GALGOTIAS UNIVERSITY

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ATM SYSTEM

A Report for the Evaluation 3 of Project 2

Submitted by

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in partial fulfillment for the award of the degree of

BACHELOR OF COMPUTER APPLICATION

IN

COMPUTER SCIENCE AND ENGINEERING

SCHOOL OF COMPUTING SCIENCE AND ENGINEERING

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APRIL / MAY- 2020

SCHOOL OF COMPUTING AND SCIENCE AND ENGINEERING

BONAFIDE CERTIFICATE

Certified that this project report **"ATM SYSTEM"** is the bonafide work of "**AYUSH SHARMA(1713104035)"** who carried out the project work under my supervision.

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ABSTRACT

The ATM system is the project which is used to access their bank accounts in order to make cash withdrawls.Whenever the user need to make cash withdraw,they can enter their PIN number and it will display the amount to be withdrawn.Once their withdrawl was successful the amount will be debited in their account.

The ATM system is developed in vb.net and back-end database as ms-access.The ATM will service one customer at a time. A customer will be required to enter ATM card number,PIN both of which will be sent to the database for validation as part of each transaction.The customer will then be able to perform one or more transaction.Also customer must be able to make a balance inquiry of any account linked to the card.

The atm will communicate each transaction to the database and obtain verification that it was allowed by the database.In the case of a cash withdrawl a second message will be send after the transaction has been physically done.
If a transaction fails for any reason other than an invalid pin the atm will display an explanation of the problem.

The atm will provide the customer with a printed receipt for each successful transaction,showing the date,time,machinelocation,type of transaction,accounts,and ending and available balance of the affected account.

INTRODUCTION

Automated teller machine is an amalgamation of vivid variety of knowledge. In itself it maintains a huge collection and caters to many different clientele. Due to this, it emerges out to be a complex entity. To carry out various operations in ATM effectively, there arises a need for automation. The growing awareness of communication technology and its rejuvenating methodology of information acquisition, processing, storage, retrieval and dissemination has indeed helped a lot in working towards creating a complete automated teller machine software. Keeping in view the latest trend in information technology, the main focus is to "Improve Knowledge Delivery Through Superior Technology".

This is a full fledged ATM project consisting of almost all the features required. Here you have all the features that you require in an ATM. You can add new accounts in the database.. You can delete them or update the list of members.

The most important part of the software is the deposit and withdrawal of money from an account.

There are good browsing facilities using the toolbar and menu.

System requirements

A. Front End (Visual basic):

ADVANTAGES OF VISUAL BASIC 6.0

- Has a shorter learning curve and development time rather than C/C++.
- Removes the complexities of the windows API from the programmer.
- Allows for rapid applications developments.
- Excellent for business applications.
- Used by most Office Suite tools as their macro languages.
- Allows you to create ActiveX controls.
- Object oriented in nature.
- Can integrate with the Internet on both the server and the client side.
- Integrate with Microsoft Transaction Server.

Backend(RDMS:MS ACCESS):

Features:

- Data independence

- Data administration
- Efficient data access
- Concurrent access and crash recovery **.**
- Reduced application development time.

FEASIBILIY STUDY

❖ Operational feasibility

The person having the working knowledge of the computer can easily operate the system, he or she does not require any sort of training.

❖ Economic feasibility

The following are the benefits of the project:-

➢ Cost reduction

This system would reduce the cost in paper and paper related tasks.

➢ Improve service-level benefits

The proposed system improves the system performance because the proposed system is based on computer processing.

➢ Time saving benefits

It saves a lot of time and provides same result in very less amount of time.

➢ Data integrity is there.

➢ Software is data independent.

➢ No chances of redundancy in records.

❖ **Management feasibility**

This system would be feasible because we have to maintain lot of records and update the record of every member.

PROPOSED SYSTEM

This system has been proposed for doing all the work of the ATM transactions. It maintains the

members' records and al the details like name of the member, birth date, address, phone number etc,. One is able to add new members and update the information about the existing members.

In this system the members can easily perform the transactions such as depositing money and withdrawing money, checking the account balance etc.

In this system the system administrator can easily maintain the information regarding the current members and the proposed new members. Also he can easily maintain the members account, make new members and update the records of the existing members.

SYSTEM DESIGN

This is most creative and challenging phase of the system life cycle is system designing. The term designing describes a final system and the process by which it is developed. The first step is to determine how the output is to be produced and in what format. Sample of the output and input are also presented. Second input data and master files database have to be designed to meet the requirement of the proposed output.

This project is made as MIS project. We have done this project on Windows platform. Windows platform is very convenient for such purpose because it provides such an environment that the changes made in any type of the data can be viewed from anywhere at anytime after making changes.

The first window is the welcome window .

Then the user gains access to the main screen of the system where he finds a menu bar consisting of various operations he can perform within the system.

The user can select any of the operation as required and can work upon the system.

HISTORY OF ATM

As is often the case with inventions, many inventors contribute to the history of an invention. In the case of the ATM, Don Wetzel invented the first successful and modern ATM in the USA, however

he was not first inventor to create an ATM. In 1939, Luther George Simjian started patenting an earlier and not-so-successful version of an ATM.

An automatic teller machine or ATM allows a bank customer to conduct their banking transactions from almost every other ATM machine in the world. Don Wetzel was the co-patentee and chief conceptualist of the automated teller machine, an idea he said he thought of while waiting in line at a Dallas bank.

At the time (1968) Wetzel was the Vice President of Product Planning at Docutel, the company that developed automated baggage-handling equipment. The other two inventors listed on the patent were Tom Barnes, the chief mechanical engineer and George Chastain, the electrical engineer. It took five million dollars to develop the ATM. The concept of the modern ATM first began in 1968, a working prototype came about in 1969 and Docutel was issued a patent in 1973.

The world's first ATM was installed in Enfield Town in the London Borough of Enfield, London on June 27 1967.

The first working ATM was installed in a New York based Chemical Bank.

The first ATMs were off-line machines, meaning money was not automatically withdrawn from an account. The bank accounts were not (at that time) connected by a computer network to the ATM. Therefore, banks were at first very exclusive about who they gave ATM privileges to. Giving them only to credit card holders (credit cards were used before ATM cards) with good banking records. Wetzel, Barnes and Chastain developed the first real ATM cards, cards with a magnetic strip and a personal ID number to get cash. ATM cards had to be different from credit cards (then without magnetic strips) so account information could be included.

WHY GO FOR ATM?

- An automatic teller machine increases existing business. The typical ATM customer will spend 20-25% more than a non-ATM customer, according to research conducted by AT&T Global Information Solutions.

- An automatic teller machine generates new business. Customers are more likely to seek out a location with an automatic teller machine; in addition to convenience, there are a number of safety benefits associated with an in-store automatic teller machine, according to survey results published in Petroleum Marketer magazine.

- An automatic teller machine provides additional revenue streams. Each ATM withdrawal transaction generates surcharge ("convenience fee") income for the owner of the automatic teller machine. Additionally, an automatic teller machine can provide revenue from on-screen

advertising, couponing, and alternative media (e.g., prepaid phone-cards, postage stamps) dispensing opportunities.

- An automatic teller machine reduces risk and lowers costs. Having an automatic teller machine on the premises can reduce the number of bad checks and cut credit card expenses because customers have the option of withdrawing cash instead.

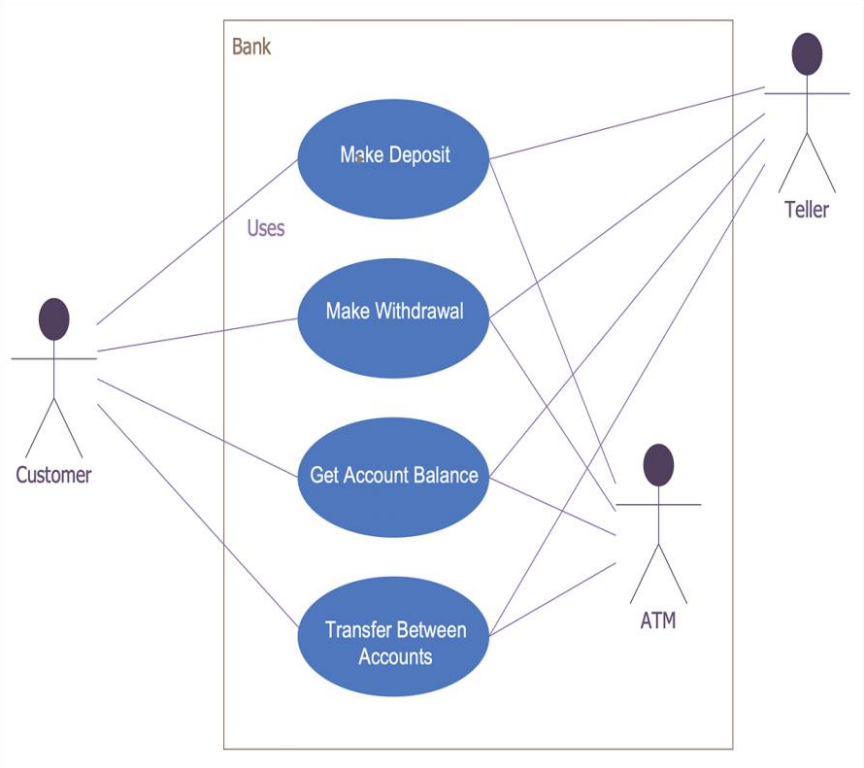
- An automatic teller machine pays for itself. With break-even points below 100 transactions per month, even a low traffic location can more than pay for an automatic teller machine from surcharge revenues alone.

IMPLEMENTATION AND ARCHITECTURAL DIAGRAMS

Use Case Diagram: Use case diagrams describe the functionality of a system and users of the system. They contain the following elements:

1. Actors , which represent users of a system, including human users and other systems

2. Use cases , which represent functionality or services provided by a system to users



MODULES OF THE PROJECT

- New account:

  Performs the basic operations that are required to add a new member and records the information of the user

- Modify account:

  This is used to modify the details of a member and password is required to make changes.

- Close account:

  This allows the user to close his/her account.

- Change password:

Through this menu option, the user may change the password by entering his old password and specifying his new password twice.

- Online transaction:
  This option allows the member to spend money that is present in his/her account.

- Reload card:
  The member can deposit money in his account using this screen.

- Check balance:
  The user can check his/her account balance by entering his/her password.

- Account statement:
  This option allows the member to view all the activities that have taken place in his/her account.

- Customer list:
  The list of members or customers can be viewed using this option.

- Customer record:
  This screen shows the details of the customer, identified through his/her card number.

Sequence Diagram: Sequence diagrams typically show the flow of functionality through a use case, and consist of the following components:

1. Actors , involved in the functionality

2. Objects , that a system needs to provide the functionality

3. Messages , which represent communication between objects

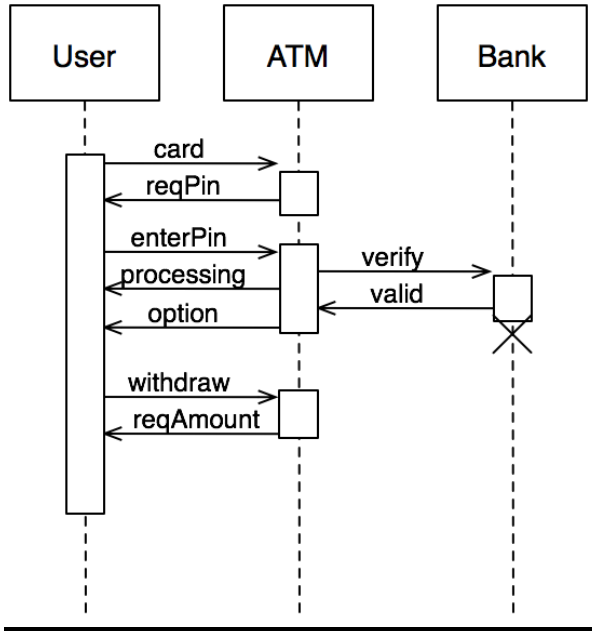


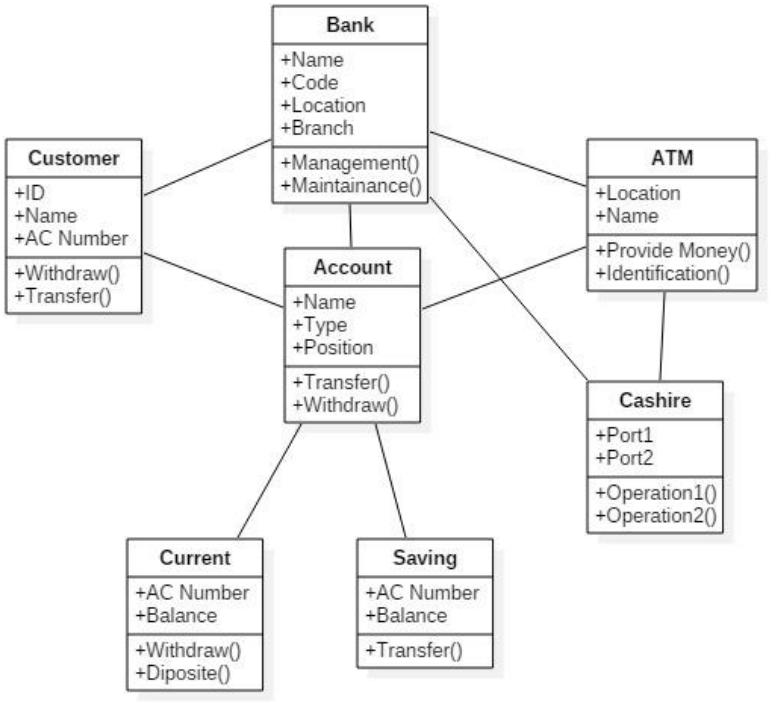
FIG: PROCESSING OF ATM

Class Diagram:- Class diagrams describe the static structure of a system, or how it is structured rather than how it behaves.

These diagrams contain the following elements:

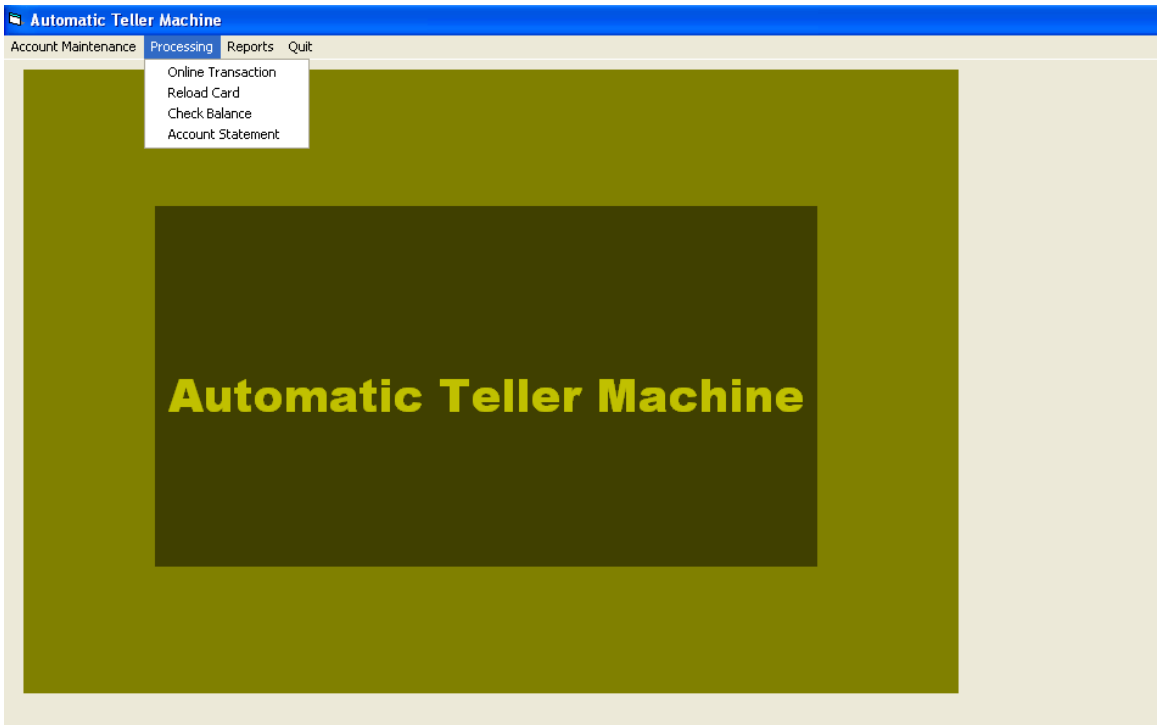
1. Classes , which represent entities with common characteristics or features. These features include attributes, operations, and associations.

2. Associations , which represent relationships that relate two or more other classes where the relationships have common characteristics or features. These features include attributes and operations.


Bank
+Name
+Code
+Location
+Branch
+Management()
+Maintainance()
Customer
+ID
+Name
+AC Number
+Withdraw()
+Transfer()
ATM
+Location
+Name
+Provide Money()
+Identification()
Account
+Name
+Type
+Position
+Transfer()
+Withdraw()
Cashire
+Port1
+Port2
+Operation1()
+Operation2()
Current
+AC Number
+Balance
+Withdraw()
+Diposite()
Saving
+AC Number
+Balance
+Transfer()

OUTPUT


Automatic Teller Machine
Automatic Teller Machine
Version 1.0


Automatic Teller Machine
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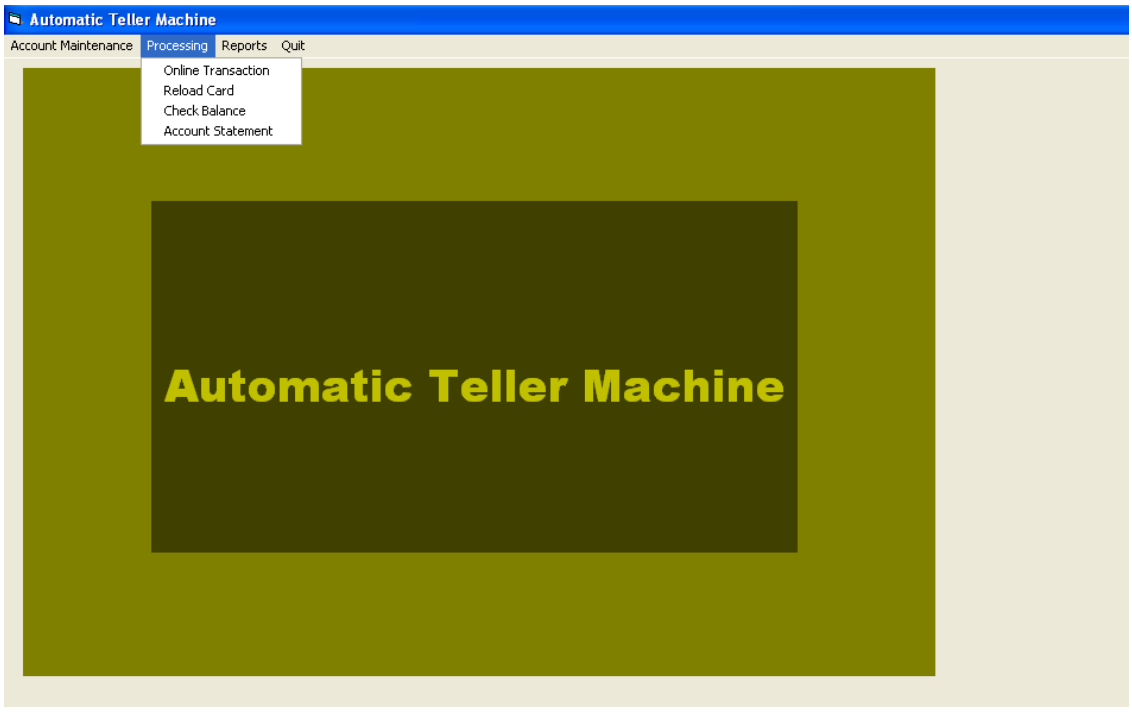
Processing
Reports
Quit
Online Transaction
Reload Card
Check Balance
Account Statement
Automatic Teller Machine


Automatic Teller Machine
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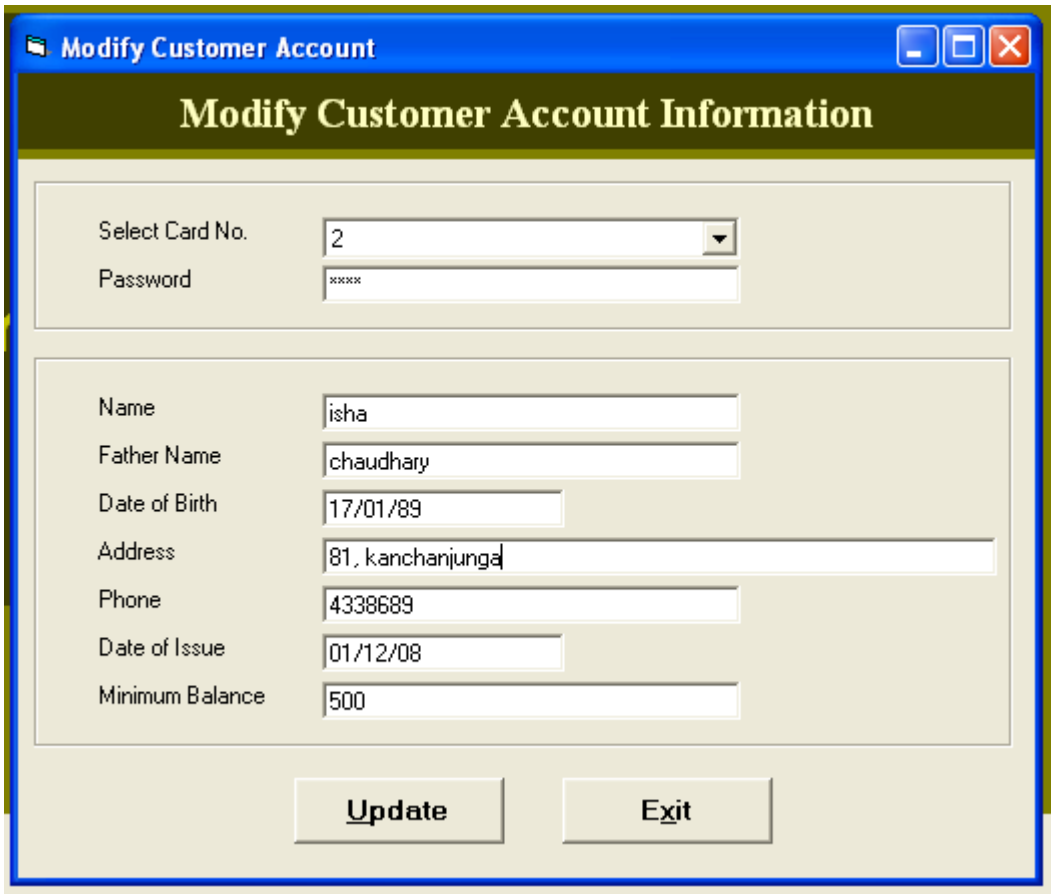
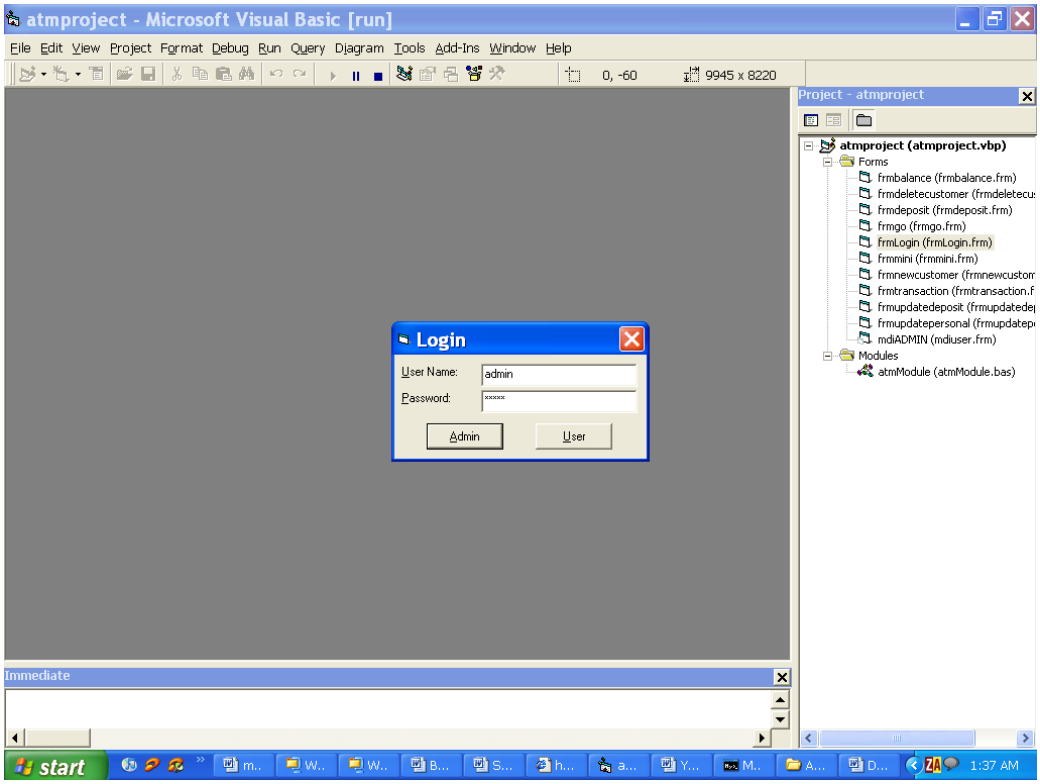

Modify Customer Account
Modify Customer Account Information
Select Card No.
2
Password
****
Name
isha
Father Name
chaudhary
Date of Birth
17/01/89
Address
81, kanchanjunga
Phone
4338689
Date of Issue
01/12/08
Minimum Balance
500
Update
Exit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File Edit View Project Format Debug Run Query Diagram Tools Add-Ins Window Help
0, -60
9945 x 8220
Project - atmproject
atmproject (atmproject.vbp)
Forms
frmbalance (frmbalance.frm)
frmdeletecustomer (frmdeletecu
frmdeposit (frmdeposit.frm)
frmgo (frmgo.frm)
frmLogin (frmLogin.frm)
frmmini (frmmini.frm)
frmnewcustomer (frmnewcustom
frmtransaction (frmtransaction.f
frmupdatedeposit (frmupdatede
frmupdatepersonal (frmupdatep
mdiADMIN (mdiuser.frm)
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admin
Password:
Admin
User
Immediate
start
1:37 AM

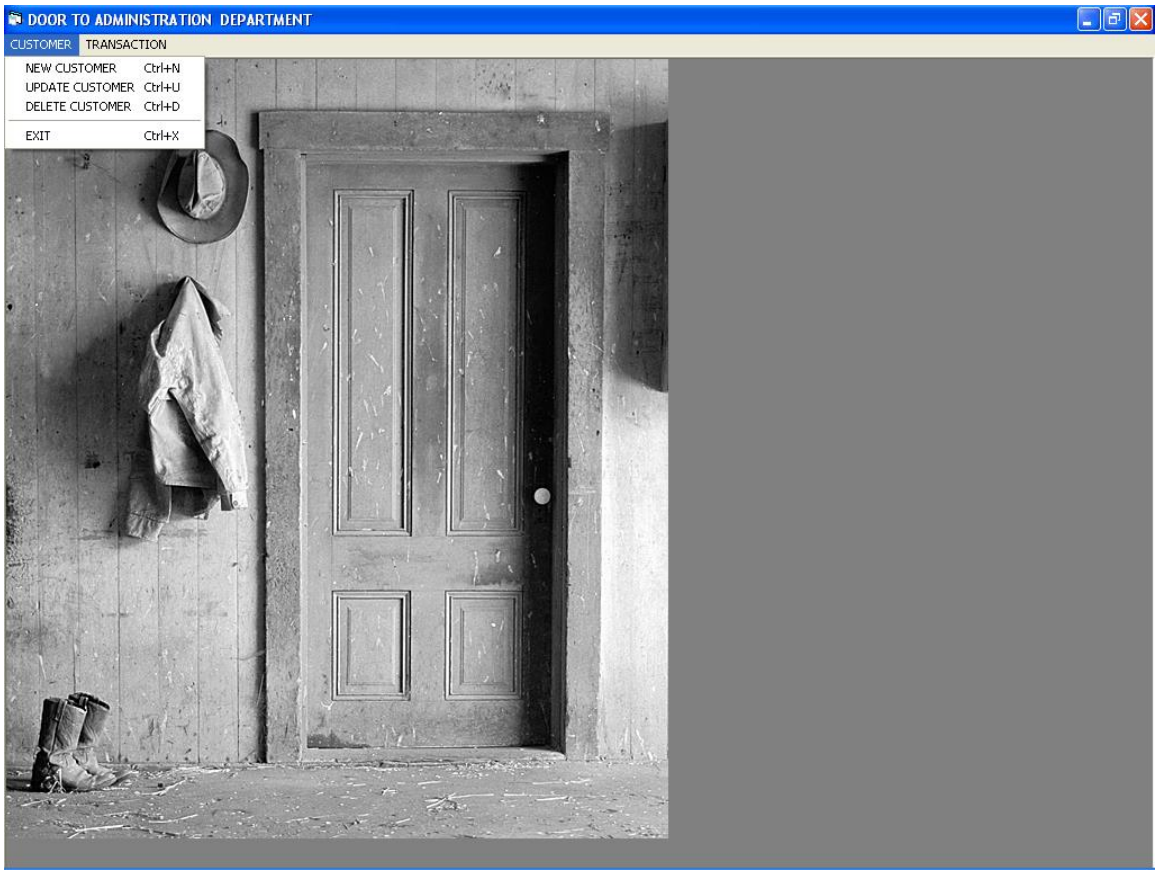
DOOR TO ADMINISTRATION DEPARTMENT
CUSTOMER
TRANSACTION
NEW CUSTOMER Ctrl+N
UPDATE CUSTOMER Ctrl+U
DELETE CUSTOMER Ctrl+D
EXIT Ctrl+X

FIG: DATA ENTRY

FUTURE SCOPE AND CONCLUSION

This project has wide scope to be implemented in any other Department. This project covers all daily transactions and generates useful analytical and daily registers, which are used in every profit based organization. Hence it can be implemented any-where else after minute organization level customization. Apart from this industry it can be also deployed in any other industry, which is involved in manufacturing after changing certain portions

Software Scope:

Extensibility: This software is extendable in ways that its original developers may not except. The following principles enhances extensibility like hide data structure , avoid traversing multiple links or methods , avoid case statements on object type and distinguish public and private operations.

Reusability: Reusability is possible as and when require in this application. We can update it next version . Reusable software reduces design , coding and testing cost by amortizing effort over several designs . Reducing the amount of code also simplifies understanding, which increases the likelihood that the code is correct. We follow up both types of reusability : Sharing of newly written code within a project and reuse of previously written code on new projects.

REFRENCES

- Software Engineering, A Practitioner's Approach – Roger S. Pressman.
- Beginner's Guide to Visual Basic 6 – Reeta Sahoo & Gagan B. Sahoo.
- Mastering Database Programming with Visual Basic 6 - Evangelos Petroutsos.

List of source of information:

After starting this project we discussed in-group and learnt about many sources of information. After starting this project, a group discussion was held. We discussed some topics with our academic adviser and our classmates

1) Books: - Books is one of the most important and essential source of information, which is helpful in this project. In group discussion, it was suggested to go through following books.

- Roger.s.pressman
- Elias m.avad
- Bipin c. desai

2) Interview: - The idea of interview is gained by group discussion. It is the one of the important source of information. Through it we got a lot of information about present system and how it works.

3) Websites: -

Now days Internet become important source of information. We also visited following websites, which was helpful in project.

- www.smartdraw.com
- www.mks.com
- www.sel.iit.rwc.ca