Student Information Management System

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Abstract—An systematized and methodical result is essential for all universities and Associations. There are numerous departments of administration for the conservation of council information and pupil databases in any institution. All these departments give the topmost record regarding scholars. Most of these track records need to maintain information about the scholars. This information could be general details like pupil name address, performance, attendanceEtc.All the modules in a council administration are interdependent. They're maintained manually so they need to be automated and consolidated information from one module will be demanded by other modules; the different modules included are independently for the Preceptors, head of the department, and the head of the institution. For illustration, pupil academic details need to be moved from one module to another. With that in mind we caught the being pupil database operation system and made necessary advancements to streamline the processes. Our work is useful for easy stoner interface. We're planning to use the important database operations that are reclamation and data manipulation. We'll give further for managing the data than manually maintaining the documents.

Keywords—Student Management System , Python , MYSQL

I . INTRODUCTION

The Student Management System is software which is helpful for scholars as well as the academy authorities. In the current system all the conditioning is done manually. It's veritably time consuming and expensive. Our Student Management System deals with the colorful conditioning related to the scholars. There are substantially 3 modules in this softwareAdministrator Module, Faculty Module, StudentModule.In the Software we can register as a faculty as well as a pupil for every pupil the authentication law and the roll no is handed by the head of the department faculty and for the enrollment of a faculty the Registration ID and the authentication law is handed by the director theinstitute.In this design an admin can manage the faculty and take decision about the scholars like omission of any pupil admin is authorized to produce the commemorative

for the enrollment of the faculty as same as a faculty is authorized for creating token for the enrollment of a pupil.

II .RELATED WORKS

Development of smartphone-based student attendance system:Student's attendance shadowing is a vital issue in order to cover scholars' performance in the classroom as well as in their studies. It becomes a crucial concern because the university authority maintains a rule that one pupil can only attend in the test if his/ her attendance is advanced or equal to several probabilities else not. The traditional attendance system needs pupil's to physically subscribe the attendance distance each time for the attendance of each class. This is unnecessarily time-consuming to notice and mark pupil's name on the attendance distance. This also happens that some scholars may accidentally or willingly mark the pupil's name as deputy. The hard dupe of attendance distance may get lost. Using Smartphones like Android Technology the course schoolteacher will be suitable to take attendance fluently by our designed mobile operation and save the attendance in the phone as well as in garçon and can check chance and also can publish as hard dupe. Using the stored information, this system is suitable to mark attendance, marking interferers' entry, attendance chance computations, shoot emails, and send SMS to the guardian to keep them informed about their child's attendance at the Institute. The designed system has online access from any place and any moment which may extraordinarily help the course schoolteacher with keeping track of their pupil's attendance.

Mobile attendance using Near Field Communication and One-Time Password**:** It presents a Near Field Communication (NFC) upheld Company M-Attendance frame for Company Workers participation. Upgrades are made in the participation of representatives in theCompany.This undertaking we propose a Near Field Communication (NFC) and One- Time Secret word (OTP)

upheld M-Attendance system for Small Scale Company. Customarily, employees need to keep up the investiture records for participation. This routine requires time and exertion, trading off on the working time. Notwithstanding this, many workers exploit the low-security participation frame and stamp the participation of the worker, who's absent in the plant, i.e., central cases. The proposed m-participation supervision frame has been intended to rearrange and ameliorate participation observing. It replaces the conventional attendance marking frame and makes it hastily, more secure and completely advanced which have multitudinous disadvantages, similar as being time consuming, lost attendance wastes and unauthorized people conceivably subscribing for others.

III . PROPOSED MODEL

The use-case diagram has been developed to illustrate the most vital useful necessities to the student management system from the customers' factor of view. We highlight the following 6 most important actors in our system:

1. Admin() :director of the Student management system, that gives account operation and system conservation;

2. Teacher() : provides information about the student Grade book and attendance;

3. Head of Department() :manages the department staff, including information about scholars,classes, subjects;

4.Principal() :manages each department of the College , he can add departments, view class reports, view department reports and view student reports;

5.Student() :a pupil of the university, he can view the pupil report about his attendance and education progress.

6.Parents ():the guardian of each student who gets regular notification regarding their ward on their attendance of each period , marks obtained and any important notifications via sms
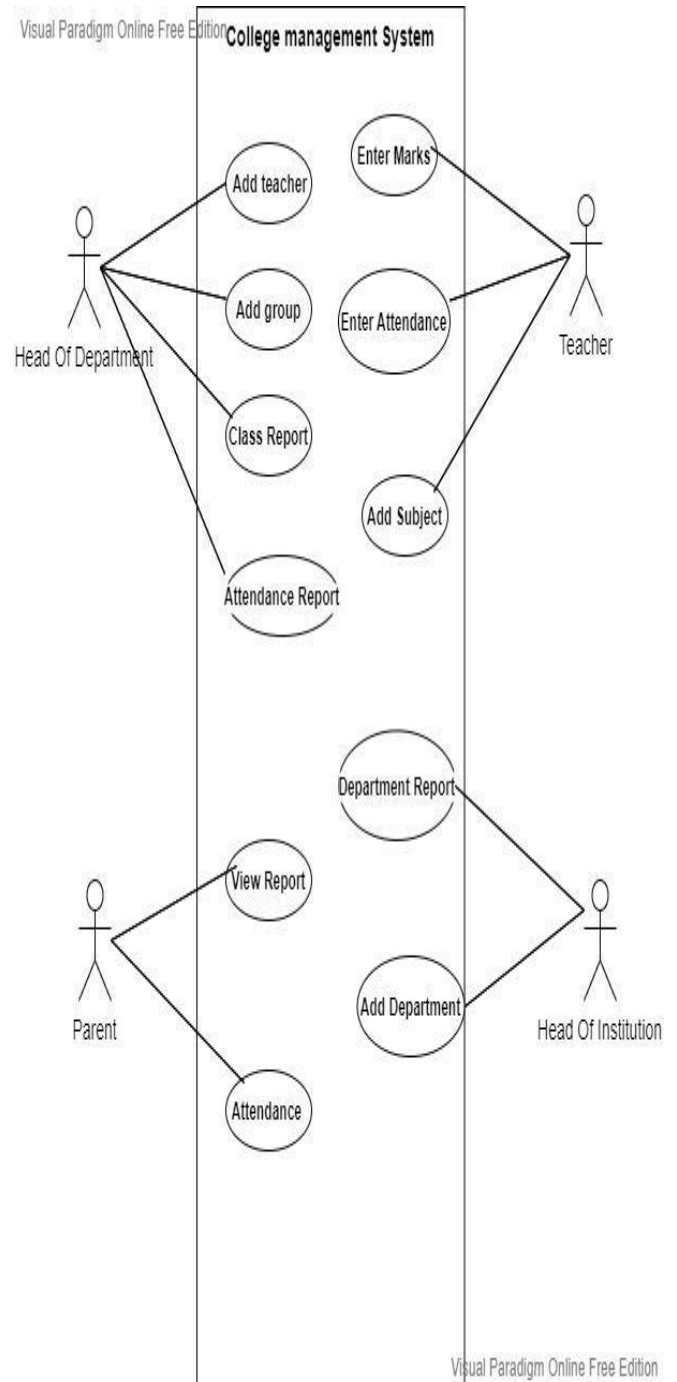

Fig 1:Use-case model for student information management system
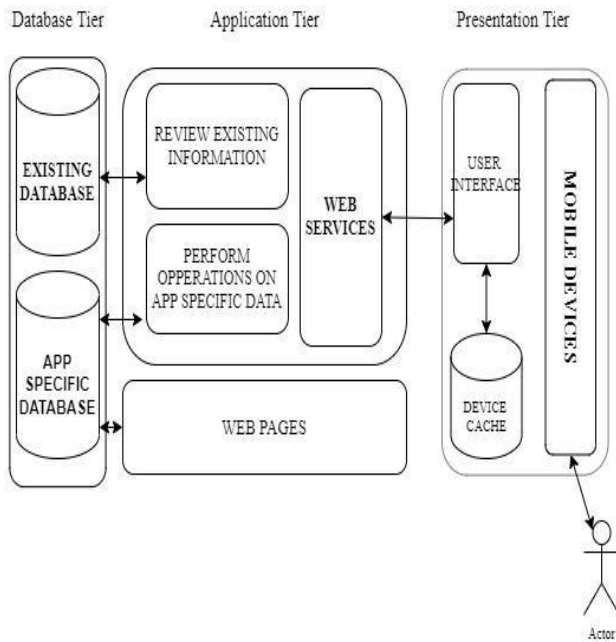
IV . SYSTEM ARCHITECTURE

Fig2 : System Architecture

A .DATABASE TIER

Database tier is composed of two data stores. One is the database of educational institutions from which pupil-affiliated information is brought. Since we perform only reclamation of data from this database and don't modify it, it can be used by a web-based information system or in any other way as it was preliminarily being used.

A small separate database element is created to add some app-specific data such as list of registered bugs of the app, records of external links to web runners etc. Produce, Read, Update and cancel operations are performed on this database as this is specific to the mobile app.

B.APPLICATION TIER

We develop web services and admin web runners for mobile apps in this tier. Web services are astronomically distributed into two groups. First group includes the services that cost the individualized information of pupils from a database based on pupils' unique id similar to the registration number. These services don't perform any production/ update/ delete operation and perform only read operations on the database of the institution. These services shoot personalized data to donation subcastes in XML/JSON format. Alternate group of web services performs CRUD operations on app specific data stores.

They transfer data to anddown from the mobile app to the data store using XML/ JSON. Also, admin web runners are created in this subcaste, which are penetrated by the College admin Department. Using these runners, the council admin department manages the configuration of the colorful element of the app.

C. PRESENTATION TIER

At the Presentation tier, we've cross platform mobile bias,

on which app is to be stationed. The donation subcaste sense is platform dependent and is written uniquely for the bias of different platforms. This sense creates the applicable stoner interface defenses on the device. Also, this subcaste acts as a consumer of web services created at middle league. It registers new addicts and requests pupil information by calling web services. Web services in turn interact with databases and deliver data to this subcaste in XML/ JSON format. The response is parsed to cost the requested information, which is eventually presented to the addicts. Cache and the original database of the mobile are used to store operational data.

VI . RESULT

A student management system is a platform that helps institutions take student data online for easier operation and better clarity. That is at its utmost important.

The student management system is suitable to collect academy-wide data online so that it can be fluently penetrated by faculties, parents, scholars, and higher authorities. That includes particular pupil information, grades, records of tests, attendance and other appraisal performance.

Basically, it allows the academy to make data points for lots of areas in one place so that it's easy to keep track of progress and performance.

VII . CONCLUSION

In this paper we have put forward the idea of an efficient and consistent method of performance evaluation of students by considering the various constraints of the education system.

The proposed model will improve the parents' participation in their children's education as a whole.It can ensure the update of the performance of their child both in academics and also in extra curricular activities if it is taken into consideration in the above system and can be an added feature in future models.

VIII . REFERENCE

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