Student College Smart Card

Meet. D. Mehta¹ Pareen. S. Harsora² Keyur. V. Pandya³ Alok. S. Haryan⁴
¹,²,³,⁴Thakur Polytechnic, Kandivali (E)

Abstract— It is developed to ease the work of student's, involves a card containing a barcode which is nothing but a unique card that is given to each student. The smart card can be used at many places like office, library and canteen. The amount (balance) in the card can always be refilled with the help of admin. The unique id is scanned with the help of barcode scanner. Therefore it makes easy for a student to carry a single card rather than cash.
Key words: Smart Card

I. INTRODUCTION

It is developed to ease the work of student's, involves a card containing a barcode which is nothing but a unique card that is given to each student. The smart card can be used at many places like office, library and canteen. The amount (balance) in the card can always be refilled with the help of admin. The unique id is stored in the barcode, when the barcode is scanned the balance is deducted from the students account that is associated with the unique id. The unique id is scanned with the help of barcode scanner. It can also be used to store important documents. This is done by scanning the unique id stored in the card which in turn is been sent to the server where the student's documents stored .Thus the user doesn't have to carry its documents always with him. The student can use this card in office to pay fine and the amount will be calculated depending on the information stored in database which is retrieved by scanning the unique id on the card. It can also be used in stationary shop and canteen. Thus this makes very easy for a student he just needs to carry a portable card which will be very secure.

II. MODULES AND THEIR DESCRIPTION

A. Modules:
This system is having 7 Modules:
1) Admin Login
2) Student Login
3) Account maintenance
4) ID scanning
5) Payment of fine
6) Payment for stationary items
7) Document Carrier

B. Description:
1) Admin Login:
The admin can login and can refill the balance of the student's card.
2) Student Login:
The Student can login and view balance and last five transactions which will help him to be aware of his card balance and accordingly refill it whenever required.
3) Account maintenance:
The admin is responsible for maintaining the accounts of the students holding the card.
4) ID scanning:
The card is being scanned to deduct cash amount from the user's account or get the student's important documents.

5) Payment of fine:
This card can be used to pay anywhere in the college.
6) Payment for stationary items:
The card can also be used to pay for stationary items.
7) Document Carrier:
The card's unique ID can be used to retrieve the important documents (results,) of the student stored on the server.

III. EXISTING SYSTEM

Traditionally the system was manually handled by student or a person by itself. Carrying money in a pocket was a critical risk while travelling from public transport. The wallet might get lost. All the documents need to be stored in a storage media therefore there are chances that the document may be deleted. There is always a risk while carrying documents when travelling. The documents may get misplaced anywhere. Maintenance of the system is very difficult.

IV. PROPOSED SYSTEM

It involves a card containing a barcode which is nothing but a unique card that is given to each student. The smart card can be used at many places like office, library and canteen. The amount in the card can always be refilled with the help of admin. The unique id is stored in the barcode, when the barcode is scanned the balance is deducted from the student's account that is associated with the unique id. It can also be used to store important documents. This is done by scanning the unique id stored in the card which in turn is been sent to the server where the student's document is stored. Thus the user doesn't have to carry its documents always with him. The student can use this card in office to pay fine and the amount will be calculated depending on the information stored in database. Thus this makes very easy for a student he just needs to carry a portable card which will be very secure
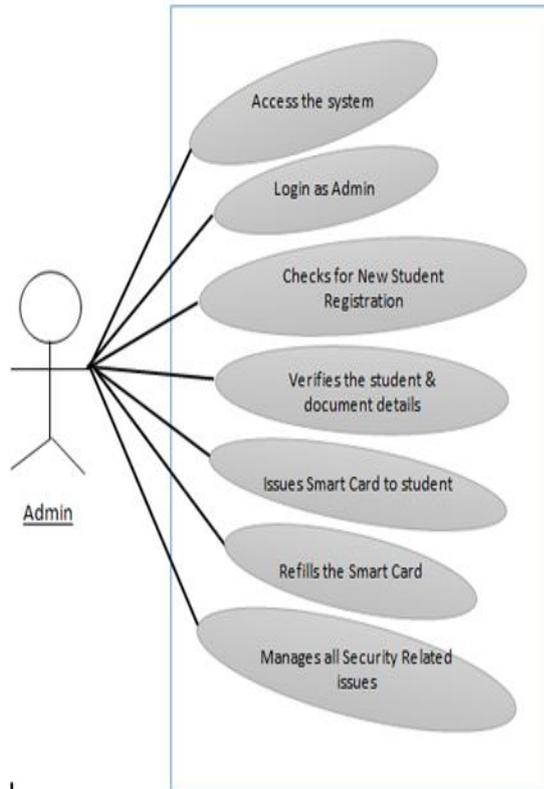
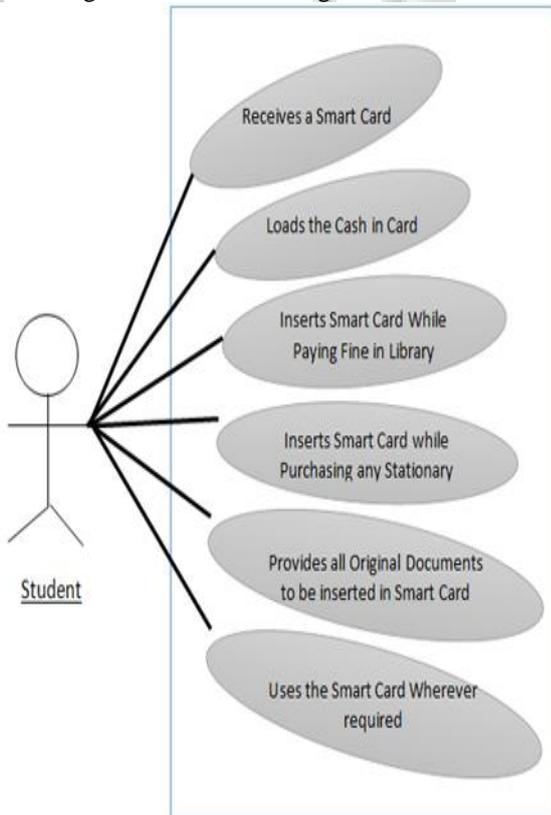## V. USE CASE DIAGRAM

Fig. 5.1.A: Use case diagram for admin

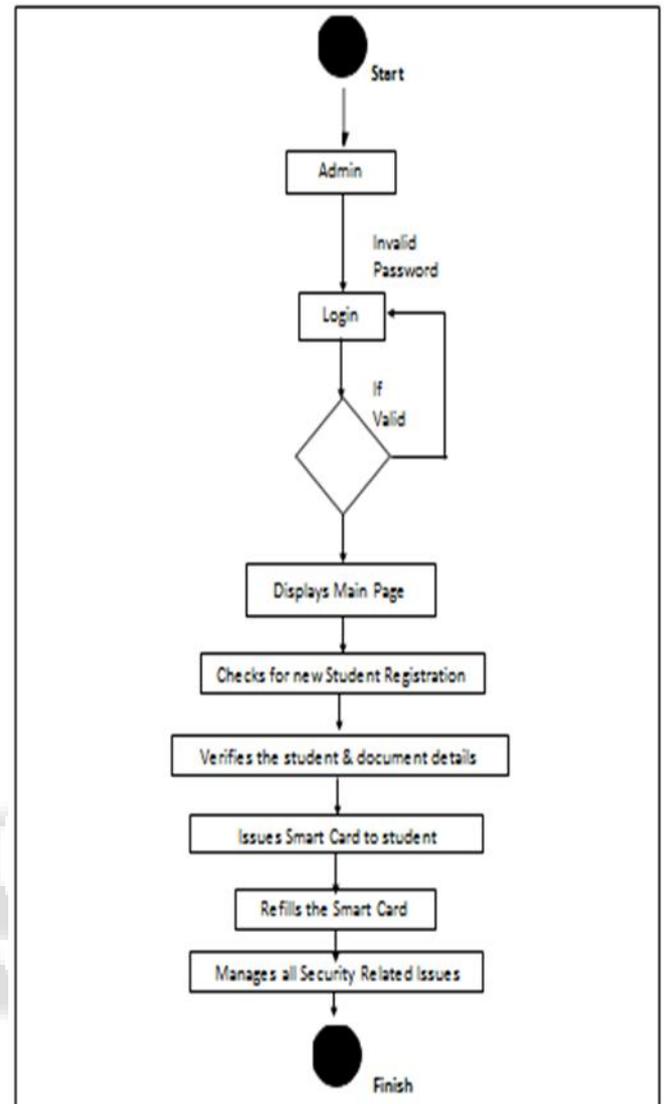Fig. 5.1.B: Use case diagram for student

VI. ACTIVITY DIAGRAM

Fig. 6.1: Activity diagram of system
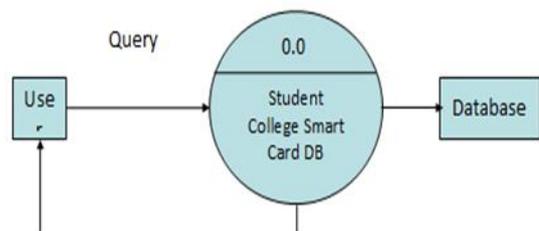
VII. DATA FLOW DIAGRAM

Fig. 7.1: Data Flow diagram

VIII. SYSTEM IS

A. Load Balancing:

Since the system will be available only the admin logs in the amount of load on server will be limited to time period of admin access.

B. Easy Accessibility:

Records can be easily accessed and stored.

C. User Friendly:

The system will be user friendly therefore it is easy to use.

D. Efficient and reliable:

Maintaining secured database on the server, which will be accessible according to the user requirement. It will be a very efficient as compared to storing all the customer data on the spreadsheet or in physically in the record books. No maintenance needed.

E. Easy maintenance:

Student College Smart Card system is design as easy way. So maintenance is also easy.

IX. ADVANTAGES AND DISADVANTAGES

A. Advantages:

1) There is no need to carry documents every time.
2) Don't need to carry cash every time.
3) Transactions will be maintained for future record.

B. Disadvantages:

1) Barcode scanner will be needed each and every system, increasing cost.
2) In case of theft/lost anyone can use the card without the knowledge of user.
3) If the id is not properly scanned the student will be in a big trouble as he will not be able to clear his dues.

X. CONCLUSION

This project is developed to ease the work of students. A unique card that is assigned to the student called "Smart Card". This Smart Card is useful for the student in places like library, canteen and stationary shops. This card can be used to submit important documents that will be needed by the student for any of its work. The main motive is to avoid direct cash payments at various places in college with a Smart Card Compact Solution, the new way of debiting money. Also, to minimize the risk of misplacing of original documents, which has been also secured to maintain all those documents in a Card.

ACKNOWLEDGMENT

REFERENCES

[1] Microsoft Developer Network (MSDN): http://msdn2.microsoft.com/en-us/default.aspx: This is a valuable online resource, and is a must for any developer using Microsoft tools.
[2] http://www.asp.net/: This is the official Microsoft ASP.NET web site. It has a lot of: tutorials, training videos, and sample projects.
[3] http://ieeexplore.ieee.org/xpl/articleDetails.jsp?tp=&arnumber=315646&queryText%3DAnswer+Checker
[4] http://ieeexplore.ieee.org/xpl/articleDetails.jsp?tp=&arnumber=139342&queryText%3DAnswer+Checker