Student Performance and Management System

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ABSTRACT - In today's world technology has reached to extent that it can be used to do various task in day-to-day life easily with less effort and time. World today has realized importance of education in one's life which has led to revolution in field of education. Universities, colleges, schools today have loads of task to be completed in given timeline. In today's scenario colleges needs to analyse student performance manually which takes a lot of time and effort by faculties working on it. Hence in order to simplify this task a web-based system is introduced which can perform student performance analysis system. Student Performance Analysis System provides a interface for school maintenance. It can used by educational institutes or coaching classes to analyse the student performance easily.
Key Words: Vb.Net, Ms Access, Student academic performance and management system.

I. INTRODUCTION

The design and implementation of a comprehensive student information system and user interface is to replace the current paper records. College staff are able to directly access all aspects of a student's academic progress through a secure, online interface embedded in the college's website. The system utilizes user authentication, displaying only information necessary for an individual's duties. Additionally, each sub-system has authentication allowing authorized users to create or update information in that subsystem.

Schools and Universities are the foundation of knowledge and an educational body on which students rely upon. Therefore, they need to maintain a proper database of its students to keep all the updated records and easily share information with students.

Most schools and Universities count on an advanced software tool knows as 'student academics performance and management' to keep all their student records and administrative operations including, examinations, attendance, and other activities.

Over the recent years, the performance and efficiency of the education industry have been enhanced by using the Student Management System. This tool has productively taken over the workload of the admin department with its well-organized, easy, and reliable online school management software.

All data is thoroughly reviewed and validated on the server before actual record alteration occurs. In addition to a staff user interface, the system plans for student user interface, allowing users to access information and submit requests online thus reducing processing time. All data is stored securely on MS ACCESS managed by the college administrator and ensures highest possible level of security.

The system features a complex logging system to track all users access and ensure conformity to data access guidelines and is expected to increase the efficiency of the college's record management thereby decreasing the work hours needed to access and deliver student records to users.

II. PROBLEM STATEMENT

Implement the vb.net for the formation of an application which is used by Admin & teachers to represent their performance and management. The goal of student academic performance management system is to develop software produce high quality software. For any school, college or other educational institute, students are an important asset in order to of great quality who excel in academics, practical knowledge, self-development and innovative thinking. To achieve this, it is become essential for every school, college or any other educational institute to analyse the

performance of students. Academic performance (AP) can be measured by conducting various examinations, assessments and other form of measurements. Managing the grades of an entire class in its learning makes the grading process easier, and the teachers have a clearly-set-out overview.

III. EXISTING SYSTEM :
In the existing system, all the student information is added manually and the data is stored in the records. Takes a lot of time and physical effort in searching and adding the information. In the existing system, there is a possibility of losing data and no proper maintenance of data. The use of linear search in file handling might increase time complexity.

IV. LITERATURE SURVEY
The features of the existing system are including a user login creator to provide user interface, student performance analyzer, student development card, achieved credit, passing criteria card and wise student performance attribute card.

4.1 Web Based Student Information Management
The design and implementation of a comprehensive student information system and user interface is to replace the current paper records College Staff are able to directly access all aspects of a student's academic progress through a secure, online interface embedded in the college's website. The system utilizes user authentication, displaying only information necessary for an individual's duties. Additionally, each subsystem has authentication allowing authorized users to create or update information in that sub- system. All data is thoroughly reviewed and validated on the server before actual record alteration occurs. In addition to a staff user interface, the system plans for student user interface, allowing users to access information and submit requests online thus reducing processing time. All data is stored securely on SQL servers managed by the college administrator and ensures highest possible level of security. The system features a complex logging system to track all users access and ensure conformity to data access guidelines and is expected to increase the efficiency of the college's record management thereby decreasing the work hours needed to access and deliver student records to users.

4.2 Objectives:
Theobjectiveofthisprojectistomanagethe details of Profile, Courses, Logins, Exam Fees.

It manages all the information about Profiles, Student, Fees.
This system reduces the workload of an institute.
It is faster way to get information about the student.
It provides facility for proper monitoring, reduce paper work along with data security.

4.3 Functional Requirements:
Student information management system aims to improve the efficiency of college information management, and the main function is managing and maintaining information. It will be ensured that the information entered is of the correct format.

4.4 Performance Requirements:
The proposed system that we are going to develop will be used as the chief performance system for helping the organization in managing the whole database of the student studying in the organization. Therefore, it is expected that the database would perform functionally all the requirements that are specified.

4.5 Safety Requirements:
The database may get crashed at any certain time due to virus or operating system failure. Therefore, it is required to take the database backup.

V. PROPOSED SYSTEM
The Student Academic Performance and Management system manages the student record, marks ,percentage ,course details. All data is store in the database. This system is effectively handling the all the record of student. We can add new record easily and fast. In this system we can add all record like name, id, address, date of birth ,age , gender, mobile no, parents no, class, course, covid vaccination details. In system we can make changes like delete, update, Insert, view, etc.

In course section we can add course details of student. the details like course name ,course id, course title, course code can be added in system. In system we can also add result of student .we can also add remark for the student. we can print the all data. we make record paperless.

1] Teacher
- **Result:** They can makeresults
- **Add Students Course:** They can add the students Course
- **Exam Time table:** they can make exam timetables

2] Admin
- **New Student:**They can add new student data
- **Old Student:**They can add old student data
- **Fee:-**they Can add fee details

- **Vaccination Information:** they can add vaccination information

Authorizedadministration, faculty members are assigned with the username and password to access the Student Performance and management System.
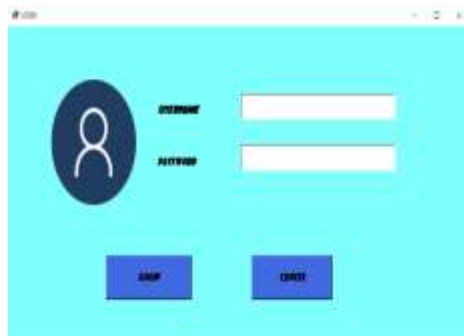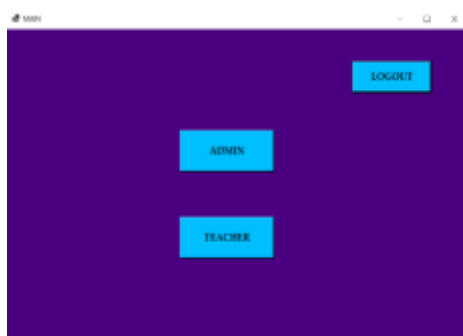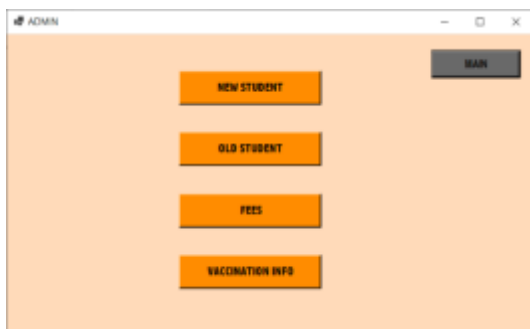

fig1

fig2

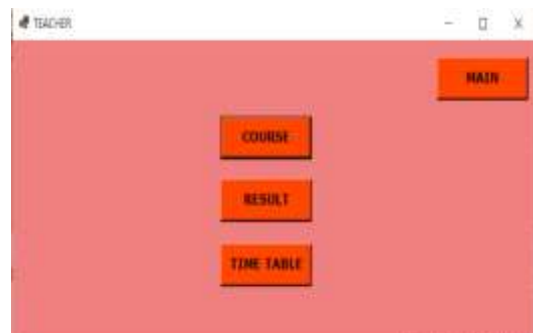Fig3

Fig4

Fig 5

fig6

Fig 7

Fig 8

VI.   PROJECT FLOW DIAGRAM

Login authority is to administration section and the faculty who are dealing with the student performance in an institution. The Student Performance Analysis system is the system online based for the managing the record of result of each

and every student. If needed the system will generate the emails to their respective parents for the improvement of the student needed.
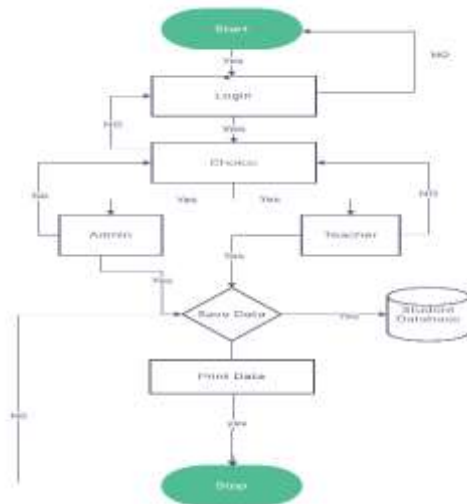

Fig9

Fig-9 illustrates the high-level view of the system. The relation between user and system is shown in the figure. Student Performance and management system is our system which is accessed by administrator to give authorities to lower user(faculties). Teacher uses the system for uploading student's Performance. Student views their marks, Percentage, Remarks. Administrator who is higher authorities needs to know the overall report of student's Performance. It is demonstrated in system by graphical representation of data in system.
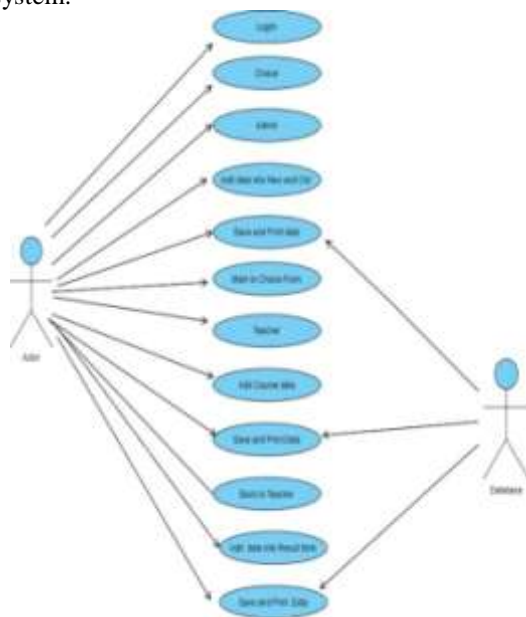

Fig10

Fig-10 gives overall view of the system functionalities. It also shows the relationship between different modules of the system. Viewing user case diagram use of the system can be clearly demonstrated. The three user of the system accesses the system modules according to the privileges provided to them by administrator.

VII.   IMPLEMENTATION
We developed a website to analyse and generate report of students based on the curriculum that represents student's academic performance. We have developed the system such that, it will automatically parse data onto the database from excel file, which will in return reduce time consumption of analysis of data. For these we used VB.Net. After teacher logins into system, data is been fetched dynamically through the database. For here, parsing is done using MS ACCESS. We hope to accelerate the analysis by developing the analysis system. It provides assistance to teachers and administrator to track record of each student, subject and department by using various techniques such sort.

VIII.   FUTURE SCOPE
Previously, data used to be inserted manually to analyse result. But currently the project supports access files for extraction of data. The future scope is that data can be fetched, parsed in other formats like doc, csv, odt, etc. Visualization can be provided to represent data in graphical format. Various representation like pie chart, graph, etc.

IX.   CONCLUSION
The goal of the system is achieved and difficulties are solved. "Student Performance with Graph & Academic Project Work Reporting System" Java project satisfies all the requirements of students in searching the projects and finding details about his\her attendance and marks. This project also satisfies the requirement of admin in adding all the details of the project and he can easily find the progress of student's attendance and marks.

REFERENCES
[1]. Ch. Aswani Kumar; K. Sumangali," Performance evaluation of employees of an organization using formal cept analysis", International Conference on Pattern Recognition, Informatics and Medical Engineering (PRIME-2012)
[2]. Shaomei Yang; Qian Zhu, "An Evaluation Model on Employee Performance Based on

Improved BP Neural Network", 2008 4th International Conference on Wireless Communications, Networking and Mobile Computing.

[3]. TANG Yu-fang, ZHANG Yong-sheng,,―Design and implementation of college student information management system based on the web services‖. Natural Science Foundation of Shandong Province(Y2008G22), 978-1- 4244-3930-0/09 2009 IEEE.

[4]. [4] TANG Yu-fang, ZHANG Yong-sheng,,―Design and implementation of college student information management system based on the web services‖. Natural Science Foundation of Shandong Province(Y2008G22), 978-1- 4244-3930-0/09 2009 IEEE.