Abstract - There is a need to simplify and unify the process of operation of various tasks in order to make campus life more secure and convenient for students, faculty and staff. Currently, the students are required to carry various ID cards, admittance cards, library cards, various certificates and mark sheets and receipts. To minimize or nullify the need of all these individual physical proofs, we have decided to coalesce them into a single entity- Smart Card. This project has an essential role in colleges. The objective is based on use of smart card as an ID card along with many other important uses.

Keywords - Smart Card, Identification, Authentication.

1. Introduction

A smart card is a plastic card about the size of a credit card, with an incorporated microchip that can be updated with data, used for phone calling, electronic cash payments, and other such applications, and afterwards periodically refreshed for additional use. A smart card contains more information as compared to a magnetic stripe card and it can be programmed for different applications. Some cards may contain programming and data to support multiple applications and some can be updated to add new applications after they are issued.

Smart cards are designed to be inserted into a slot and read by a special reader. However, smart card can be used in many other areas such as health and services, banking such as auto-teller machine, network authentication, telephone calling, identification including government identity, employee ID badges and membership, telecommunication (mobile phone subscriber identification and administration), electronic passports, transport ticketing and tolling, and physical access control. If having a look at a wallet, you will find; notes, coins, library card, driving license, paper identity card and other cards. As a result of accepting smart card technology, all these documents can be replaced by one card and it can be used for all.

2. Overview

We have designed an interface for the users of the smart card to be used with the computer via a smart card reader. In this context we have designed a form based on the requirements of a regular college student. The form contains various fields for various types of information.

Fig 1: Scenario Based Diagram
3. Methodology

For the front we have used C-sharp dot net technology. For the back end SQL Server 2008 is used.

4. Conclusion

Our project has an essential role in colleges. Our project is based on use of smart card as an ID card along with many other important uses. The Smart Card will become the official identification card for Staff, Faculty and Students at many colleges and universities. The information contained on the Smart Card includes the staff/student identification number, name, and a photo. It serves as "one card" identification to access a variety of college departments such as campus simulation, library or residence facilities as well as handling payments for food services.

- Secure login and authentication of users to PCs and networks.
- Storage of digital certificates, individuals credentials and passwords.
- Encryption of sensitive data.

References


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