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STUDENT INFORMATION MANAGEMENT SYSTEM

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ABSTRACT

Student information management system provides a simple interface for maintenance of student information. It can be used by educational institutes or colleges to maintain the records of students easily. Whenever we are in a need of college attendance status, exam results and we need to go to the faculty. This system has lots of disadvantages as handling of paper record is very tough. Achieving this objective is difficult using a manual system as the information scattered, can be redundant and collecting relevant information may be very time consuming. The best solution to this is website which stores and handles the data of students at a single place. All students his/her basics details and attendance status with their respective roll numbers. Student login is handle by user login module whereas faculty and administrators can login as admin to handle student details.

1. INTRODUCTION

The earlier system of college to maintain student records was manual paper based system. In addition to that there was chance of data lost. Title of the project is student information management system is defined as a web application that aims to all the level of management providing information within an organization. This system can be used as information and data sharing system for the college. It deals with the various activities related to students. It contains two types of user such as administrator and student. Administrator has the power to add and edit student profile. The administrator can access all the details for the student and it allow the student to keep up to date profile. It also facilities keeping all the records of students such as their id, name, personal details, academic details, fees details and so on. So, all the information about a student will be available in a few second. It also provides a less time-consuming process for viewing, adding, editing and deleting the details of the students. All these problems are solved using this project. All these problems are solved using student information management system:-providing the online interface for students, faculty etc., increasing the efficiency of college record management, decrease time required to access and deliver student records. To make the system more secure, decrease time spent on non-value added tasks.

2. EXISTING SYSTEM

The staff enters corresponding subject attendance, marks of a student and other details then those must also be entered in the excel sheets and validations are to be done by the user itself. So, there will be a lot of a work to be done and must be more conscious during the entrance of details. The manual system as the information is missing; repeated and collecting relevant information may be very time-consuming. All the details of the student are maintained in a single record. So, searching and upgrading the details is a tedious task. Also there is a chance of errors. The disadvantage of the system is that it is many manual calculation, it is much human interaction needed and lots of paper work needed.

3. PROPOSED SYSTEM

In our proposed system, Staff has the facility of entering the student details. It reduces the workload of the staffs. The advantage of the system is that it is very easy to edit details of the student and delete a student when it found unnecessary. The marks of the student are added in the database. These entered details are used to access the performance of the students. These reports can be view by students of the institution. It is easy to filter student database for placement using their result. It allows the students can view their marks whenever they want. The design of the student information management system contains the home page which is the first page of the system. The home page provides the login page. The login page provides the registration form for the new users.

4. LITERATURE STUDY

This section presents a review of related literature to the study of management information system and student records. Most of these academic institutions still relay on traditional way of management which mainly involves paper-work, much of human effort. The students, who are admitted to those institutions which are dependent on traditional way of managing things, have to struggle a lot just to get a certificate or any other documents. Also the administrations face difficulty in maintaining all the records, tracking the records and fetching the record of their interest in time.

A) TOWARD A STUDENT INFORMATION SYSTEM

This paper basically focuses on providing a simple interface for the easy collation and maintenance of all manner of student information. A student information system deals with all kinds of data from enrolment of graduation, including program of study, attendance record and examination results to name but a few. All these data need to be made available through an online-interface.

B) A STUDY OF STUDENT INFORMATION MANAGEMENT SOFTWARE

This paper focuses on providing information to support the operation, management and decision-making functions of enterprises or organization. In the face of huge amount of information, it is required to process the student information management system to improve the efficiency of student management. In this paper, a typical student information management system will be established to realize the systematization, standardization and automation of student information relationship.

C) WEB BASED STUDENT INFORMATION SYSTEM

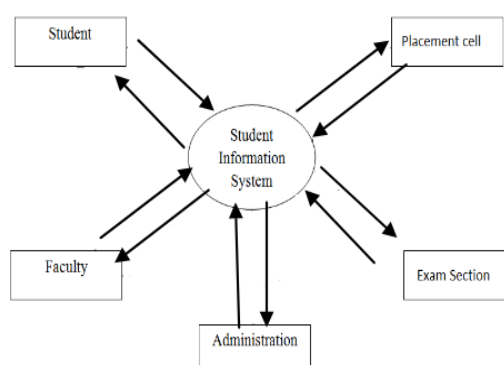
This paper focuses on simple interface for maintenance of student information. The creation and management of accurate, up-to-date information regarding a student academic career is critically important in the university as well as colleges. It tracks all the details of a student which can be used for all reporting purpose, tracking of attendance, progress in the course, completed semesters, years. 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.

5. METHODOLOGY

The student management system is an environment where all the process of the student in the institution is managed. It is done through the automated computerized method. Conventionally this system is done using papers, files and binders. This system saves the time of the student and of the administrator.

6. SYSTEM DESIGN

The design of the student information management system includes the design of the home page provides the way for all the students, staff and other user to access the system. Every user of the system has a unique username and password. The home page mainly contains a login form through which a new user can register, or an existing user can login to the system by entering the username and password.



MODULES LIST AND DESCRIPTION:

1. Login Module
2. Admin Module
3. Faculty Module
4. Student Module
5. Attendance Module
6. Examination Module

1. Login Module

It will help users to login into the system using institution id and password. The module provides a layer of security over the system as only authorized personnel can login into the system. It is better than the manual method as they don't have any security measure of who can access the system and who cannot.





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Login

Email

Password


2. Faculty Module

Each staff maintains the record of students attendance and marks. Staff upload the attendance file into the system based on which attendance of each student is updated. Administrator can send notification to the staff related to various events happening in the college. Staff can view the student records to analyze the performance of particular student.






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Name

Register Number

Date of Birth 

Mobile

Address

Department

Email

Password ☐ Show

Confirm Password

Role

3. Student Module

The student is the most important factor of the college because in every college student plays the very important role. Student can access the information of college, attendance details, mark details, and their basic details. The attendance details contains the details of student overall attendance based on their subject wise attendance. Students can view their performance in the exams in marks details. Basic details contains the basic information of the students.

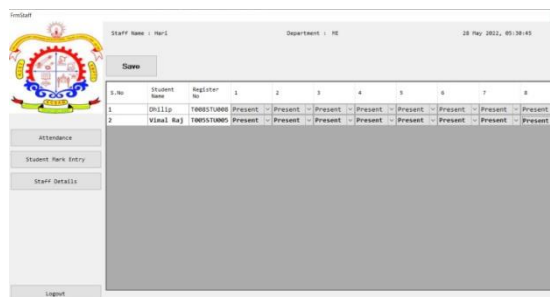




Name:
 Register Number:
 Date of Birth:
 Mobile:
 Address:
 Department:
 Email:
 Password: ☐ Show
 Confirm Password:
 Role:

4. Attendance Module

The semester wise attendance was updated for each and every student it consists of number of leave taken, attendance percentage and so on.



Staff Name : Haris Department : EE 28 May 2022, 05:38:45

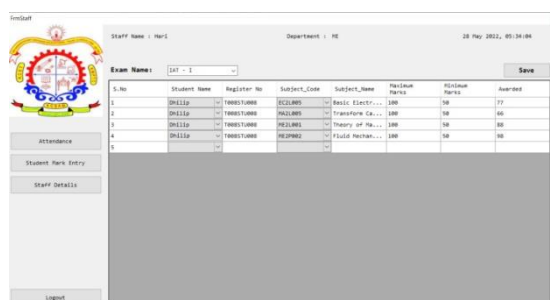
Save

S.No	Student Name	Register No	1	2	3	4	5	6	7	8
1	Shilp	T009STU008	Present	Present	Present	Present	Present	Present	Present	Present
2	Vinai Raj	T009STU009	Present	Present	Present	Present	Present	Present	Present	Present

Attendance
Student Mark Entry
Staff Details
Logout

5. Examination Module

The end semester examination results are available and then can search a particular student results also number of pass and fail of the particular subject.



Staff Name : Haris Department : EE 28 May 2022, 05:38:04

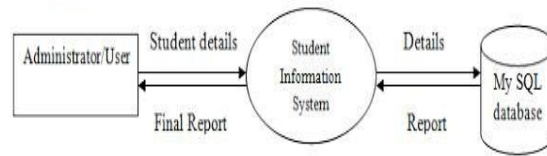
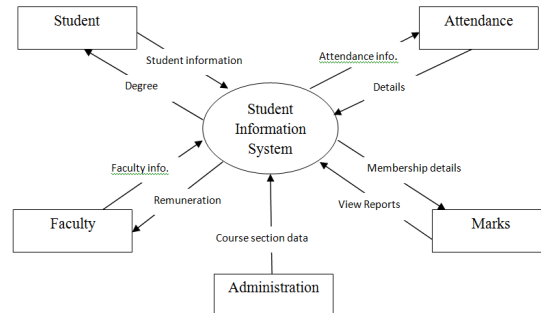
Exam Name: Save

S.No	Student Name	Register No	Subject Code	Subject Name	Maximum Marks	Obtained Marks	Assessed
1	Shilp	T009STU008	EEEL005	Basic Electr...	100	58	77
2	Shilp	T009STU008	PAEL005	Transforme Ca...	100	58	60
3	Shilp	T009STU008	PAEL005	History of Pa...	100	58	60
4	Shilp	T009STU008	PEEL002	Fluid Machin...	100	58	60

Attendance
Student Mark Entry
Staff Details
Logout

7. DATA FLOW DIAGRAM

A data flow diagram (DFD) is a graphical representation of the “flow” of student information system. A data flow diagram can also be used for the visualization of data processing. DFD shows the interaction between the system and outside entities. A DFD represents flow of data through a system. Data flow diagrams are commonly used during problem analysis. It views a system as function that transforms the given input into required output. Movement of data through the different transformations or processes in the system

Level 0 DFD :**Level 1 DFD:**

8. RESULT

1. Home Page:

The system starts with the home page. The home page contains the details of college like college mail id.

2. Login Page:

The users enter the username and password to login into the system. the users with correct login credentials can successfully login into the system. it also provides the option of registration to the new users.

3. Registrations Page:

New users can register into the system using this form. In this form users enter their details. After providing all details user get registered into the system.

4. Forget Password Form:

If the users forget their password they can give their email id for password recovery purpose using this form.

5. Dashboard:

The dashboard contains the links of users academic details.

6. Attendance Page:

On the attendance page students can view their attendance details.

7. Marks Page:

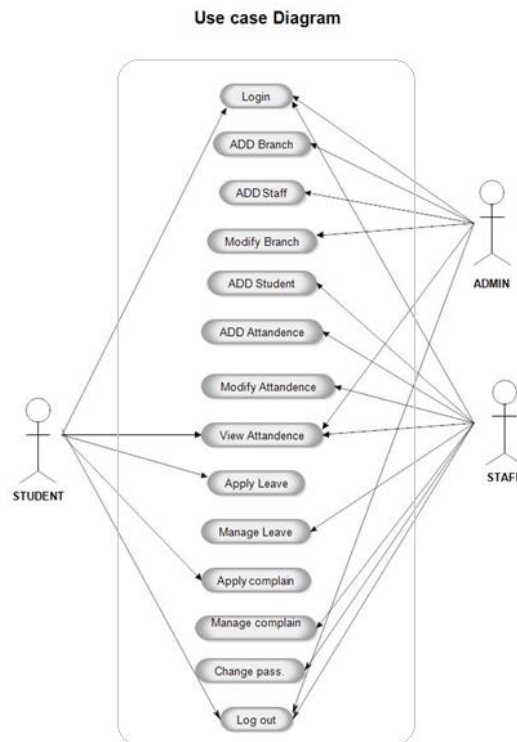
On this page students can view their internal marks.

8. Basic Details:

On this page students can view their basic details.

9. USE CASE DIAGRAM

A use case diagram at its simplest is a representation with the system that shows the relationship between the user and the different use cases in which the user is involved. A use case diagram can identify the different types of users of a system and the different use cases and will often be accompanied by other types of diagram as well.



10. SOFTWARE TESTING

The software testing part is last and the most important process of this software. After completing the development of all the modules of user interface and the database the software testing was done. The testing of each module was done several times with different credentials to ensure that the user interface is working fine and user won't be affected in any way after using the software. After that, the database was checked in order to ensure smooth storage and retrieval of the information by each of the user. Thus student information system was thoroughly checked several times and we found it working fine and smooth.

11. FUTURE SCOPE

Using SIMS for the data storage and retrieval has the high scope because:

The project provides simple interface for maintenance of student information. The students will have their own user id and passwords to access their own info they can go through only their details such as attendance, marks etc. This will increase the transparency of the information. And the project avoids the confusion and makes it simple for the students to get their own data.

- The whole project will be made available as an android app for more ease of use and mobility.
- Online class functionality can be added.
- Online exam functionality can be added.
- We will make the entire system more accurate and also be able to give statistics data.
- Maintain student biographical, status and academic information in a secure, accessible system.
- Provide a secure online system for faculty to enter final semester grades for each student.

12. CONCLUSION

This paper assists in automating the existing manual system. This is a paperless work. It reduces the man power required. It provides accurate information always. Malpractice can be reduced. All years together gathered information can be saved and can be accessed at any time. It was a wonderful and learning experience for us while working on this project. This software is very easy to use so all educational institute can use this frequently. So, we can hope that our software will be very popular and get sponsors to develop in future. Our paper focuses on presenting information in an easy and accessible manner which provides facilities like online registration and automating the record generation process in an educational institution. Our project enhances the upgradability of the existing system and makes it convenient for the staff to manage records.

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