Student Registration and ID Card System for Distance Education

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Abstract: With the rapid advancement of technology, universities are increasingly adopting digital systems to support academic and administrative development. The integration of web-based platforms has become essential for ensuring efficiency, accessibility, and accuracy in student services. In this context, the Student Registration and ID Card for Distance Education have been designed to meet the demands of modern distance education programs. The system is developed using HTML and CSS to build a responsive user interface, JavaScript for interactive validation, PHP for secure server-side processing, and SQL for reliable data management. Students can conveniently register by submitting their personal and academic details online, without being constrained by time or location. The system reduces paperwork and minimizes the possibility of human error, making the process more efficient and accurate. For administrators, the system provides secure tools to manage the student records, approve registrations, and update data with ease. A unique feature is the automatic generation of digital ID cards, each links to the database, and is capable of including QR codes for rapid verification. This system ensures that students have both an official identifier and quick access to educational resources. By integrating widely adopted technologies, the system enhances institutional efficiency, strengthens data security, and contributes to the overall modernization of university operations in the era of digital transformation.

Keywords: student registration, online enrollment, Digital ID Card, report generation

INTRODUCTION

The traditional, manual administrative processes characterized by paper-based forms, in-person verification, and physical record-keeping have become significant bottlenecks. In direct response to this need, the student registration and ID card system for Distance education system was conceived and developed. This comprehensive web-based application is designed to automate and manage the entire student enrollment lifecycle, from initial application and document submission to final admission and identity management. A core innovative feature of the system is its ability to automatically generate a unique digital student card upon successful registration. This digital ID serves as a multi-purpose tool for identity verification, access to institutional resources, and a centralized academic profile, thereby eliminating the delays and costs associated with physical card production and distribution.

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PROBLEM

A seamless registration process is essential for students to begin their studies on time and stay focused on learning. In today's context, computer science education requires efficiency and modernization. Unfortunately, traditional registration methods often create stress, consume valuable time, and increase the risk of errors in student records or class assignments. To address these challenges, it is proposed that a Student Registration System will be developed. This system will streamline enrollment by making the process faster, simpler, and more accurate for students in Hinthada University. With online access, students will be able to register anytime, view their schedules clearly, and avoid paperwork-related issues. At the same time, the university can get the benefits from the improved management of student records and enrollment data.

APPROACH

This system is designed with two main roles: Students and Administrators. On the student side, they can view the notices of university and get the contact information through the portal.

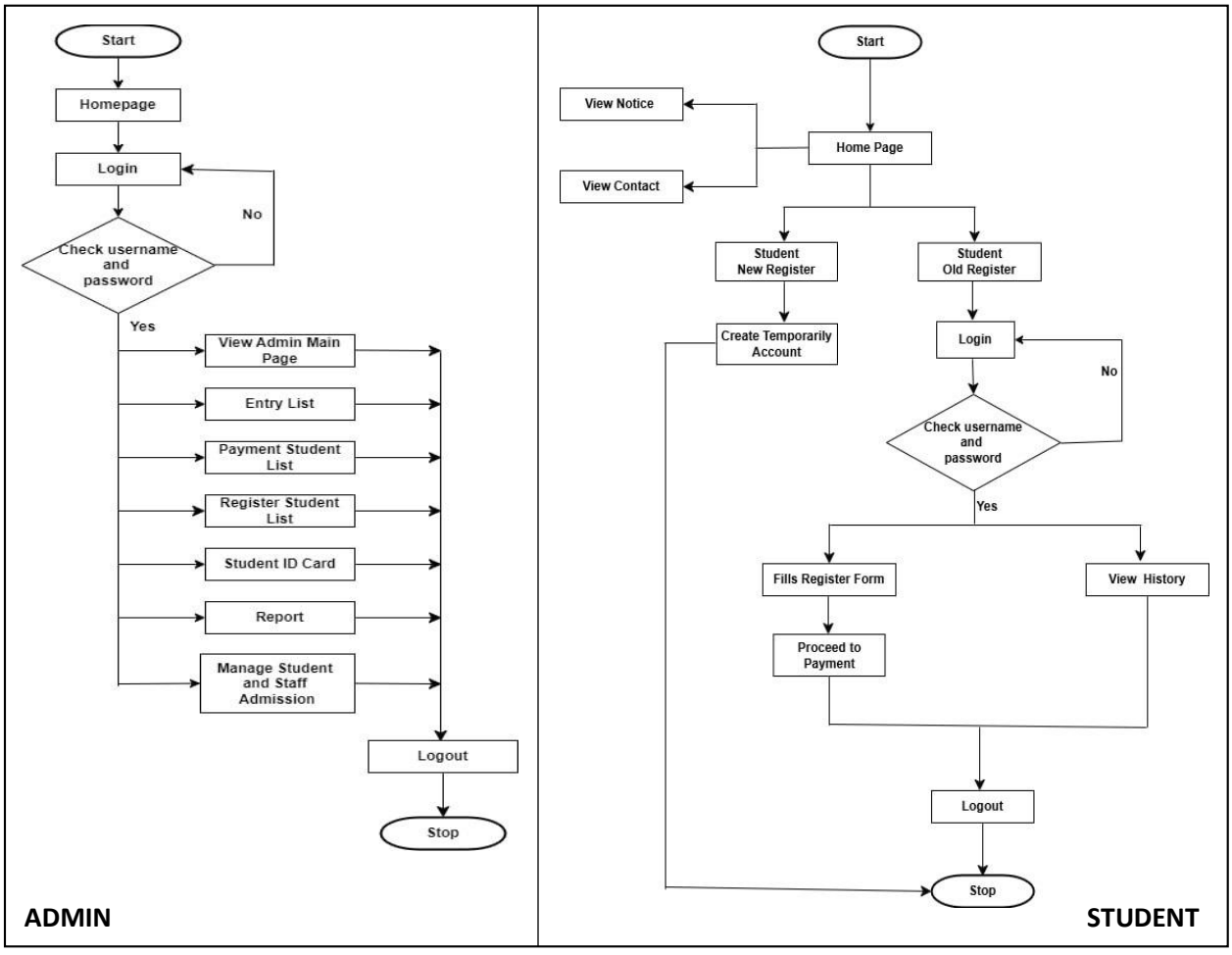

Figure 1: System Flow Diagram

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To begin with the students must create a temporary account and log in to complete their registration details accurately. Students can then select a preferred payment method, pay the annual tuition fee, and download assignment papers as needed. Registration will only be approved if the student has successfully passed the previous semester and agrees to the university's regulations. Once registered, the students can also review their personal details in their history records. For administrators, the system provides secure tools to manage student records, approve registrations, and update data efficiently. A notable feature is the automatic generation of digital ID cards, each linked to the database and equipped with QR codes for quick verification. This system ensures that students receive an official identifier while also enabling easy access to educational resources.

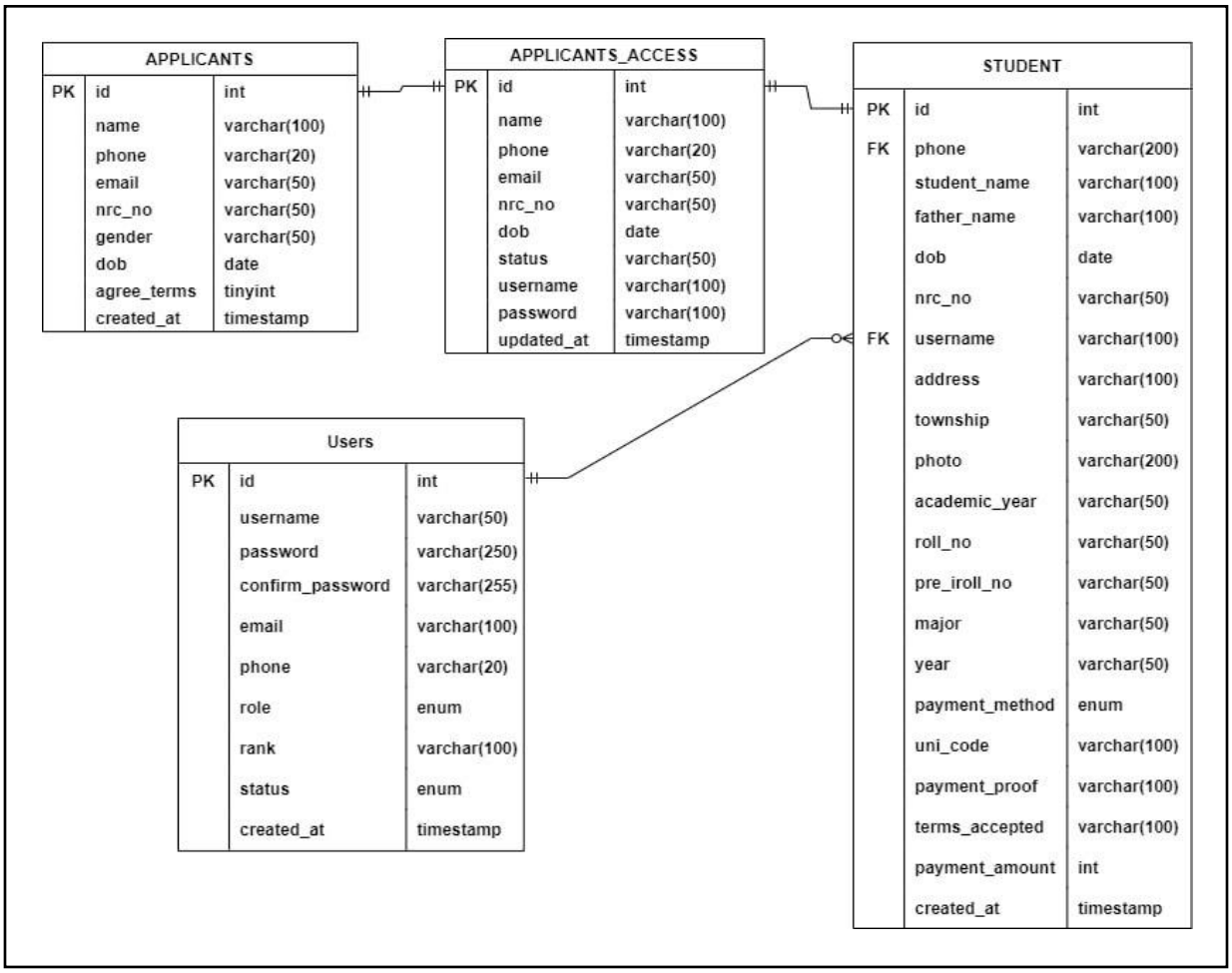

Figure 2: Database Design

An Entity Relationship Diagram is an essential tool in database modeling that visually represents the structure and relationships of data in a system. It helps define business processes and serve as the foundation for a relational database. An ERD attribute can be denoted as a primary key, which identifies a unique attribute, or a foreign key, which can be assigned to multiple attributes. A cardinality notation can then define the attributes of the relationship

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between entities. It consists of four core entities that form the foundation of a student management system. The USERS table serves as the central identity repository, storing authentication credentials and role-based access permissions for all system users. It maintains critical login information and user status through the fields like username, password, role enumeration, and status tracking. The STUDENTS table contains comprehensive academic and personal profiles, functioning as the educational records hub. It stores detailed information including student identification, family backgrounds, contact details, academic program specifics, and financial transaction data. The APPLICANTS table manages prospective student data, capturing initial registration information and application consent through agree_terms flags. The APPLICANTS_ACCESS table handles application system authentication, storing temporary access credentials and application status during the admission process. It maintains a direct one-to-one relationship with both APPLICANTS and STUDENTS tables, ensuring a seamless transition from the applicant to the enrolled student status.

RESULTS

A student who has received a valid ID and password for the academic year can access the information through the profile, view and confirm payment receipts from the university, view the assignment record and check or save details of each student ID card.

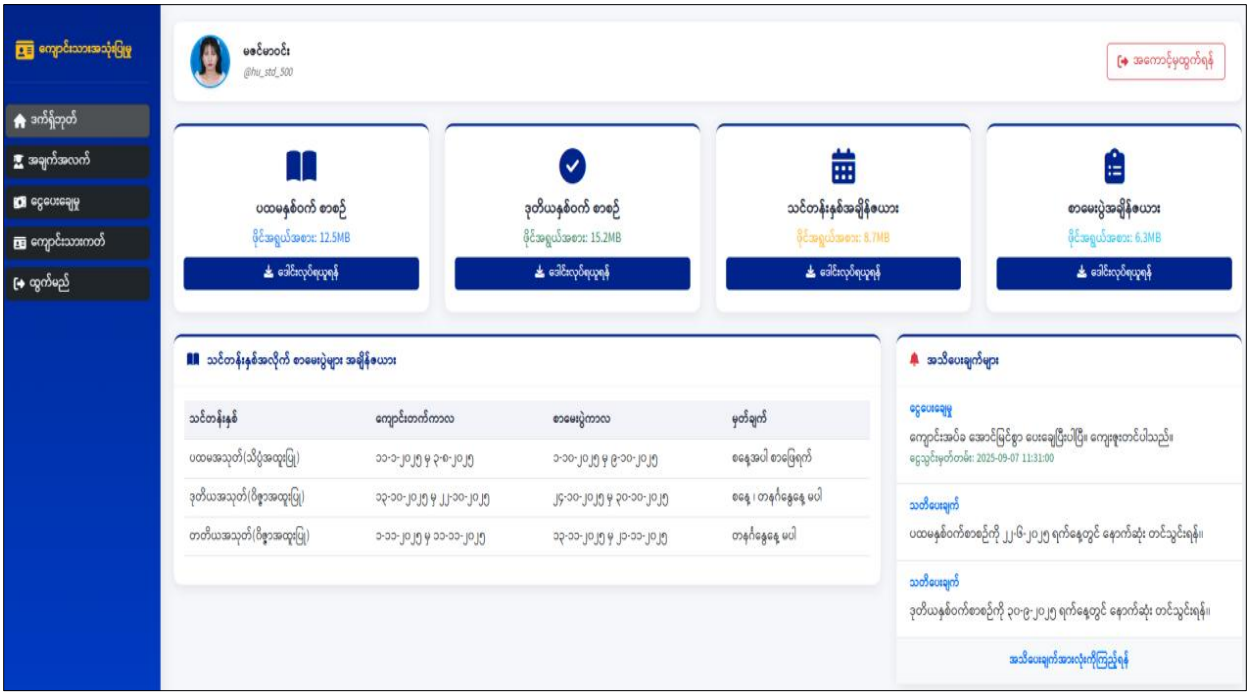

Figure 3: Student Login for Dashboard View

The Student ID card is designed to be used effectively by including details such as the academic year, major, and student name, and it supports printing on both the front and back sides.

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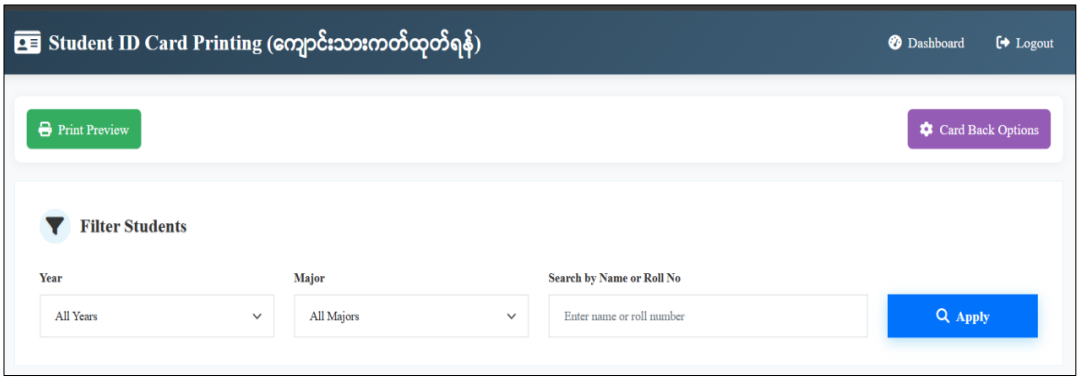

Figure 4: Issuing student ID cards by Year

The system can easily be used it by selecting the desired academic year and major for which the student card is to be issued. To retrieve information, the daily student payment summary can be viewed by date in the Reports section and printed for use. The monthly payment report can also be used in a summarized format in group by academic year, major, and payment method.

Figure 5: Student ID cards Report for Print

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CONCLUSION

In conclusion, the development and implementation of the Student Registration and ID Card System for Distance Education at Hinthada University represents a significant step forward in modernizing educational administration. This project successfully integrates two critical processes which are student enrollment and identity management into a single, cohesive, and automated digital platform.

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