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Student smart card

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ABSTRACT:

Smart cards have been around for a while now; it has been mainly used to store some kind of monetary value. Currently smart cards can be seen in the transportation, telecommunication and retail sectors. This project aims to design a student card system for an educational institute using smart card technology that can be usable in the transportation, retail and educational sectors. The smart card will be used as means for identification, security and cash. From there we can see the potential and power of smart cards their versatility, practicality and usability. The smart card will be used as a means for identification, automation, and payment. This app proposed design multipurpose smart card to create identity card, payment transactions. The smart card has a barcode that is unique for every card assigned to the student. The smart card does not save data directly in the smart card but in the server for the account-based system. This design would increase the transaction speed and also keep to secure the transaction process.

I. INTRODUCTION:

Smart cards have been used excessively during the last twenty years. In recent years though, a new generation of smart cards evolved programmable smart cards. In this paper the authors give an oversight of the current state of the technology and compare the cards on the market. The range of uses for a smart card has increased every year to include applications in a variety of markets and disciplines. In previous years, the information age has proposed an array of security and privacy issues that have called for promoted smart card security applications. IN 1950 Diners Club generated the first plastic card to be used for payment applications. The synthetic material PVC was used for this card since it ensured that the card will last for a considerable time period. This card identified you as member of a selected group, and was accepted by certain restaurants and hotels. Later, VISA and Master Card entered the market, and eventually the cost pressures off raud, tampering, merchant handling, and bank charges made

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the machine-readable card format using a magnetic stripe unavoidable. This technology is used only for storage of data and its security features are weak. Therefore, magnetic stripe technology is considered unsuitable for storing sensitive data and for highly sophisticated applications. In 1968, German inventors Jurgen Dethl of and Helmut Grotrupp filled the first Integrated Circuit Card related patents. Same type of applications followed in France in 1974 and Japan in 1970. The French Postal and Telecommunications services (PPT) successfully completed a field trial with telephone cards in 1984. Several millions of French telephone smart cards were in circulation in 1986. Their number reached nearly 60 million in 1990, and 150 million in late 90's. Today, according to data monitor, smart cards shipments are more than 4 billion.

II. RELATED WORK:

Smart cards have been around for a while now; it has been mainly used to store some kind of monetary value. Currently smart cards can be seen in the transportation, telecommunication and retail sectors. This paper aims to design a student card system for an educational institute using smart card technology that can be usable in the transportation, retail and educational sectors. The smart card will be used as means for identification, security and cash. From there we can see the potential and power of smart cards their versatility, practicality and usability.

For every different purpose a different card is present and at a time it becomes difficult to handle all these cards especially for the students, who just wish to carry a single card which can serve all the purposes. This paper aims to design a student card system for an institute using smart card technology that can be usable in the attendance, payment, and automation of class. The smart card will be used as a means for identification, automation, and payment. This paper proposed design multipurpose smart card to create identity card, payment transactions and automation of class. The smart card has a barcode that is unique for every card assigned to the student. The smart card does not save data directly in the smart card but in the server for the account-based system. This design would increase the transaction speed and also keep to secure the transaction process.

Existing System:

Traditional System uses different diaries and registers to store data. So, a

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college has to maintain lot of diaries to keep this data. Different procedures/operations done in these systems are slow and tedious. Updating any piece of existing data into these registers can be a difficult job and leaves prone to some human errors. Searching any specific detail is tedious. Also, analysis of this data is very difficult and has very limited scope. But, if the arrangement of data is pre-planned for acquiring some results, like total count of students in a lecture, it can be done but requires manual counting

Disadvantages:

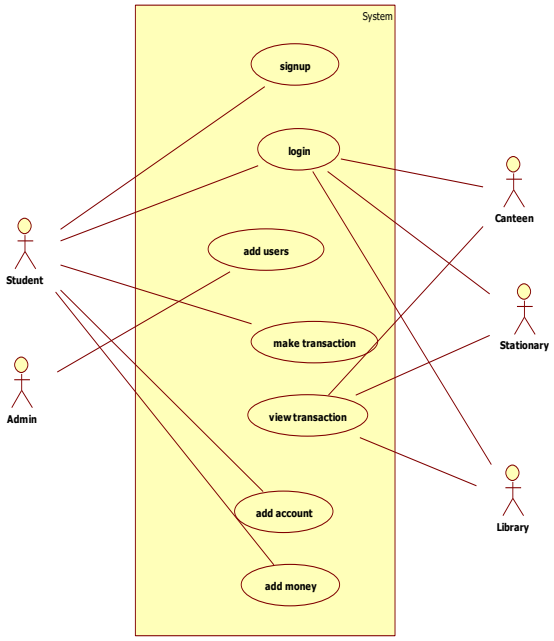
- It is the manual process.
- There is no chance to use this card in multiple location s at college.

PROPOSED SYSTEM:

In this proposed system we have created a system for college and other institutes to automate their day to day activities. This will help normal functioning of colleges more efficient. Also, leveraging analytics over data collected through different activities in college would help management to understand the needs and interests of students leading to data driven decisions.

USE CASE DIAGRAM:

A use case diagram in the Unified Modeling Language (UML) is a type of behavioral diagram defined by and created from a Use-case analysis. Its purpose is to present a graphical overview of the functionality provided by a system in terms of actors, their goals (represented as use cases), and any dependencies between those use cases. The main purpose of a use case diagram is to show what system functions are performed for which actor. Roles of the actors in the system can be depicted.



System requirements:

H/W System Configuration :-

- Processor - I3/Intel
- RAM - 8 GB
- Hard Disk - 1TB

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- Key Board - Standard Windows Keyboard
- Mouse - Two or Three Button Mouse
- Monitor - Any

S/W System Configuration :-

- Operating System - Windows 10
- Server-side Script - PHP
- Database - My SQL 6.0

III. CONCLUSION:

Smart cards can add facility and maintenance to any transaction of value and data but the preference facing today's managers can be difficult. We prospect this site has adequately presented the options and given you sufficient information to make informed assessments of performance, expense and security that will manufacture a smart card system that apt today's requirement and those of tomorrow. Security is very sensitive issue in smart card especially due to the various independent parties involve throughout the card's life cycle leading to what is now called dividend in rely. There is need to evolve a method in which even without rely none of the parties can cheat one another. Further, to overcome the lack of security provided by passwords or PINs for authentication and access control, some researchers believe that biometric is the best original means of authentication. The results of this study decode that security has an important and positive effect on user delight and consequently on user acceptance. It means that with growing the level of protection, the level of user adoption will be enhanced. Ultimately, further examination needs to be completed in the future to discriminate factors that will confer users better understanding of the system and also set up new techniques to enlarge the safety level of the smart card.

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