MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)

Skills Based Mini Project Report

on

ATM MANAGEMENT SYSTEM

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Submitted to:

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MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)

CERTIFICATE

This is certified that Prachi Gayakwad (0901CA211038) has submitted the project report titled **ATM MANAGEMENT SYSTEM** under the mentorship of **Dr. Anshu Chaturvedi** (Professor) as the skill based mini project in 1st year of Master of computer Application in Computer Science and Engineering from Madhav Institute of Technology and Science Gwalior.

Dr. Anshu Chaturvedi
(Professor)
Computer Science and Engineering

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DECLARATION

I hereby declare that the work being presented in this project report, for the fulfilment of partial requirement of the skills based mini project in 1st year of Master of Computer Application in Computer Science and Engineering at Madhav Institute of Technology & Science, Gwalior is an authenticated and original record of my work under the mentorship of **Dr. Anshu Chaturvedi.** (professor), MITS Gwalior.

I declare that I have not submitted the matter embodied in this report anywhere else.

Prachi Gayakwad
0901CA211038
1st year
Master of Computer Application,
Computer Science and Engineering

ACKNOWLEDGEMENT

The full semester project has proved to be pivotal to my career. I am thankful to my institute, **Madhav Institute of Technology and Science** to allow me to continue my disciplinary project. I extend my gratitude to the Director of the institute, **Dr. R. K. Pandit** and Dean Academics, **Dr. Manjaree Pandit** for this. I would sincerely like to thank my department, **Department of Computer Science and Engineering, for allowing** me to explore this project. I humbly thank **Dr. Manish Dixit**, Professor and Head, Department of Computer Science and Engineering, for his continued support during the course of this engagement, which eased the process and formalities involved.

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ABSTRACT

The ATM System is the project which is used to access their bank accounts in order to make cash withdrawals. Whenever the user need to make cash withdraws, they can enter their PIN number (personal identification number) and it will display the amount to be withdrawn in the form of 100's 500's and 1000's. Once their withdrawn 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. VB.Net is the one of the powerful version of Framework and object oriented programming. Hence we use this software in our project.

The ATM will service one customer at a time. A customer will be required to enter ATM Card number, personal identification 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 transactions. Also customer must be able to make a balance inquiry of any account linked to the card.

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1. INTRODUCTION

Automated Teller Machine enables the clients of a bank to have access to their account without going to the bank. This is achieved only by development the application using online concepts. When the product is implemented, the user who uses this product will be able to see all the information and services provided by the ATM, when he enters the necessary option and arguments. The product also provides services like request for cheques, deposit cash and other advanced requirement of the user. The data is stored in the database and is retrieved whenever necessary. The implementation needs ATM machine hardware to operate or similar simulated conditions can also be used to successfully use the developed product. To develop this ATM system the entire operation has been divided into the following step:

1.verification process
2.language, service and account selection
3.Banking services
4.Transactions
5.Special services

The program is designed in such a way that the user has to card and pin number. Once verified, he is provided a menu and he/she had to enter the option provided in the menu. For example, when the user wants to view the list of payment history than he/she had to enter the option for payment history provided in the main menu. When the option is entered alone with the respective argument, then the payment history is displayed on the screen .The user also must be given option to browse through the pages like previous page, next page, etc. The user may experience a delay in retrieving or viewing the data, when there are many users logged on to the same bank branch system.

2. OBJECTIVE

The project to be designed will control a simulated automated teller machine (ATM) having a magnetic stripe reader for reading an ATM card, a customer console (keyboard and display) for interaction with the customer, a slot for depositing envelopes, a dispenser for cash (in multiples of $20), a printer for printing customer receipts, and a key-operated switch to allow an operator to start or stop the machine. The ATM will communicate with the bank's computer over an appropriate communication link. Design the ATM system in detail with the architectural design. Use use cases, sequence diagrams, class structural models and behavioral models.

3. CODING

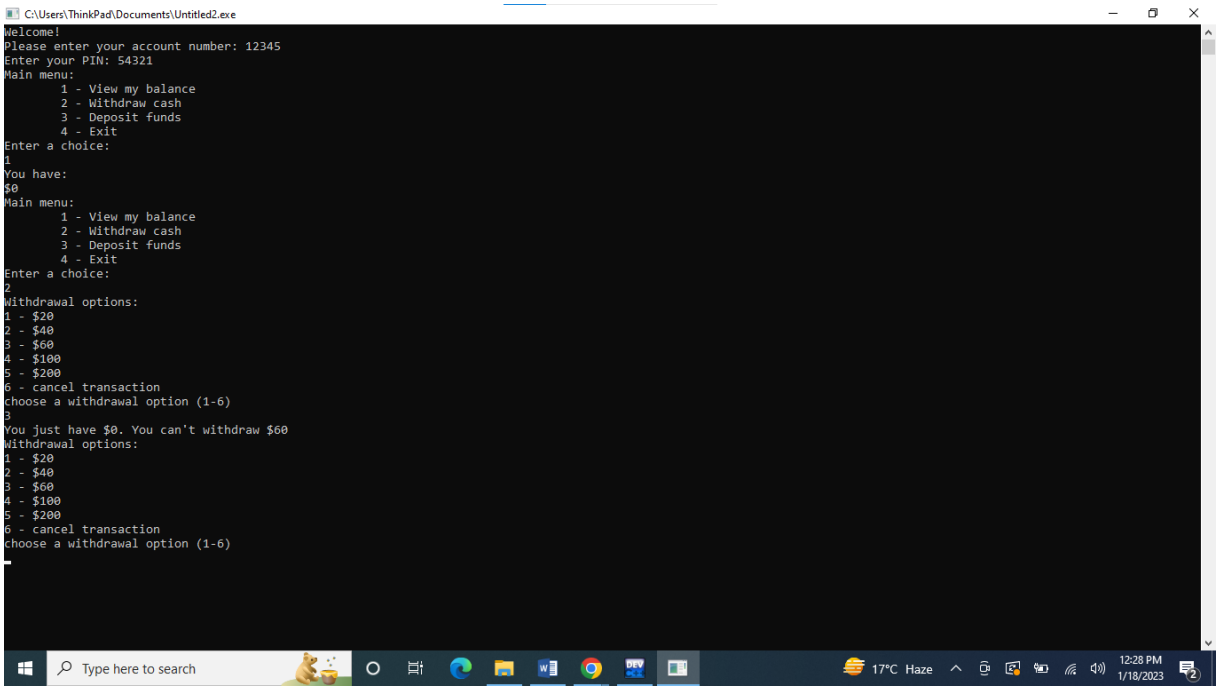
```
#include <iostream>
#include <stdlib.h>
#include <string.h>
using namespace std;
class Bank {

   // Private variables used inside class
private:
   string name;
   long long accnumber;
   char type[10];
   long long amount = 0;
   long long tot = 0;

   // Public variables
public:
   // Function to set the person's data
   void setvalue()
   {
      cout << "Enter name\n";
      cin.ignore();

      // To use space in string
      getline(cin, name);

      cout << "Enter Account number\n";
      cin >> accnumber;
      cout << "Enter Account type\n";
```

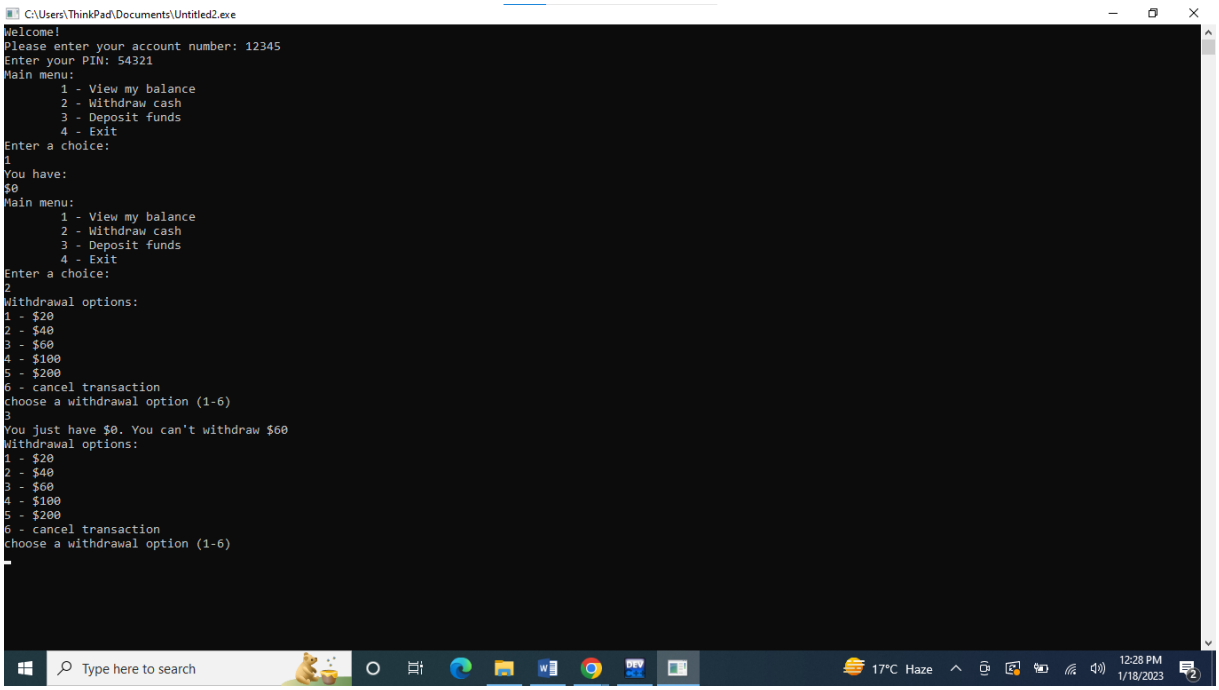
```
    cin >> type;
    cout << "Enter Balance\n";
    cin >> tot;
}

// Function to display the required data
void showdata()
{
    cout << "Name:" << name << endl;
    cout << "Account No:" << accnumber << endl;
    cout << "Account type:" << type << endl;
    cout << "Balance:" << tot << endl;
}

// Function to deposit the amount in ATM
void deposit()
{
    cout << "\nEnter amount to be Deposited\n";
    cin >> amount;
}

// Function to show the balance amount
void showbal()
{
    tot = tot + amount;
    cout << "\nTotal balance is: " << tot;
}

// Function to withdraw the amount in ATM
void withdrawl()
{
    int a, avai_balance;
    cout << "Enter amount to withdraw\n";
```

```
        cin >> a;
        avai_balance = tot - a;
        cout << "Available Balance is" << avai_balance;
    }
};

// Driver Code
int main()
{
    // Object of class
    Bank b;

    int choice;

    // Infinite while loop to choose
    // options everytime
    while (1) {
        cout << "\n~~~~~~~~~~~~~~~~~~~~~~~~~~~~"
            << "~~~~~~~~~~~~~~~~~~~~~~~~~~~~"
            << "~~~WELCOME~~~~~~~~~~~~~~~~~~"
            << "~~~~~~~~~~~~~~~~~~~~~~~~~~~~"
            << "~~~~~~~~~\n\n";
        cout << "Enter Your Choice\n";
        cout << "\t1. Enter name, Account "
            << "number, Account type\n";
        cout << "\t2. Balance Enquiry\n";
        cout << "\t3. Deposit Money\n";
        cout << "\t4. Show Total balance\n";
        cout << "\t5. Withdraw Money\n";
        cout << "\t6. Cancel\n";
        cin >> choice;

        // Choices to select from
```

```
        switch (choice) {
        case 1:
           b.setvalue();
           break;
        case 2:
           b.showdata();
           break;
        case 3:
           b.deposit();
           break;
        case 4:
           b.showbal();
           break;
        case 5:
           b.withdrawl();
           break;
        case 6:
           exit(1);
           break;
        default:
           cout << "\nInvalid choice\n";
        }
     }
}
```

4. Output (Screenshot)




C:\Users\ThinkPad\Documents\Untitled2.exe
Welcome!
Please enter your account number: 12345
Enter your PIN: 54321
Main menu:
1 - View my balance
2 - Withdraw cash
3 - Deposit funds
4 - Exit
Enter a choice:
1
You have:
$0
Main menu:
1 - View my balance
2 - Withdraw cash
3 - Deposit funds
4 - Exit
Enter a choice:
2
Withdrawal options:
1 - $20
2 - $40
3 - $60
4 - $100
5 - $200
6 - cancel transaction
choose a withdrawal option (1-6)
3
You just have $0. You can't withdraw $60
Withdrawal options:
1 - $20
2 - $40
3 - $60
4 - $100
5 - $200
6 - cancel transaction
choose a withdrawal option (1-6)
Type here to search
17°C Haze
12:28 PM
1/18/2023

1. CONCLUSION

All good things must come to an end, so does our ATM program. We are done with the basic transaction processes for our ATM. Now we have in hand, two unique features of our ATM which help in reducing the complex nature of banking process such as PIN CHANGE and FUND TRANSFER. I am not sure about the fund transfer, but now we can change the pin using ATM without visiting the bank. This amendment is one of the most advantageous feature of ATM today.