SYNOPSIS

Report on

Student Management System

by

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ABSTRACT

An organized and systematic once solution is essential for all universities and organization. There are many departments of administration for the maintenance of college information and student database in any institution. All these departments provide various records regarding students. Most of these track records needs to maintain information about the students. This information could be the general details like student name, address, performance etc or specific information related to department like collection of data. All the modules in college administration interdependent. They are maintained manually. So they need to be automated and centralized as, information from one module will be needed by other modules. For example, when a student needs his course completion certificate it needs to check many details about the student like his name, registration number year study, exams he attended and many other details. So it need to contact all the modules.

With that in mind, we overhauled the existing student database management system and make necessary improvement to streamline the processes. Our work is useful for easy user interface. We are planning to utilize the powerful database management, data retrieval and data manipulation in the documents. Our work is use for saving valuable time and reduces the huge paper work.

In summary, Student Management System is helpful for student as well as the College authorities. In the current system all activities are done manually. It is very time consuming and costly. Our student Management System deals with the various activities related to the students.

In this system we can register as a user and user has of two types, student and administrator. Administrator has the power to add new user and can edit delete a user. A student can register as user and can edit and delete his profile. The administrator can add, edit and delete marks for the student. All the user can see the marks

keywords: Student database management system, Database,, evaluation, tracking.

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Introduction

The objective of Student information System is to allow the administrator of any organization to edit and find out the personal details of a student and allows the student to keep up to date his profile. It will also facilitate keeping all the records of students, such as their id, name, mailing address, phone number, DOB etc. So all the information about an student will be available in a few seconds. Overall, it'll make Student Information Management an easier job for the administrator and the student of any organization.

A Traditional system which was mainly paper-based, required large amount of space to store information. It limits the exchange of information, updating and causes loss of documentation. collaborative work in this system becomes rigid and degrades performance.

This project on student information management system is one complete information management solution for students and staff of any educational institution. In today's world, it is a need to organize huge amount of data than ever before. In the absence of a great infrastructure for faculties, students and departments, management to exchange data, crucial information about students and organizations can be misplaced, which can cause loads of problems that can affect the reputation of the organization. For an academic institution, the data handling should be an easy task for which online approach is a must. Following which the proposed system uses internet as the solution for global access of data, record keeping and managing details of students which makes the student management system centralized. At one time, the school depended intensely on paper records for this activity. However, their use is not as widespread in universities in India. The Management employees can now easily use this system to create records, keep attendance records, fee payment status which is a very time-consuming activity.

Literature Review

Literature was reviewed from various sources, like from research papers, publications books, existing
bibliographic information, and recommendations by the project panel.

Library Automation System of the University of Toronto in 1963-1972 [1]
was one of the first achievements to manage the data with the help of automated system. The real idea of implementing Automation is to enhance efficiency, reduce delays, increase production flexibility, reduce prices, human error elimination, and alleviate labour shortage, high degree of accuracy [7].
Automation in Educational Assessment created in Nigeria [2] shows how an online automation system can be implemented to eradicate human errors and bring fairness during the exams.

Defining the Paperless Workplace with the Paper Metaphor [5], has explained the difficulties faced by the organization while switching from conventionally used paper based system to an online automated system as they were not able to draw the gap between both the systems but automated Project Grading & Instant Feedback System [4] provides an example of an automated system which enhances the efficiency of manual project grading system with feedbacks can being easily managed.
The hierarchical approach is followed in the institutional organizations. Teachers, staffs and students have different privileges.
So for this system we have used access control method which suits the ranking that is the role based access control method.
Since there are large number of users present in an academic institution it is a prime requisite to grant certain privileges to each users according to their positions so that the sensitive information is not misused.
The role based access control makes it easy for the system to differentiate between its users which makes the system faster without any lagging.
There are certain activities restricted to specific users so to avoid the violation of code of conduct fairness is maintained in the system. Thus, the new system is named as the student management system.

Project Objective

All the information of the student can be managed as main objective of the management system. For example, information about the students' exams, their exam fees, courses as well as the personal profile of the students can be obtained by creating such a system.

Creating system like this can reduce unnecessary data collection using paper. Therefore, such a system is very important in managing time.

Also, the number of students who come in a year, as well as the daily attendance of those students as well as the data can be taken from the system to provide the necessary facilities for the student.

Using such a student management system enables students to maintain their information, as well as easy access and secure information over a long period of time without any changes.

Using such system, student result management can be done, and the information related to the exams can be found easily when required.

As well as we can maintain the data accuracy.

Exam scheduling. Exams can also be managed by not only correct dates but also notifying students.

Also make it easy for students to enter information, modify entered information, or remove Certain information. this can be done easily using student management system.

Research Methodology

1. Research Design:

Experimental Development:

This research employs an experimental development approach to design, develop, and implement the Student Management System. The project involves iterative phases of design, coding, testing, and refinement.

2. Data Collection:

User Data:

Data collection involves gathering engage with stakeholders, such as students, teachers

And administrators, to gather detailed information.

3. Technology Stack:

Front-end Development:

The system's user interface is developed using HTML, CSS.

Back-end Development:

The system user's interface is developed using PHP.

4. System Architecture:

Front-end: The HTML, CSS-based front-end will communicate with the back end for user interactions and data handling.

Back-end: The back end will manage user data with help of PHP.

5. Development Phases:

Phase 1: Requirements Gathering: In this phase, we identify user requirements, including customization options and desired features.

Phase 2: System Design: We design the system architecture, database structure, and user interfaces based on gathered requirements.

Phase 3: Development: Development includes front-end development using HTML, CSS.

Phase 4: Testing: Rigorous testing is conducted to ensure system functionality.

Phase 5: User Feedback and Iteration: After an initial release, user feedback is gathered and used to iterate and improve the system.

Project Outcome

1. User-Friendly Front-End Interface:

The system will feature a user-friendly front-end interface developed using ReactJS. This interface will allow users to easily navigate and customize their mock interview experience, making it accessible to individuals with varying levels of technical proficiency.

2. Student Data Management:

The core function of student management system is to manage student information.

3. Security and Data privacy:

Ensure that the student management system compiles with data protection rules and incorporates security measures to protect sensitive student data.

4.reporting and analytics:

Generates various reports and analytics to help administrators and teachers make data-driven decision.

Proposed time duration

Week Number	Tasks
Week 1-2: **Project Initiation and Planning**	1. Define project objectives and goals. 2. Assemble the project team. 3. Establish communication and collaboration tools. 4. Identify user requirements and technical specifications.
Week 3-4: **System Design and Front-end Development**	1. Develop the system architecture. 2. Design the database structure. 3. Build the user interface using HTML, CSS
Week 5-6: Back-end and Database	1. Database connection using PHP 2. Ensure seamless data flow between the front-end and back-end. 3. Create database of students and admin.
Week 7-8: **Testing, Refinement, and Deployment**	1. Conduct thorough system testing. 2. Gather initial user feedback. 3. Identify and address issues and bugs. 4. Continue testing and refinement based on user feedback. 5. Finalize the project codebase and configurations. 6. Prepare a presentation and demonstration for the project's final submission.

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