Student Supportive System

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Abstract- *Student support system is a digital initiative taken 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, student 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.*

Keywords- Online Student Supportive system, e-learning, Student management system, Smart connect.

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 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.

II. LITERATURE SURVEY

A. A CASE STUDY OF THE STUDENT ACADEMIC SUPPORT SYSTEM: STATE UNIVERSITY SYSTEM OF FLORIDA (HELEN Y. HILL)

Here in this paper the boundaries of the study limits data to a single college within each university and the levels of usage within other colleges at each institution were not considered. This precludes the ability to make generalized statements about computer assisted advising usage as it would apply to the entire university. The nature and size of the study will limit the findings to an overview of the institution's usage of the Student Academic Support System, but will allow for a more detailed examination of usage by the Colleges of Business within each university. State universities that do not have a College of Business are identified and the overall usage of computer assisted advising was examined. The study tried to identify each institution's unique and separate approach to computer assisted advising.

B. AN ACADEMIC DECISION _SUPPORT SYSTEM BASED ON ACADEMIC PERFORMANCE EVALUTION FOR STUDENT AND PROGRAM ASSESMENT (DERVIS Z and IBRAHIM ERSAN)

An integrated approach to the academic decision-support system design has been demonstrated which includes administrative and planning features as well as statistic alanalys is of performance features. The importance and wealth of information that can be extracted from student registration and grades databases has been shown. An extremely useful and critically important tool for general university performance analysis has been proposed, designed and developed that provides a great insight to the effects of major academic decisions. Examples of these are the implementation or removal of a `Repeat (Probation) System', or changing the `Entry Requirements' or the `Examination Type' for entry to the university. Definition and use of general performance indices for global use have been made. These include ACT/TIU ratio, distribution of grades at graduation and during education, ACT/ TIU table and the scatter diagram for entry/ graduation CGPA values. Display of information in certain useful formats and forms have been proposed and implemented

C. NEW BRIDGE BETWEEN FACULTY AND STUDENTS (YURIKO HORVATH, WALTER R. RICE2, M KRIMO BOKRTED AND JORGE J SANITAGO AVILES)

With the growing emphasis on technology use in the learning environment, teachers have been encouraged to use different forms of information technologies to help better organize and provide easier access to course material. Despite this encouragement, the majority of teachers have not been aware of what technologies are available and how these technologies may benefit student. The goal of developing an Information Technology course designed and run by students is to create a mutually beneficial relationship between faculty and students. The main focus of the Information Technology course will be on the use of HTML tools, discussion forums, and methods of presenting course material on the World Wide Web. By teaching faculty how to better communicate course material, future students can benefit from a better course structure. Faculty members benefit because course material can be conveyed to students in a more efficient manner.

D. INTERNET-BASEDPERFORMANCE SUPPORT SYSTEM IN ENGINEERING EDUCATION (CATALINA MARTINEZ, NURIA RIOPEREZ LOSADA)

This paper is about the "Internet-based performance support systems with educational elements" model. The theoretical foundations and characteristics are analysed together with their application being to check the model's effectiveness by means of a mixed research approach with university students. Measuring instruments consisted of questionnaires on attitude about learning through the use of computers as well as reflection on the learning methods, and achievements on practice tests. The results showed that students had positive attitudes and good results on achievement in performance. We recommend the use of educational platforms that are performance learning-centred in universities and for continuing training, as a necessary answer to current workplace demands.

III. EXISTING PROBLEM

The rapidly changing environment of management information systems and the move to a different computer environment raises the question of how to access the Student Academic Support System. The need to understand the flexibility of the computer assisted advising system and to identify how the Student Academic Support System has been utilized by parents and entire college becomes imperative as each university searches for the best practices and process for managing larger populations of students and their corresponding information. Each institution is constantly moving to enhance their current computer environment or to move to a totally different system that best meets their needs. This creates a need for re-evaluation of the computer assisted advising system in place. picture of the development of computer assisted advising practices within the state may open a discourse to allow recommendations regarding the future of the Student Academic Support System to flow freely within the system

IV. SCOPE AND OBJECTIVES OF THIS SURVEY

The purpose is to implement a college application which contains up to date information of the college which will 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

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
- Maintaining database security, mainly on CIA factors of database security
- Regulation and Updating system and its services.

V. SYSTEM DESIGN

There are two important components in the student support management system one is the attendance and the next is the internal marks component. The faculty will be having the access to take the attendance either manually or with the help of the csv file. The attendance which is taken can also be edited with the help of the edit attendance option which is provided to the faculty. Once the attendance has been taken the faculty can download the attendance report for the future references. The student and the parent have option of viewing the attendance subject-wise and get to know their attendance percentage. The faculty will behaving the access to enter the IA marks either manually or with the help of the csv file. The IA marks which is taken can also be edited with the help of the edit IA marks option which is provided to the faculty. Once the IA marks has been taken the faculty can download the IA marks report for the future references. The student and the parent have option of viewing the subject-wise IA marks and get to know their average in the IA marks. Below figure explains very clean manner
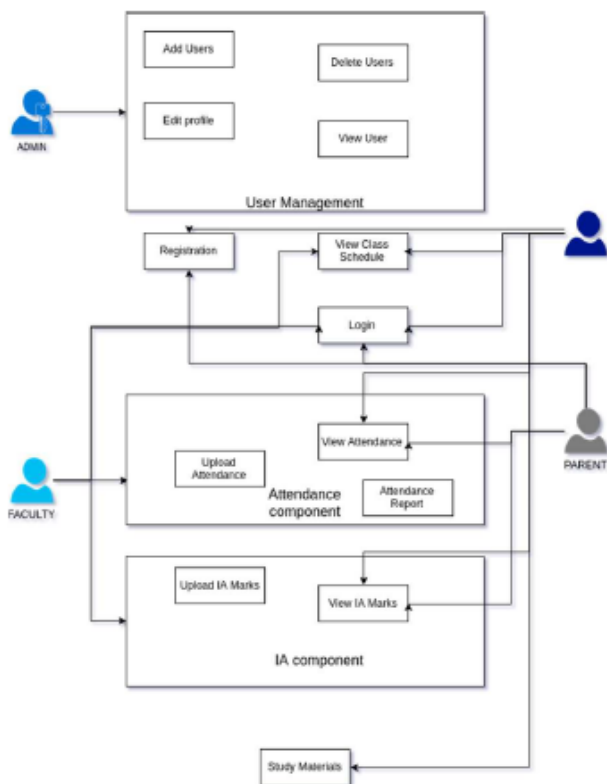

Fig. Overall System Design User case diagrams.

listed user case diagram shows the relation between the actor which is admin and the different use-cases. The admin will be having the access to the following features such as the admin can create the class and he can assign the students who belong to a particular class. The admin first has to upload an csv file which has the valid student university registration number only those students with the valid registration number can be logged on to the system. The admin also has the power to register a faculty by entering all details and validating the data
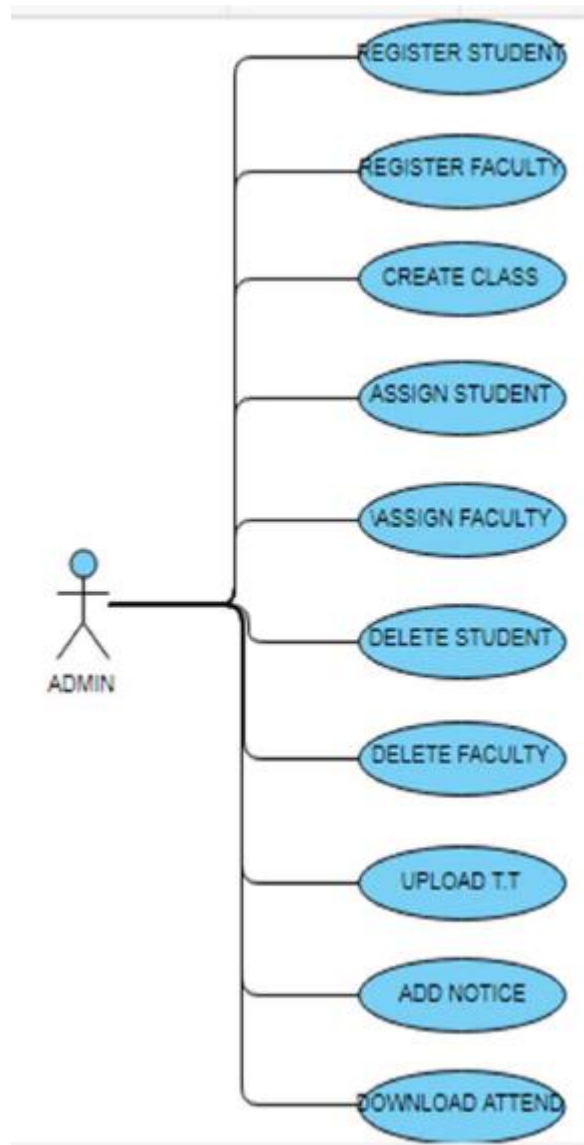

Fig. User diagram for Admin

Once the faculty and the students are registered their username and the password will be sent to their respective mail. With the help of the username and password the student and the faculty can make use of the system. Admin also as the feature of downloading a particular class attendance by selecting the unique id which is given to the different class. If a student or the faculty leaves the college then the credentials

related to that student or the faculty can be deleted by the admin so that in the future, they cannot access the system. The admin is also provided with the change password option where he has to set anew password of his choice.If the admin forgot the password while logging in then there is an option of change password where the admin has to enter the id given to him and the new password will be sent to the registered mail
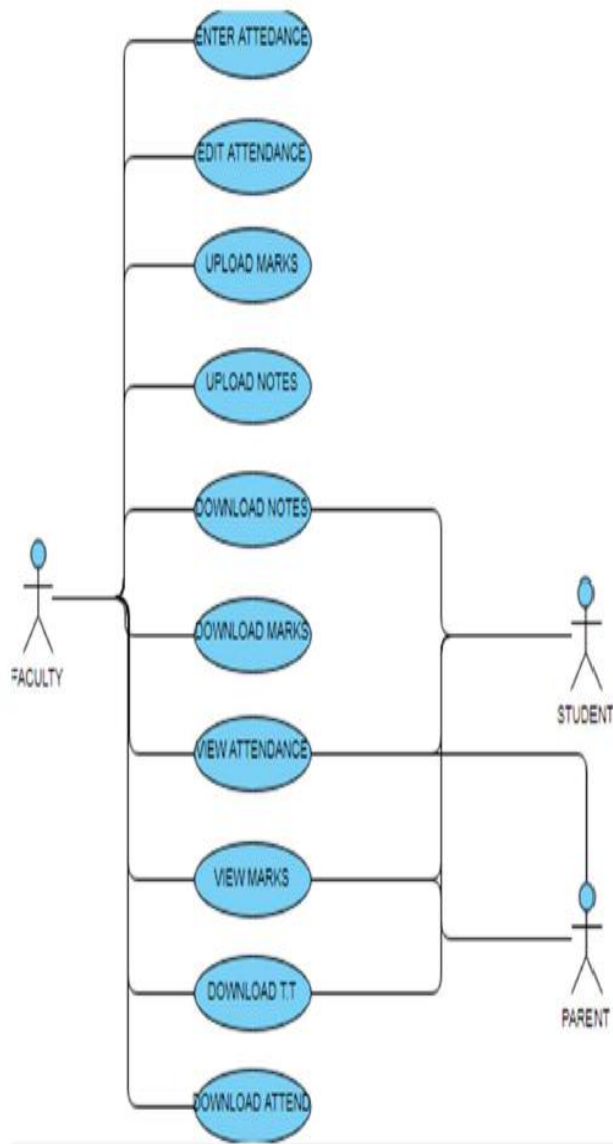

Fig. User Case diagram for students, Faculty, Parents

The above use case diagram shows the relation between the actors involved such as the faculty, Parent and the student with respective use cases. Once the faculty has been registered by the admin by providing the correct details verified by the faculty the login credentials for the faculty will be sent to their registered mail, With the help of which the faculty can login in to the system and make use of the student

support system. The different functionalities which are provided to the faculty involves taking the attendance to the particular class which has been assigned by the admin to the faculty. The faculty is also provided with the edit attendance option. The faculty can also enter the IA marks of the students who has been assigned to their class. The attendance and the IA marks can be entered with the help of the manual enter or with the help of the csv file. So the faculty can upload the attendance and the IA marks with the help of the csv file. Once the attendance and the IA marks has been entered the faculty has the option to view the entered attendance and IA marks of all the students who has been assigned to the particular class. The faculty has also been provided with downloading the attendance report and the IA marks report. He can also upload the notes of the particular subject which has been assigned to him which can be viewed by the student. The different option which are provided to the student involves viewing the attendance and the IA marks of each subjects which he has been assigned to. The student can also download the notes which has been uploaded by his faculty. And has the option for change password where he can enter the new password.

VI. CONCLUSION AND FUTURE ENHANCEMENT

In summary, we proposed a web application for student support system using java,jsp and other programming and scripting languages. We have four important roles/users Student,Faculty, Parent and Admin and the relation between each user is clearly maintained. A student can view his/her daily attendance report entered by faculty and can also download ifit is required and can also view and download internal assessment report after each internals and also can read and download notes uploaded by faculties. A faculty can add internal assessment mark of each student and enter attendance for each class assigned and also uploading notes and can even download internal marks and attendance template. A parent can view and download his/her peer's internal assessment marks and attendance. A admin can assign faculty to a class and assign subject to faculty and also assign students to class and admin can even add/delete any user whenever required and admin is hierarchically superior. The application is designed in such a way that it is secured, reliable and performance wise it is tested and confirmed that all the functionalities are giving accurate results and data backup is maintained to use in case of emergency. In future, we need to make application such that from top level management like CEO of the institution to low level management like non-teaching staff to be involved in the hierarchy. The application itself should generate random unique seat numbers to both student and also faculties. The admission process and paying

fees and paying salary to employees everything should be in one platform. Linking biometric to the system makes it easy to collect necessary personal information of users and can help in security issues thus avoiding any dupe. Making application as one overall application of institution thus including every other website that is linking other website to institution to this and also connecting or directing to VTU website to check semester results and also to know any updates from university.

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