

STUDENT MANAGEMENT SYSTEM

Department of Computer Engineering

A. P. SHAH INSTITUTE OF TECHNOLOGY, THANE

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CSL605 SKILL BASED LAB COURSE: CLOUD COMPUTING

Mini Project Report

• Title of Project: STUDENT MANAGEMENT SYSTEM

• Year and Semester: TE Sem VI

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Abstract

In today's digital age, educational institutions require efficient and user-friendly systems to manage their student records. The Student Record System (SRS) is a web application built using PHP and MySQL that allows educational institutions to manage student data efficiently. The system is designed to have two modules: one for administrators and the other for users. In the admin module, administrators can add and manage courses, subjects, and student records. They can add personal, contact, and academic information for students, as well as view and update student data as needed. Additionally, administrators can manage sessions and register new students. In the user module, users can log in, log out, and register for an account. Users can view their personal information and update it as necessary. They can also view their academic records and other relevant data. In future developments, the system can be expanded to include a doubts section where students can post their doubts and administrators can respond to them. Overall, the Student Record System is a valuable tool for educational institutions seeking to manage their student records efficiently and effectively..

Keywords: -

- Student Record
- Web Application
- PHP
- MySQL
- Course Management
- Subject Management

Introduction

In today's digital age, the management of student data has become increasingly complex. Educational institutions need an efficient and reliable system to manage student records, including academic information, personal data, and other relevant information. The Student Record System (SRS) is a web application designed to meet these needs, providing an easy-to-use and robust platform for educational institutions to manage their student data.

The SRS is built using PHP and MySQL, two popular technologies for building web applications. The system is designed to have two modules: one for administrators and the other for users. The administrator module allows administrators to add and manage courses, subjects, and student records. They can also add personal, contact, and academic information for students, view and update student data as needed, manage sessions, and register new students. On the other hand, the user module allows users to log in, log out, and register for an account, view their personal information, and academic records.

The SRS is a valuable tool for educational institutions seeking to manage their student records efficiently and effectively. With this system, institutions can improve their data management practices, save time and resources, and provide a better learning experience for their students. The system can also be expanded in future developments to include a doubts section, where students can post their doubts and administrators can respond to them, further enhancing the system's functionality and value.

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Problem Statement, Objective & Scope

Problem Statement: -

Educational institutions face challenges in managing and organizing student data, including academic records, personal information, and contact details. Manual processes and traditional paper-based systems can be time-consuming, error-prone, and difficult to manage. Furthermore, these systems do not provide an easy way to share information between different stakeholders, such as administrators, teachers, and students. This can lead to inefficiencies and lack of collaboration, ultimately impacting the quality of education. To address these challenges, educational institutions require an efficient and user-friendly system to manage their student records. The Student Record System (SRS) is designed to meet this need, providing a web-based platform for managing student data. The SRS is built using PHP and MySQL and includes modules for administrators and users. The system allows administrators to add and manage courses, subjects, and student records, while users can log in to view their personal information and academic records.

Objective: -

- Improve data management for educational institutions.
- Enhance collaboration and communication between stakeholders.
- Increase efficiency by automating manual processes and reducing paperwork.

Scope: -

The In the event that information is the cash of the information economy, digital libraries are where it is contributed'. Our project Absolute Journal is exclusively for the computer branch of A. P. Shah institute of technology. Herein all the subjects from all four years of engineering will be available. Amongst several other features, notes from various teachers for the same subject will be available. This will help the students to gain a clearer idea about a certain topic that they may have found difficult previously. Students sharing their ideas and notes will also help making the web application interactive

Cloud Platform

Google Cloud is a suite of cloud computing services provided by Google that run on the same infrastructure that Google uses internally for its own products. Google Cloud provides a wide range of services, including computing, storage, networking, machine learning, and data analytics. The services are delivered on a pay-as-you-go model, which means that customers only pay for the resources they use.

IAM

One way we have used IAM in our project is to restrict access to the admin module of the system to only those users who have the necessary administrative privileges. We can create an IAM role with the required permissions, and then assign that role to a specific user or group of users who need access to the admin module. This will ensure that only authorized users can access and modify critical aspects of the system.

VM

By using VMs in Google Cloud for our student record system, we can benefit from the scalability, reliability, and security features provided by the cloud platform, without having to worry about managing physical servers ourselves.

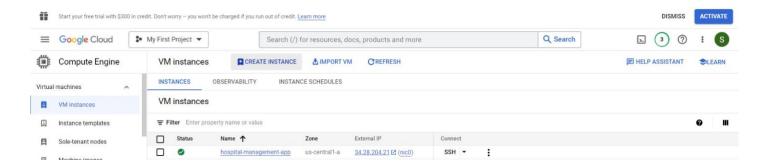
CLOUD SQL

Cloud SQL is a fully managed relational database service for MySQL, PostgreSQL, and SQL Server. This frees you from database administration tasks so that you have more time to manage your data.

BUCKET

For storage purpose we have used storage bucket

RESULTS



All instances > gym

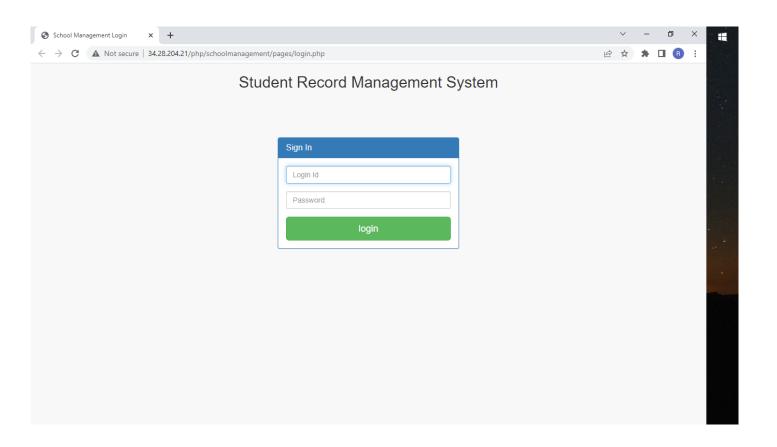
gym

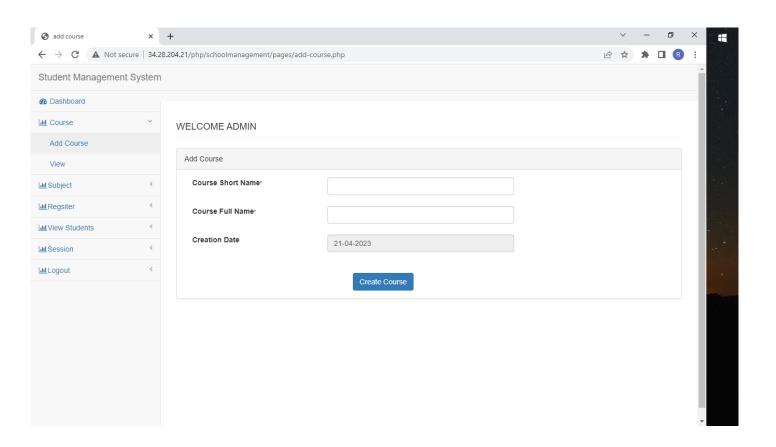
MySQL 8.0

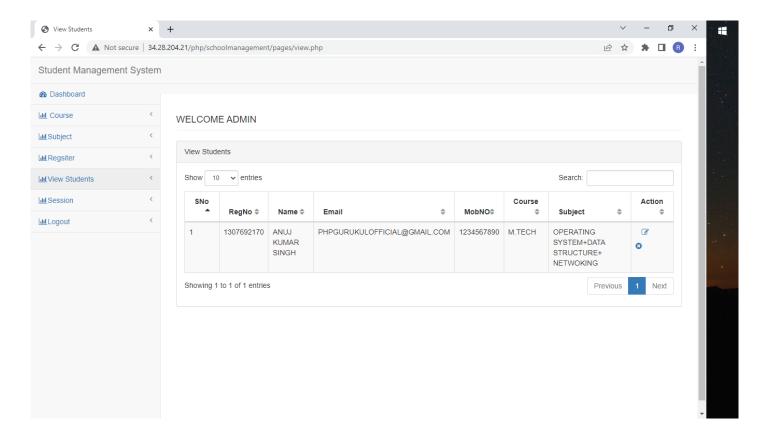
+ CREATE DATABASE

Name 🔨	Collation	Character set	Type	
information_schema	utf8_general_ci	utf8	System	:
library	utf8_general_ci	utf8	User	:
loginsystem	utf8_general_ci	utf8	User	:
mysql	utf8_general_ci	utf8	System	:
performance_schema	utf8mb4_0900_ai_ci	utf8mb4	System	:
schoolmanagement	utf8_general_ci	utf8	User	:
sys	utf8mb4_0900_ai_ci	utf8mb4	System	•









Conclusion

The Student Record System project aims to provide an efficient and user-friendly web-based platform for educational institutions to manage their student data. The system includes two modules, one for administrators and the other for users. The administrator module allows administrators to manage courses, subjects, student records, personal, contact, and academic information, sessions, and student registration. The user module allows students to log in, log out, and register for an account, view their personal information and academic records.

By deploying the project on Google Cloud, the system can take advantage of benefits such as scalability, reliability, accessibility, and cost-effectiveness. These benefits can help ensure that the Student Record System is a valuable tool for educational institutions in managing their student data, providing a more efficient and effective way to store and organize information, enhancing collaboration and communication between stakeholders, and improving overall data management practices. Ultimately, the Student Record System project has the potential to contribute to the improvement of educational institutions by providing a centralized platform for managing student data and enabling better decision-making based on accurate and up-to-date information.

Demonstration and Code Link

https://github.com/Shravya2308/php