

Student Information System

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Abstract - (SIS) Student Information System enables us to access all of the necessary forms of information required by the users or the teachers to manage their own or others authorized record, let's say students records in an automated manner over the internet at any point in time [1]. The information or the documents of the candidates or students are manipulated in such a way that it provides an alliance with the system to balance the student's information. The organizations such as big universities make use of or recycle the records of the students very effectively and efficiently [5]. All the data available in the form of digital documents which are updated, modernize and renovated time to time by the department or the administration, which in this case is the faculties and the higher authorities in an organization, are most likely to be treated as sensitive data for every section [2]. The college details as well as the student's details along with the course and batch details followed by curriculum and placement details and more importantly academic-related records and reports with all the necessary resources are taken care of or handled by the (SIS) Student Information System [3]. The Student information system allows us to examine and analyze all the interest, affairs and transactions in the college. Different ambiguity and uncertainties can be produced and established on various substitute or preferences related to the student's semester including the courses and the examination [2].

Keywords-sis, student information system, sims, software, web-based portal, attendance management, students' records, Database, HTML, SQL.

I. INTRODUCTION

A software application which is basically a web-based designed known as Student Information System to introduce an organised information trading environment for teachers, student and the college and universities [2]. In many institutions, this is very difficult to maintain student data. Due to this reason, it is very inconvenient to access information about any student. This system will be used to maintain records of the students that are registered in or that have completed academic course. Providing an appropriate registration system or a channel to the new candidates [1].

Maintaining each and every account of the candidate in a non-document format from subscription or we can say enlistment to the end of the academic. Modernizing the information accessible by the department on their workspace whenever required in just a fraction of seconds [4]. By having an Integrated control over the records of the candidates or the students. The student information system is a computerized or programmed version of hand-operated or manual student management system. The students can audit their data and records whenever they feel so [5].

II. MOTIVATION

It is an attempt to replace the conventional way of storing student records with the new online methods which is quick and accurate. We can provide privileges to colleges and students to access their data at any time. We see a lot of colleges maintain a record in hard copy format. Introducing a system will be beneficial to such colleges to work faster and easy access to student's data [2].

III. SCOPE

The students of colleges register for courses then their data has been stored into the databases of the information system. When teachers required the information about any student, they can access through the Student Information System. Students and teachers can access attendance, academic progress [5]. SIS supports a ton of functions that are useful from the admission of the students in the college to the graduation of them. The students can request their documents which are submitted in the institute at the time of admission when their graduation gets completed.

IV. LITERATURE REVIEW

1. Paper 1- In this paper, they developed the college student management system based on the web portal.

They have used the database system to store the data. In this system, student's information like their attendance, employment, course type is storing. But the student information is not secure because they are not using the login system because of this anyone can access the information [1].

1.1. Weaknesses:

- In this system, it does not have an alumni module which cannot have the track on pass out students.
- In this system, it also does not have online fees payment module.
- Not using the security system.

1.2. How to Overcome:

- Encrypting the student's information by adding login system.
- Fees payment module can be added in this system.
- Requesting module can be added in this system.

2. Paper 2

In this paper, student's information is store by creating the database using PHP and MySQL. The students and faculties can access the information system by login into it. After the login students can access their courses, college notifications, the exam and placement updates. Faculties can access student information, update student course details [2].

2.1. Weaknesses:

- It does not have fees module in which students cannot access their pending fees information.
- Administrator can only add the new student.

2.2. How to Overcome:

- Adding the fees module can make student easier to access their fees information.
- By verifying the student via an email, the new student can get access to the system.

3. Paper 3

In this paper, the system is the automation of the manual record management of the students which helps them to access their data easily at anytime and anywhere. After providing the login credentials home page appears which shows the notifications and the activities of the college. It stores all the important information of the students in one place very securely [3].

3.1. Weaknesses:

- The login and registration are not secure in the database because of not using any security algorithms.

- It does not contain requesting module to access documents submitted at the time of admission.

3.2. How to Overcome:

- Security can be improved by using security algorithms like sha1 or sha256 or md5.
- By adding the requesting module in the system students can access their documents any time.

4. Existing System:

We have reviewed the existing Student Information System of the Master Soft. In this system, they are maintaining student records like their personal records, academic progress. Teachers can access the data of any student at any time. The online fees payment module is also included in the system [6].

Table 1 Competitive Analysis of Our System.

Parameter	Academic	Alumni	Fees	Notification	Request
Paper 1	Yes	No	No	Yes	No
Paper 2	Yes	No	No	Yes	No
Paper 3	Yes	Yes	No	No	No
Paper 4	Yes	No	No	No	Yes
Existing System	Yes	No	Yes	Yes	No
Our System	Yes	Yes	Yes	Yes	Yes

V. METHODOLOGY

The proposed methodology can be used to implement the project is explained as follows. The use case diagram of the system is shown in figure 1.

There are two actors in the system which are the student and faculty. The system is developed by using HTML, CSS, JavaScript for front end development and PHP, MySQL for the

back-end development of the system. The student logs in to the system and can access their academic records which include the yearly academic records, attendance, fees and the notifications from the institute. The academics can further include the alumni which stores the data about the pass-out students from the institute. Alumni further includes requesting of the documents which are submitted at the time of the admission process in the institute. The proposed method is help to maintain the records of the student academic details and their records after completing the course.

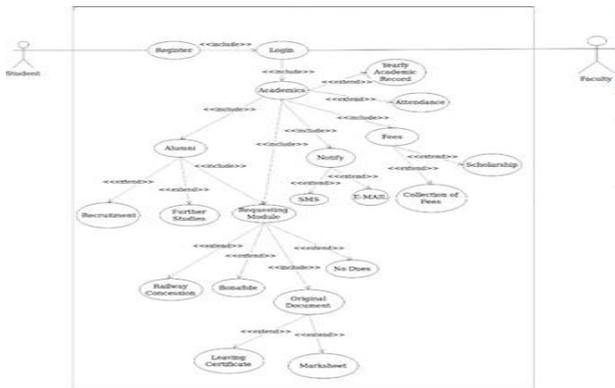


Fig. 1 Use Case

The proposed system has different modules as shown in the system architecture of the project as Fig. 2.

1. Registration Module

A user enters the details of username and password. The roll number will be the username for every user which is unique it will be given by the institute. The passwords are stored in sha256 encrypted hash ensuring the security aspects. With the help of username and password, a user will be able to gain access to the Web Portal. After Registration of User, it will Automatically Login the User to Portal. After log in to the System, new page appears for admission form.

2. Academics Module

Academics module contains the details of the student attendance, there academics like marks in the internal as well as external exams of every semester. After filling the admission form, the students and faculty can access the student yearly academic records, there attendance for the current semester and the achievements of the student in the whole academics by entering the roll number and the name of the student.

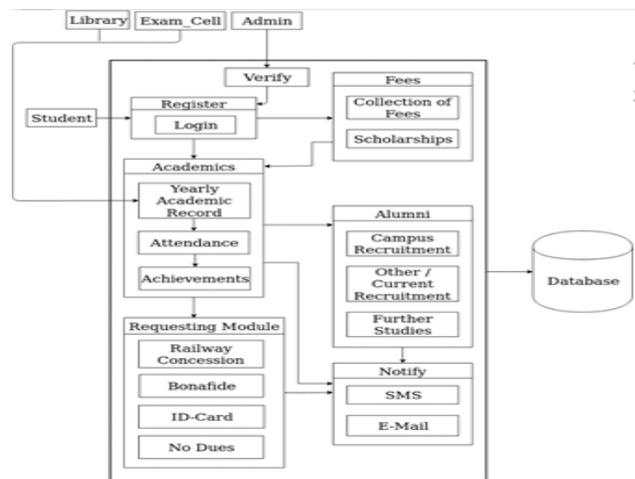


Fig. 2 System Architecture.

3. Fees Module

The student and faculty can access the data about the fees by entering the roll number, current year and name of the student. Fees module contains the collection of fees and the scholarships of the student. The scholarship of every student can be stored in the fee's module. The scholarship forms can be submitted through this module without getting in the queue for a long time and without wasting the valuable time of the student.

4. Alumni Module

In the alumni module, faculty can access the data about the pass-out students from the campus every year. The alumni module contains the data about the alumni whether they are recruited from campus or from the outside of the campus. It also contains the data of alumni current job. It also contains the data of alumni who are going for further studies.

5. Requesting Module

In the requesting module student of campus can get railway Concession, Bonafede, ID-card and the No Dues. The pass-out students can get their original documents from the college by using this module. The students can get railway concession by filling the forms available on the website. The pass-out student can use this function to apply for their original documents after completing their graduation which is submitted to the institute at the time of admissions.

6. Notification Module

In the notification module the college authorities will inform the student's and their parents about their monthly attendance and about their Unit Test marks and also the end semester marks by using the SMS and the E-mail. The important notices from the institute can be sent to students at any time by using the Student Information System very easily. They can get notifications like holidays, extra lectures, important meetings.

VI. RESULTS

The results of the implemented system are as follows:

- Home Page



Fig 3 Home page.

• Registration Page



Fig 4 Registration page.

• Login Page

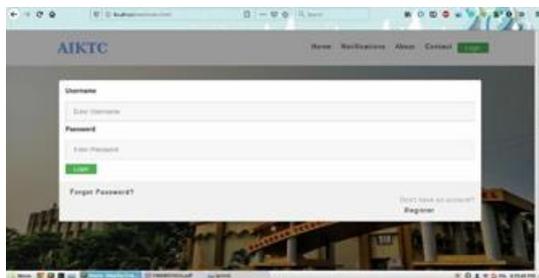


Fig 5 Login page.

• Academics Form

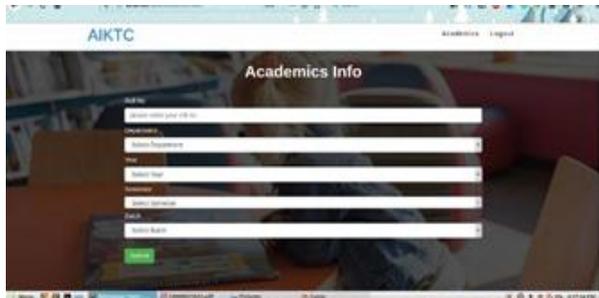


Fig 6 Academics Form.

• Admission Form

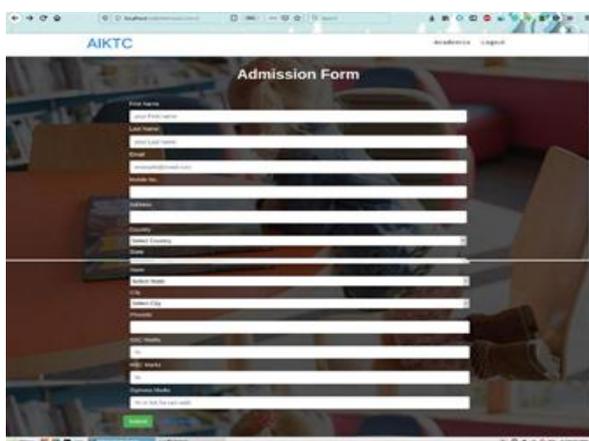


Fig 7 Admission Form.

• Notification Page



Fig 8 Notification Page.

• Contact Form



Fig 9 Contact Form.

VII. CONCLUSIONS

- Faculty can conduct, govern and even oversee the attendance of the candidates or students by adopting the Student information system, according to avoid and discard the desk work.
- Teachers or faculties can authorize the students or the candidate and can make out or confirm the eligibility of any student who can appear for the exam and who cannot.
- Teachers or faculties can authorize the students or the candidate and can make out or confirm the eligibility of any student who can appear for the exam and who cannot.
- Attendance details can be developed at any point in time.
- Parents and Guardians including the students can trace their grades smoothly and effectively.
- And hereby this project is a user-friendly application for the maintenance of the candidate's records.

REFERENCES

- [1] L. Meng, "College Student Management System Design Using Computer Aided System", International Conference on Intelligent Transportation, Big Data and Smart City, Halong Bay (2015, pp. 212-215)
- [2] S.R. Bharamagoudar, Geeta R.B., S.G. Totad, "Web Based Student Information Management System", International Journal of Advanced Research in

Computer and Communication Engineering (June 2013)

- [3] Dr. K. Venkata Subbiah, D. Dinesh, Ch Suresh, "Development of a Student Database Management System for a University", International Journal of Engineering Research and Application (August 2016)
- [4] Rami A. Y. Raba, Mohammed M. I. Awad, "Students' Portal Architecture based on SOA", 2015 3rd International Conference on Control, Engineering & Information Technology (CEIT), Tlemcen (2015)
- [5] Student information and management portal, "www.slideshare.net"
- [6] Student Information System, "https://www.iitms.co.in/products/studentinformation-system-sis/"