IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
Impact Factor: 7.301
Volume 3, Issue 14, May 2023

Student Management System

Deepak Sharma[1] and Shailja Varshney[2]
Department of Computer Science & Engineering[1,2]
ITS Engineering College, Greater Noida, U.P., India

Abstract: *To maintain and facilitate access, our college digitally maintains the student's data. Though it is stored, the information is dispersed and in various formats. An increase in the number of students has made it more difficult to sustain. The need for students to constantly fill out the same information results in data that is redundant and inconsistent due to this condition. It also prevents data from being altered in various cases. We want to develop a web-based application that will act as a single interface where all of the student information is going to be gathered in one place and can be classified to show them to the various user types according to a need-to-know basis. The application makes it simple for students to update any information, while also making it simple for college employees to get specific student information. With the option of making an online payment through a payment gateway, the web application will assist with student online admission. It will track each student's attendance as well as their grades for each of the courses' individual subjects. Additionally, it will give students access to fresh placement options offered by the college, assist in maintaining faculty and departmental records, and display a history of any online transactions made by students during the admissions process with the college. JavaScript, CSS, and HTML will be used to create the application's front end, while PHP and MySQL will be used to create its back end.*

Keywords*:* component, formatting, style, styling, insert

I. INTRODUCTION

Each Institution has a system of management that must keep specific student records. The number of students attending college expands along with it, as does the amount of content pertaining to students. The student information management system is expected to be gathered given the daily rise in data and the need to increase management performance and efficiency.[1]

The majority of people around the world now use the Internet in their daily lives. People use the Internet to carry out a variety of duties, one of which is to store their data in a database that piques their interest. They can use these databases to post queries and obtain the required data. Software called a student information system is necessary to maintain students' data and make it all available online so that it may be provided quickly when it is needed.[2]

Any institution has a number of administration divisions to oversee student databases and college information. These divisions each provide various student records. Most of these documents must safeguard student information. The information may include general specifics like a student's name, residence, academic standing, and attendance, as well as department-specific elements like data gathering. Every module in college administration is related. They are kept up by hand. They must thus be automated and centralised since information from one module will be needed by another in order to supply course materials and track students' development.[3]

II. PROBLEM STATEMENT

At moment, student information is managed by maintaining digital records in numerous locations, such as Google Drive and excel sheets. Colleges must address difficulties such as interlinking, data repetition, delayed access to data, duplication of data, and non-data manipulation. Additionally, there will be a huge rise in the volume of data generated as the student population grows, which will make it difficult to manage, update, and retrieve the chosen data.

2.1 Objective

- Include student data
- Accept Students Into Several Programmes

IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
Impact Factor: 7.301
Volume 3, Issue 14, May 2023

- System for Student Payment
- Student Attendance Programme
- Produce a student ID card
- Add a programme
- Test Add
- Sending Results by SMS
- SMS Notice Sending
- College Report (Payment, Expense, Income, Profit, Attendance).

III. METHODOLOGY

A sequential design method used in processes for developing software is called the waterfall model. A constant downhill flow (like a waterfall) is used to symbolize the steps of conception, commencement, analysis, design, building, testing, production/implementat.

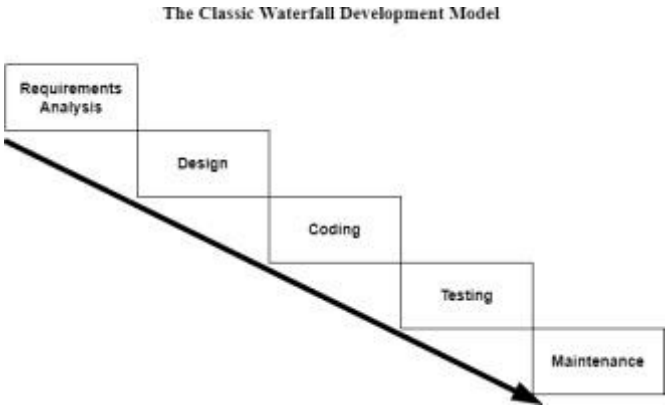

Fig. 1.Figure of waterfall model.

The manufacturing and construction industries, which work in extremely organised physical settings where changes made after the fact are either unfeasible or exceedingly expensive, are where the waterfall development technique first arises. Because there were no established methods for software development at the time, this hardware-oriented technique was used instead.

We employ this model since it is ideal for our software development because we have well-defined, clear, and fixed needs. The scope of our project is secure. This paradigm is straightforward to comprehend and utilise since each phase is processed and completed one at a time without interfering. For development projects where a sequence is clearly known, the waterfall paradigm is effective.

IV. CATEGORY OF USER

Student

They get access to their private data, educational information, attending history, test history, and alerts of all upcoming events. Additionally, the students can read and download their timetable and bill for fees. Another crucial service offered to the students is the ability to monitor notifications from their particular departments.

Admin

All system access privileges belong to the administrator. He has the authority to modify, add, or remove departments and courses from department. Additionally, he has entire login reports and student information. He oversees all faculty details, including their user roles, departments, and personal information related to their departments and login reports. The administration also maintains information on newly

IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
Impact Factor: 7.301
Volume 3, Issue 14, May 2023

admitted students' paperwork and payment of fees.

Admission Incharge

The admission incharge is responsible for managing new admission data. When students register, the admissions coordinator will check their information and be allowed to comment. The person in charge of admissions also monitors information on studnt payments and ultimately admits the student.

Faculty

All payments submitted to the institution for admission are immediately accessible to and under the control of an accountant.

The teacher has access to and control over every student's academic records and progress. They can also see the attendance of the students

V. MODULES IMPLEMENTED

Admission

Through an admission form, we obtain the student's pertinent information and papers for this module, and we verify the information. Additionally, it controls the method and specifics of payment. Then, for each student, it creates a fee receipt, a virtual ID, and a unique ID. This information is gathered and arranged in one location to be retrieved all at once.

Data Gathering :-

Personal data (name, email address, blood type, caste, phone number, and address)
Academic Information (Details of Grades 10, 12, and Diploma)
Admission Information (Branch, Admission Year, Academic Year)
Parental Information
Account Information (Password)

Exam

The examination module is in charge of compiling and managing each student's test results during the duration of the course. Additionally, it displays a summary of every student's educational information.

Data Gathering(Student, Subject, Marks) :-

1) Student Subject Marks

Attendance

The attendance module enables instructors to track and control students' attendence while also providing a net analysis of that attendance.

Information Gathering

Attendance by Student Subject (Student, Subject, Attendance)

VI. TECHNOLOGY USED

Hyper Text Markup Language (HTML)

HTML is the foundation of every web based application and is also used for the user interface and to transfer data to the backend for storing data.

CSS (Cascading Style Sheet)

The design of Web pages' layouts is done with CSS. To supply our user interface, it will be utilized a respectable design so thatit is appealing and simple for the users to use.

IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
Impact Factor: 7.301
Volume 3, Issue 14, May 2023

JavaScript

In terms of scripting languages, JavaScript is regarded as one of the most well-known. A World Wide Web scripting language is what JavaScript is by definition. JavaScript is mostly used to enhance the functionality of websites by creating cookies, validating web forms, detecting browsers, and other functions. One of the most widely used scripting languages is JavaScript, which is why it is supported by almost all current web browsers, including Firefox.

Bootstrap

The goal of the Bootstrap HTML, CSS, and JS package is to make building instructional web pages as easy as possible. It will make responsive web design easier to create and make some aspects, such modals, easier to use.

MySQL

SQL is used by MySQL, a Relational Database Management System (RDBMS) that isoffered for free. It will be used to manage relationships between them and store and retrieve user-provided data..

PHP

PHP is a flexible scripting dialect that is largely used to create websites. The development of an API will make the website dynamic by serving as a conduit for communication between the front end and back end.

VII. RESULT

The system starts with the login page in which admin use their credentials to login into the system.
After logging into the system admin able to do many tasks related to management of college very easily and efficiently.

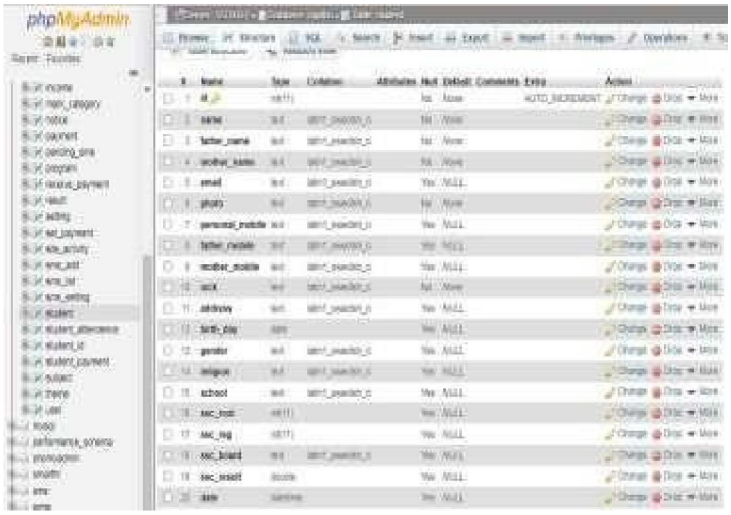

Fig. 2.Database Snapshot

Fig. 3. Login Page

IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
Impact Factor: 7.301
Volume 3, Issue 14, May 2023

In this login page, admin has to enter the right login information (username and password).
After entering into the system the admin can be able to do most of the tasks very efficiently like to add details of the students or to enroll a student into the college

Fig. 4 Figure of Registration Form.

The device will direct the student to the payment processror when they have submitted and verified their papers, and once the payment has been done, the system displays payment data.

Fig. 5.Figure of Payment Record.

IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
Impact Factor: 7.301
Volume 3, Issue 14, May 2023

The student profile, which can be modified by the admin and viewed by the student, will be produced once the money has been paid and the required papers have been submitted.

Fig. 6.Figure of Student Profile.

Send SMS Notification Process

The college's ability to deliver information, activity, or event announcements via SMS technology, which is quicker and more direct to the intended receiver, makes this college notification system extremely important. Thousands of parents would benefit from this SMS- based college notification system since the notices they receive are accurate. By publicising college events and programmes, it will also promote parental involvement.

Fig. 7.Figure of Send SMS

IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
Impact Factor: 7.301
Volume 3, Issue 14, May 2023

Add Notices in the System

Fig. 8. Figure of Add Notices.

Add Exam Result Process

The faculty can be able be upload result of the student by selecting program,subject and type of exam.They can also see the result of each and every students and also able to send SMS notification to students to tell students about the declaration of their results of any academic year.

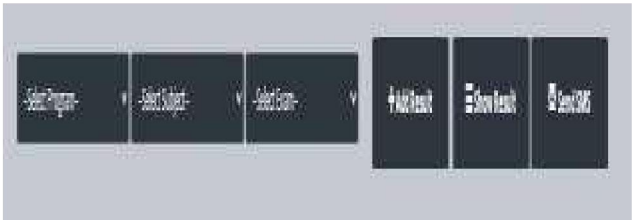

Fig. 9. Add result of students.

VIII. CONCLUSION

The college may readily supply correct information by using the student management system to preserve their student data. Remote monitoring and control are both possible. All the data gathered can be saved and accessed whenever necessary. The student's information is kept in one location. It is useful to be able to access all of the student's information in one location, including information on their internship and whether they registered via their department. Therefore, the SMS system will assist the college in developing high-quality student data. The system will make it easier to handle student data from enrollment to graduation and to provide a variety of student reports.

REFERENCES

[1]. S.R.Bharamagoudar, Geeta R.B & S.G.Totad, "Web service api for student information and course management systems". International Journal of Advanced Research in Computer and Communication Engineering Vol. June 2013.

[2]. Almahdi Alshareef, Ahmed Alkilany, "Toward a Student Information System for Sebha University, Libya", Fifth international conference on Innovative Computing Technology (INTECH 2015)-p 34-39

[3]. Prabhu T Kannan, Srividya K Bansal, "Unimate: A Student Information System", International Conference on Advances in Computing, Communications and Informatics (ICACCI 2013)-p-1251-1256

[4]. Dipin Budhrani, Vivek Mulchandani, Yugchhaya Galphat, "Student Information Management System" International Journal of Engineering Development and Research Volume 6 2018

[5]. Pushpagowsalya. P, Reeta. R, Dr.S.Priyadarsini, "Student information system" International Journal of Scientific Development and Research (IJSDR) Volume 5April2020.

IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
Impact Factor: 7.301
Volume 3, Issue 14, May 2023

[6]. Bradford, M., Earp, J., Grabski, S.: Centralized end-to- end identity and access management and ERP systems: a multi-case analysis using the technology organization environment framework. Int. J. Account Inf. Syst. 15, 149–165 (2014)

[7]. Morton, N., Hu, Q.: Implications of the fit between organizational structure and ERP: a structural contingency theory perspective. Int. J. Inf. Manage. 28, 391–402 (2008)

[8]. Silva, L., Fulk, H.: From disruptions to struggles: theorizing power in ERP implementation projects. Inf. Organ. 22, 227–251 (2012)