

Smart Record

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Abstract: *The mission of the Smart record is to create an integrated information technology environment for HOD, faculties and the administration. Smart record provides a simple interface for maintenance of student information. It can be used by the colleges to maintain the records of students easily. The smart record deals with all kind of student details, academic-related reports, curricular activity details and counseling details. It is mainly useful for educational establishments to manage student data which also facilitates all individual associated information for easier navigation on a daily basis. It provides capabilities for entering the assessment scores, tracking student attendance and managing many other student-related data needs in a college.*

Keywords: Smart Record, Student Information, Online Interface

1. Introduction

The earlier system in college used only paper records for maintaining the student's details. There are several disadvantages to this method. Paper records are tedious to manage and track. Thus it led to the origination of smart record system. This system provides a simple interface for the maintenance of student information and examination scores. Faculties can directly access all facets of a student's academic progress through a secure, online interface embedded in the college's website. In addition to this, each of the sub-systems has authentication allowing only the authorized users to update information in that subsystem. All data is thoroughly reviewed and verified on the server before actual record alteration occurs. All the data are stored discretely on a SQL server that is managed by the college administrator and ensures the highest possible level of protection. The system features a logging system to track all users' access and ensure conformity to data access guidelines thus expecting to increase the efficiency of the student's record management system and thereby reducing the time needed to access student records.

2. Literature Study

a) Online College Management System

This paper [1] mainly focuses on providing a simple interface for the maintenance of student information. The creation and management of accurate, up-to-date information regarding students' academic careers is critical for the faculties and administration of an educational institution. A student information system deals with all kinds of data from enrollment to graduation, including program of study, payment of fees, attendance record and examination results. All these data need to be made available through an online interface.

b) A Research Paper on Student Information and Score Management System (SISMS)

This paper [2] focuses on providing information to support the operation, management and decision-making functions of the students' in the educational organizations. In the face of huge amount of information, it is required to possess the student information and score management system to improve the efficiency of student. Through this productive system, the management can be standardized, scientific statistics can be

generated and much more. Thus the workload of management can be reduced.

c) Departmental Information Management System

This paper [3] focuses on simple interface for maintenance of faculty information. The creation and management of accurate, up-to-date information regarding a student's academic career is critically important in the university as well as colleges. Student information system deals with all kind of student details, academic related reports, college details, course details, curriculum, batch details, placement details and other resource related details too. It tracks all the details of a student which can be used for all reporting purpose, tracking of attendance, progress in the course, completed semester years.

3. System Design

The designing phase of the smart record was done after examining documents and researching existing systems to get a fine clarity about the system. Verification of facts was also done for those to adhere to our system. This system uses both qualitative and quantitative approaches. The design of the smart record system first includes the design of the home page which provides the gateway for all the staffs in order to access the system. Every staff using the system has a unique username and password preferred by them. The home page mainly contains a login form through which staffs can log in into the system by entering the username and password in order to view the students assigned to them respectively. Similarly, this system is controlled by an admin. The admin has to provide the username and password to perform his further functionalities.

a) Faculty's Functionality

Each faculty will be assigned with the group of students by the admin. The main responsibility of the faculty is to maintain the reports and records with up-to-date information perfectly for each student under their control respectively. Faculties are given access to view and edit each of the student's detail sections. There are about 5 data sections where faculties have the access for viewing. They are Student's Profile, Academic details, Counseling and Remarks, Absenteeism record, Co-Curricular activities, and Extra-Curricular activities. Similarly, there are about 3 data

sections where faculties are given rights to edit the details for the student's assigned to them. They are Counseling and Remarks, Absenteeism record, Co-Curricular activities, and Extra-Curricular activities. The interface of this system is designed in such a way that the details can be entered semester-wise from semester 1 to semester 8. These are the mandatory responsibilities of the faculties in this smart record system.

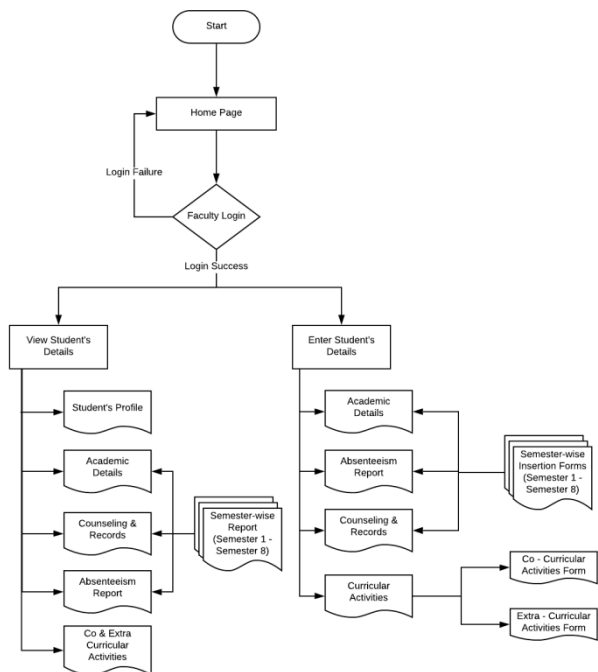


Figure 1: Block Diagram depicts Faculty login

b) Admin's Functionality

Admin has most important responsibilities in this smart record system. One of them is adding the faculty credentials to the system. The faculty credentials include faculty's id, faculty's name, faculty's username and password. The faculties are given a choice to choose their own username and password for logging in into the system by the admin respectively. The next responsibility of the admin is to assign the students to the appropriate faculties. This can be done by assigning the student's register number under each of the faculties who are responsible for them. These are the mandatory responsibilities of the admin in this smart record system.



Figure 2: Block Diagram depicts Admin login

4. Module Description

In The module description gives detailed view about the modules involved in the smart record and its functionalities. Each of the modules carries a unique set of information.

a) Student Profile

Student Profile module consists of all the personal information of the student such as name, university register number, phone number, email id, father's name, nationality, languages known, etc. It also contains the academic details until higher secondary level such as marks scored in percentage, the name of the institution and board of study.

b) Academic Details

Academic Details module contains a detailed semester-wise report (semester 1 – semester 8) of all the marks scored by the student in Unit test – 1 & 2, Internal Assessment – 1 & 2, Revision Exam, Model Exam, and University Exam respectively. This module also contains added information such as GPA, CGPA, Standing Arrears and History of Arrears.

c) Counseling and Remarks

Counseling & Remarks module consists of semester-wise report (semester 1 – semester 8) of the counseling and suggestions given to the student after Internal Assessment – 1 & 2, Revision Exam & University Exam respectively. Each section consists of date and time of counseling, topics discussed and suggestions given during counseling session for the respective students.

d) Absenteeism Records

Absenteeism Records module consists of the detailed semester-wise record (semester 1 – semester 8) of absenteeism. It contains details such as date, time and reason given by student for his/her absence in the institution.

e) Curricular Activities

Curricular Activities module consists of the two sub modules. They are Co-Curricular Activities and Extra-Curricular Activities respectively. Co-Curricular Activities consists of the particulars about the seminars and conferences participated by the student. Extra-

Curricular Activities consists of the particulars about the sports and cultural events participated by the student.

5. Conclusion

It is always prudent to opt for a student information system that is designed using modern system architecture to cope with changing requirements. This system should encompass very solid information coding and distinctly outlined business applications. Since this system also includes the university result prediction facility the faculty members can give more attention to the weaker students. The overview of system elaborates the ease of information delivery at the tip of your fingers with precise data and teaches them to manage their time efficiently.

References

- [1] Kartiki Datarkar, Neha Hajare, Nidhi Fulzele, Sonali Kawle, Vaibhav Suryavanshi, Dipeeka Radke, "Online College Management System", International Journal of Computer Science and Mobile Computing, (IJCSMC), Vol. 5, Issue. 4, April 2016.
- [2] Prof. D. M. Dalgade, Aishwarya Pandey, Garima Negi, Neeti Papat, "A Research Paper on Student Information and Score Management System (SISMS)", International Journal of Advances in Cloud Computing and Computer Science (IJACCCS), Vol. 2, Issue. 2, May 2016.
- [3] Prof. Uday U Rote, Vinit V Shah, Darshan D Thakkar, Shantanu Y Shastri, "Departmental Information Management System", International Journal of Innovative Research in Science and Technology, Vol. 3, Issue 9, February 2017.
- [4] Dipin Budhrani, Vivek Mulchandani, Yugchhaya Galphat, "Student Information Management System", International Journal of Engineering Development and Research (IJEDR), Vol. 6, Issue 1, January 2018.
- [5] Prabhu T Kannan, Srividya K Bansal, "Unimate: A Student Information System", International Conference on Advances in Computing, Communications and Informatics (ICACCI)-p-1251-1256