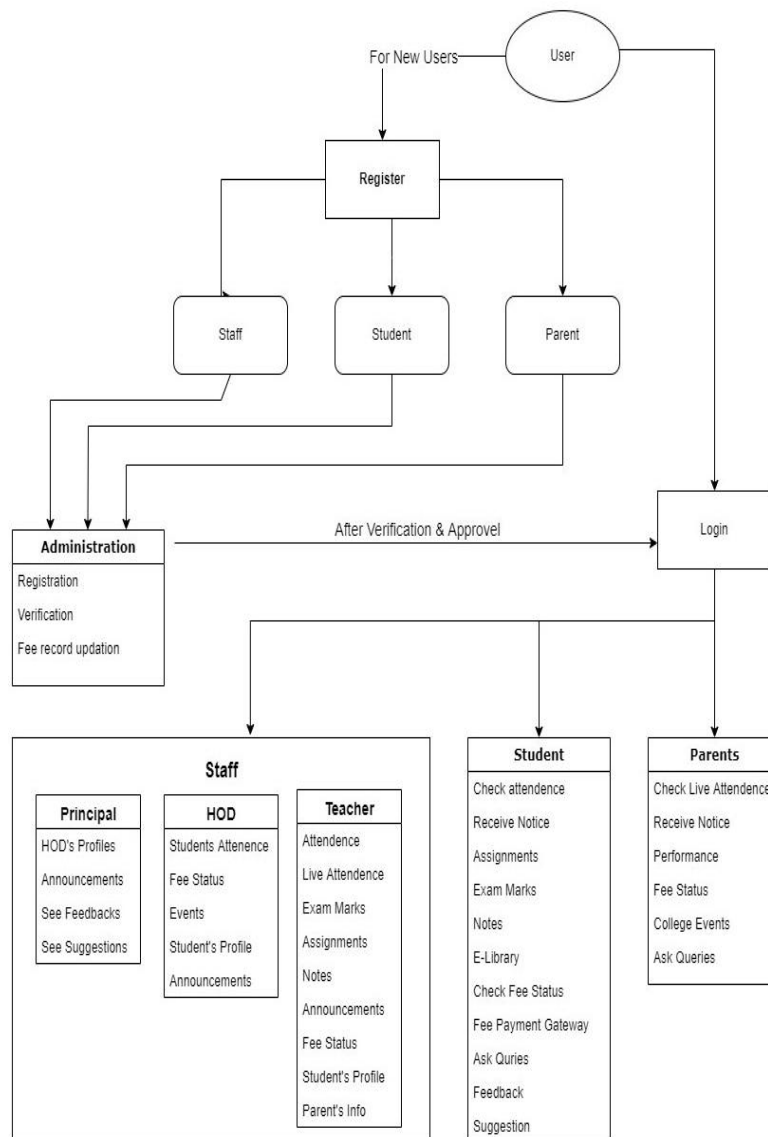
Figure 2: Proposed System

IX. CONCLUSION

The Objective of Our System is to reduce the workload and to save significant time of the staff members. College Automation System will help the educational institute to do regular activities accurately, quickly and reliably. In Existing System accessing information from files is a difficult task and there is no quick and easy way to keep the records of students and staff. And lack of automation is also there in the Existing System. Hence, we conclude that the system would be definitely help full to the user by saving time and effort by reducing the processing time and the volume of errors. Which would also help us to improve the efficiency of the work to be done and work satisfaction

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