Student Support System

[1]Bindu S, [2]Gurunatha B, [3]Sanjay, [4]Nikhil

[1234]Atria institute of technology

Abstract: Student support system is a digital initiative taken by the computer science students to produce an interface to get access to the student information. This interactive application can be used by educational institutes or colleges to store and maintain student details easily. The application maintains student data with the accurate and timely provide information on time. This support system deals with all kind of information like student details, Attendance, Marks, calendar events in the educational institutes, study materials, department details, extracurricular activities, Information on subjects, Internal Assessment details. This application tracks all the details of a student from the day one to the end of the course which can be used for all reporting purpose, tracking of attendance, progress in the course, completed semesters, years, coming semester year curriculum details, exam details, project or any other assignment details, final exam result. It will also have faculty details, students' details in all aspects, the various academic notifications to the staff and students updated by the college administration. It also facilitates us explore all the activities happening in the college, Different reports and Queries can be generated based on vast options related to students, batch, course, faculty, exams, semesters, certification and even for the entire college.

Index Terms- SQL queries, Data base, server, user interface.

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 online interface embedded in the college's website. 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. 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. Previously, the college relied heavily on paper records for this initiative. While paper records are a traditional way of managing student data there are several drawbacks to this method. First, to convey information to the students it should be displayed on the notice board and the student has to visit the notice board to check that information. It takes a very long time to convey the information to the student. Paper records are difficult to manage and track. The physical exertion required to retrieve, alter, and re-file the paper records are all non-value-added activities. This system provides a simple interface for the maintenance of student information. It can be used by educational institutes or colleges to maintain the records of students easily. Achieving this objective is difficult using a manual system as the information is scattered, can be redundant and collecting relevant information may be very time consuming. All these problems are solved using online student support system. The paper focuses on presenting information in an easy and intelligible manner which provides facilities like online registration and profile creation of student's thus reducing paper work and automating the record generation process in an educational institution.

The Goal of This Paper

A. Purpose

The purpose is to implement a college application which contains up to date information of the college. That should improve efficiency of college record management. Student support system mainly focuses on   managing the information of the students, faculty, placement cell information, exam section, related information of the college which is maintained by the college administration.

B. Objectives

•   Providing the online interface for students, faculty and parents.

•   Increasing the efficiency of college record management.

•   Decrease time required to access and deliver student records.

  Below are modules of the student support system.

Administrator:

The administrator is responsible for entering the new student, promoting the student from one class to another, from one semester to another and from one year to another. Managing the student accounts like any changes regarding to the name, address etc. The administrator also manages the faulty accounts like entering a new faculty, assigning the faculty to the subjects. The administrator

also updates the college related information like calendar of events, information regarding any other events that occur in the college. The administrator will check the all the updates i.e. student updates, faculty updates, exam updates etc. The administrator has the highest level of power in the student information system.

Faculty:

 The staff can update the information regarding the student's attendance, internal marks of the students and any information regarding the subjects they handle. They can also view the student details for better understanding the student performance and improving the efficiency of the student. The staff also gets the updates from the college regarding any events occurring in the college. They can also get the notifications from the placement cell and exam section.

Student:

The student is the main focus, because in every college student plays a very important role. Student can access the information of the college, course details, subject details, faculty details, training and placement cell information and exam section information. The course details include information regarding branch he is studying, the academic curriculum of the college, year wise subject offered by the branch, the subject details include the syllabus of the subjects, information regarding the staff handling the subjects, the subjects he presently registered for the semester he is presently studying, attendance and internal marks of the subjects, he can also ask any queries to the staff regarding the subjects. The placement details include the information about the companies, the eligibility criteria for attending recruitment of the companies, the process of recruitment, the date and time of the recruitment. The placement cell updates the student's information who got selected for a company. The exam section details include the internal and external time tables, the room allocation for the exams, it also contains the semester end results. Parents:

Parents can have access to their children's details like attendance report, Internal Assessments, Semester marks and rise the query regarding any issues with the college management and get it resolved.

Conclusion

This Application assists in automating the existing manual system. This is a paperless work. It can be monitored and controlled remotely. It reduces the man power required. It provides accurate information always. All years together gathered information can be saved and can be accessed at any time. The data which is stored in the repository helps in taking intelligent decisions by the management. So it is better to have a Web Based Student Support system. All the stakeholders, faculty and management can get the required information without delay. This system is essential in the colleges/hostels and universities.

References

[1] Junko Toyoshima, Koichiro Fuji, Yuji Tokiwa, "Development of a Mobile-Friendly Classroom Support System to Improve

Students' Presentation Skills" 2016 IEEE Frontiers in Education Conference (FIE)

[2] Guadalupe Ortiz, Alfonso García de Prado, "Web Service Adaptation A unified approach versus multiple methodologies for different scenarios" 2010 Fifth International Conference on Internet and Web Applications and Services.

[3] Juan Manuel Vaca, J. Enrique Agudo, Mercedes Rico, "A Pilot Study: Documenting Engineering School Systems that Support

High Student Retention" 2012 IEEE 12th International Conference on Advanced Learning Technologies.

[4] Juan Manuel Vaca, J. Enrique Agudo, Mercedes Rico,

"Adaptive Competence-Based System in an E-learning Platform: Adapting Support Tasks to Students" 2012 IEEE 12th International Conference on Advanced Learning Technologies.

[5] Shipra Ravi Kumar, Ravi Sharma, Keshav Gupta "Strategies for Web Application Development Methodologies" 2016 International Conference on Computing, Communication and Automation (ICCCA).

[6] J. L. Herrero, F. Lucio, P. Carmona, "Web services and web components" 2011 7th International Conference on Next Generation Web Services Practices.

[7] Lakshmi Prasanna Chitra, Ravikanth Satapathy, "Performance Comparison and Evaluation of NodeJS And Traditional Web Server (IIS)" 2017 International Conference on Algorithms, Methodology, Models and Applications in Emerging Technologies (ICAMMAET).

[8] Yuriy Syerov, Solomia Fedushko, Zoriana Loboda, "Determination of Development Scenarios of the Educational Web Forum" 2016 XIth International Scientific and Technical Conference Computer Sciences and Information Technologies (CSIT).