“ATM-System”

[This Project is to make an automated teller machine with user's account and password, bank account, with that user are able to withdraw , deposit , and view their account balance.]

MASTER OF COMPUTER APPLICATION
{2019-2022}

Guided By:

Mr.Upendra Singh
Department of Computer Technology & Applications

Submitted by:

Vikas Choudhary
(0801CA191032)

Department of Computer Technology & Applications
SHRI G.S. INSTITUTE OF TECHNOLOGY AND SCIENCE
INDORE (M.P.)

SHRI G.S. INSTITUTE OF TECHNOLOGY AND SCIENCE
INDORE (M.P.)

Recommendation

The project report entitled **"*ATM-System*"** submitted by **Vikas Choudhary** students of MCA Second year in the session 20020-21, towards partial fulfillment of the degree of **Master of Computer Applications** of Rajiv Gandhi Proudyogiki Vishwavidhyalaya, Bhopal, is a satisfactory account of {his/her/their} work and is recommended for the award of degree**.**

Mr.Upendra Singh
Project Guide
Department of Comp. Tech. & Application

Mr.Neeraj Aarya
Head
Department of Comp. Tech. & Application

SHRI G.S. INSTITUTE OF TECHNOLOGY AND SCIENCE
INDORE (M.P.)

Certificate

The project report entitled **"*ATM-System*"** submitted by **Vikas Choudhary** students of MCA Second year in the session 2020-21, towards partial fulfillment of the degree of **Master of Computer Applications** of Rajiv Gandhi Proudyogiki Vishwavidhyalaya, Bhopal, is a satisfactory account of their work and is approved for award of the degree.

Internal Examiner **External Examiner**
Mr.Upendra Singh

Date:21-01-2021

Acknowledgement

We are heartily pleased to acknowledge all those people who have helped us in the successful completion of this project. With great pleasure we express our heartfelt gratitude to our esteemed guide, **Mr. Uperndra Singh** Lecturer Department of Computer Technology & Application, S.G.S.I.T.S. Indore. His persistent encouragement, perpetual motivation, everlasting patience and valuable technical inputs in discussions have enabled the successful completion of this project. His invaluable help, advice and constant encouragement helped us a lot and provide impetus to the progress of the project. We extend our profound indebtedness to the Head of the department **Ms. Sunita Varma,** the word loose their worth for her invaluable guidance, continuous encouragement and cooperation in every respect.

We sincerely wish to express our gratitude to all the members of staff of M.C.A. who have extended their cooperation at all times and have contributed in their own way in developing the project. Successful completion of a project is not an individual effort. It is an outcome of the cumulative effort of a number of persons, each having his own importance to the objective. We are thankful to our parents for being a constant source of encouragement in all our endeavors. Indeed it is their support that helps us through the ups and downs of life. The support and suggestion of our friends are worth appreciation and thankfulness. *A blend of gratitude, pleasure, great satisfaction and indebtedness is what, we feel to convey to all those who have directly or indirectly contributed to the successful completion of our project work.*

Vikas Choudhary

Abstract

This is a *Java* Project to Display the *ATM* Transaction. The user will choose from any one of the available options as input. Different cases using switch case have been provided for different operations like withdraw, deposit and check balance. ... The *Java* program is successfully compiled and run on a Windows *system*.

This Project is to make an automated teller machine with user's account and password, bank account, with that user are able to withdraw , deposit , and view their account balance.

Table of Contents

Chapter 1
Introduction

1.1 Preamble

This Project is to make an automated teller machine with user's account and password, bank account, with that user are able to withdraw , deposit , and view their account balance.

1.2 Objective

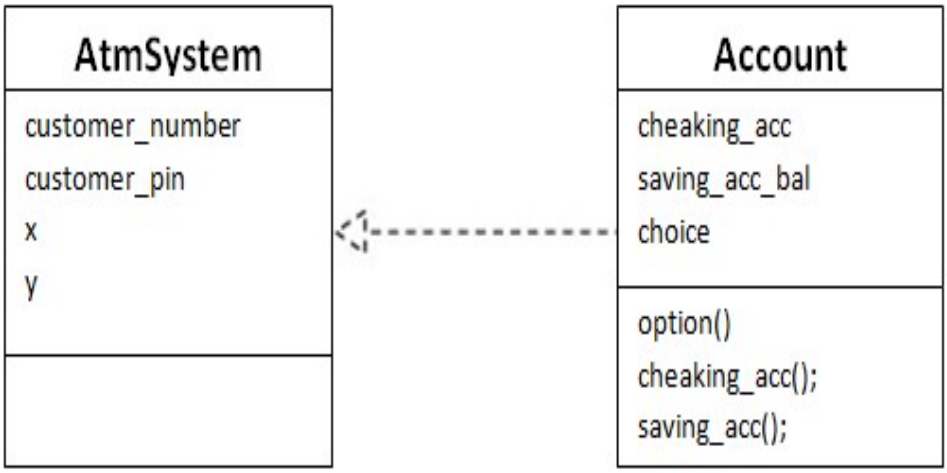
The *aim* of the *ATM* Simulation *System* project is to build a *Java* based *ATM* ... These *systems* able *easy* access to money.

1.3 Scope

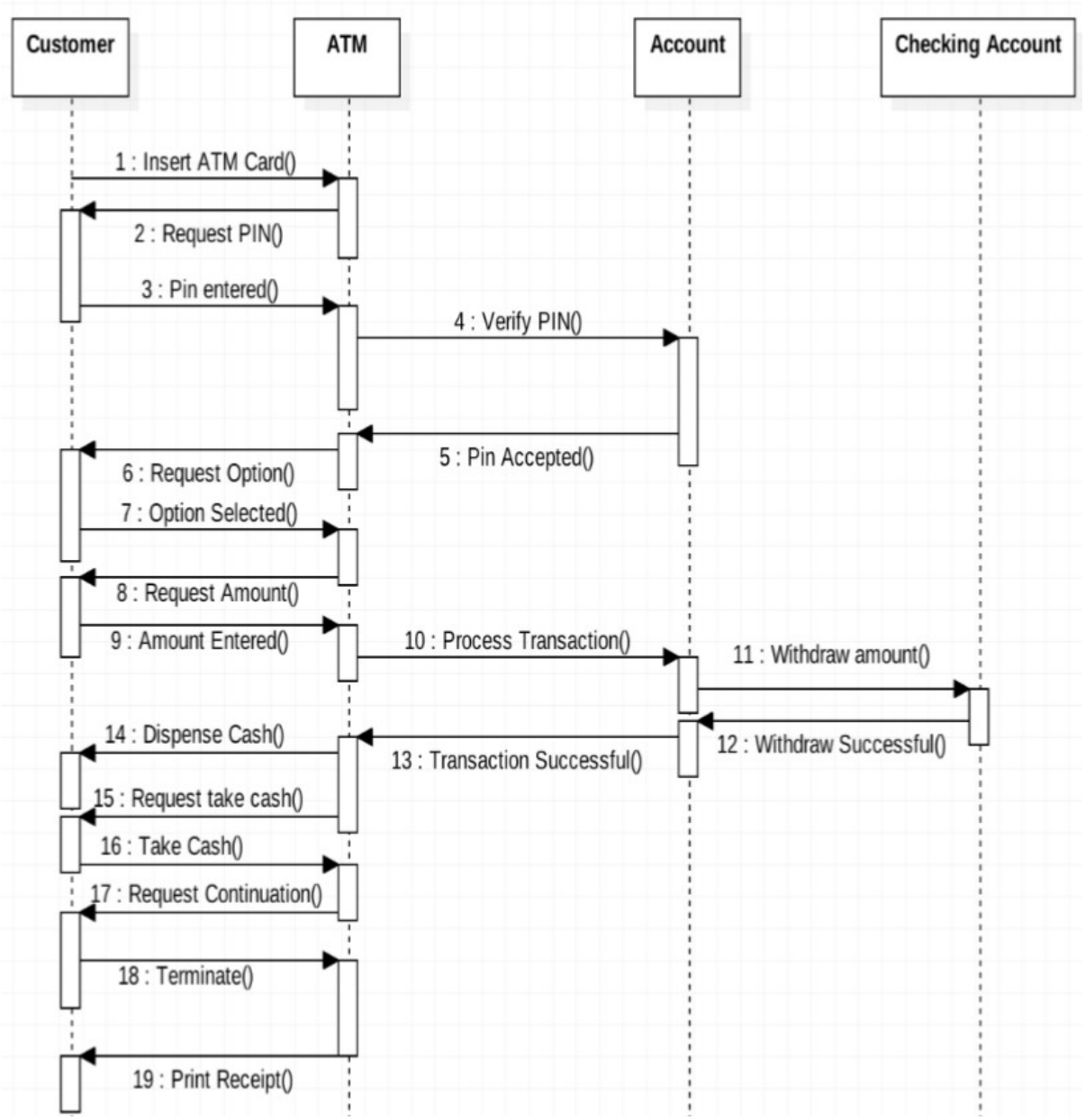
The ATM is used by customers of a bank. Each customer has two accounts: a checking account and a savings account. Each customer has a customer number and a Personal Identification Number (PIN). Both must by typed into the simulation to gain access to the accounts. Once they have gained access, the customer can select an account (checking or savings). The balance of the selected account is displayed (initially zero). Then the customer can deposit and withdraw money and the balance will be updated accordingly. The application terminates when the user selects exit rather than an account. Since this is a simulation, the ATM does not actually communicate with the bank. It simply loads a list of customer numbers and PINs from a data file. This data file is maintained externally to this application.

Chapter 2
Analysis

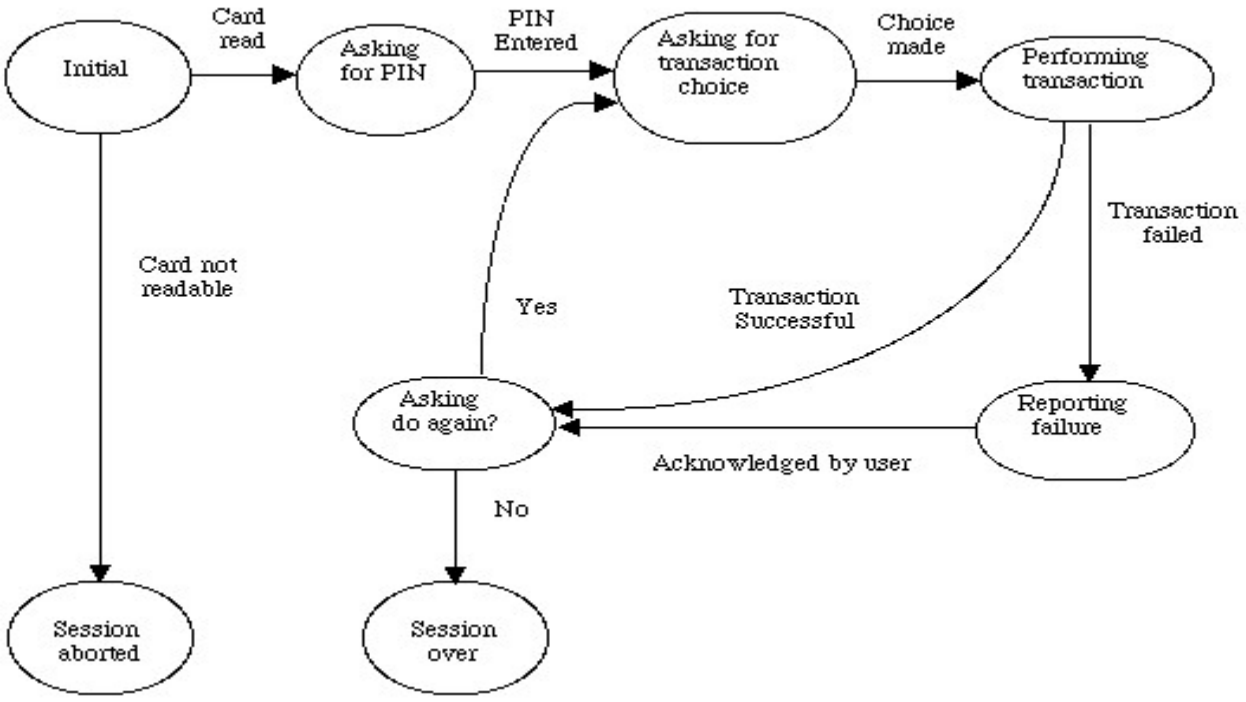
2.1 Class Diagram :



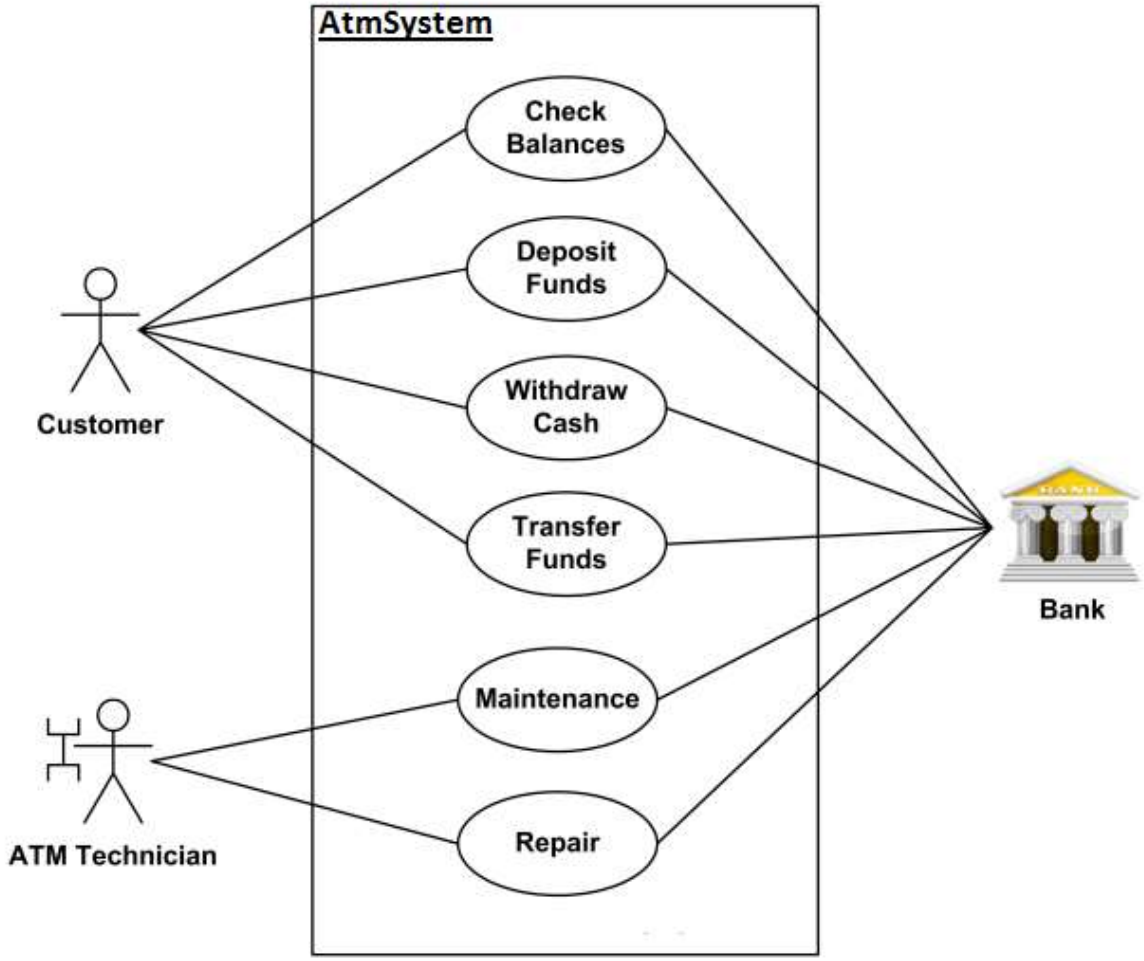
2.2 Sequence Diagram:



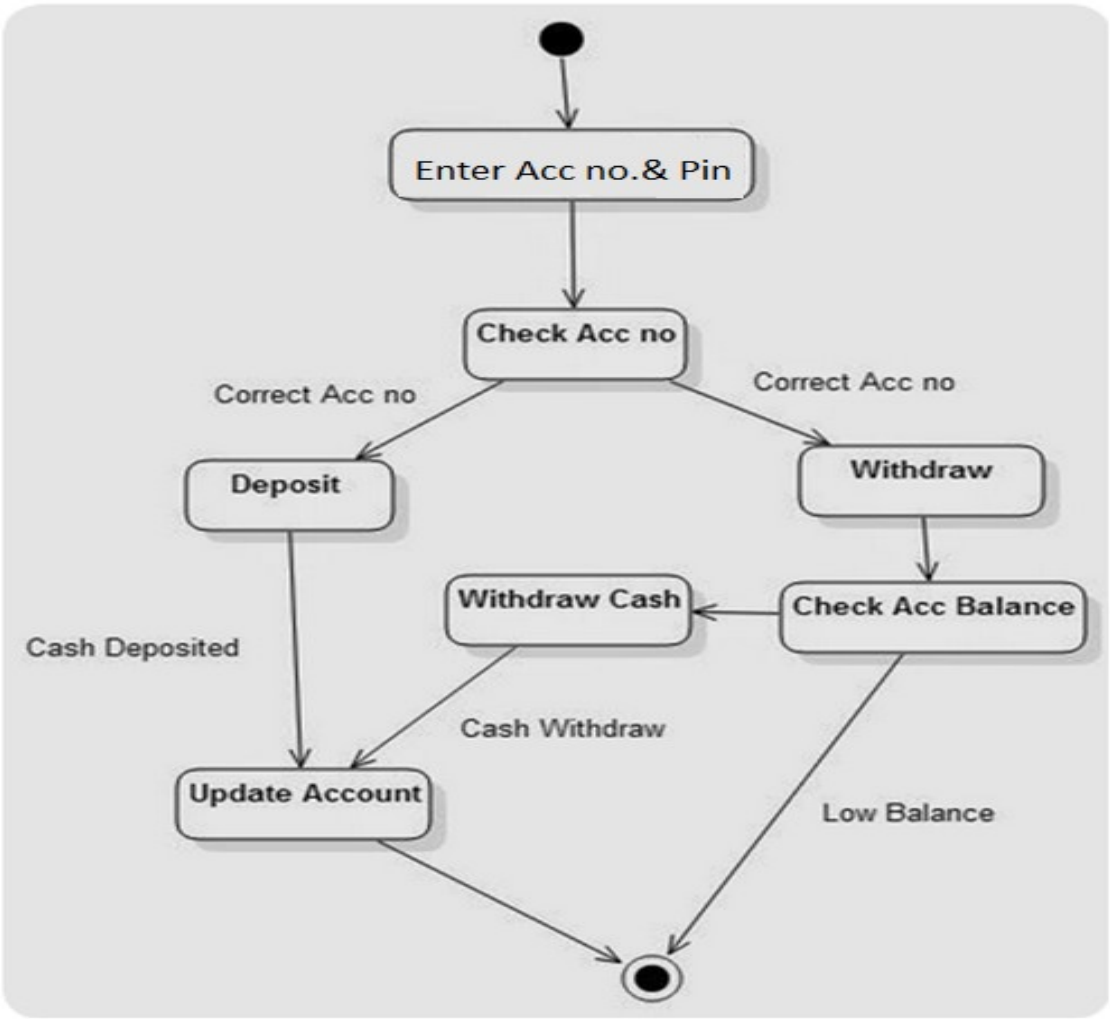
2.3 State Chart Diagram:



2.4 Use-Case Diagram:



2.5 Activity Diagram



Chapter 3
Implementation

3.1 Coding :

```
import java.util.*;    //packages//
class Account
{

 double cheaking_acc_bal=0.00;    //global variable declaration & initialization //
 double saving_acc_bal=0.00;

 int option()            //method define//
 {
          Scanner s= new Scanner(System.in);      //object creation for scanner class//
          Account obj2=new Account();            //object creation for Account class//

        // do-while loop use for statement repetation//
    do{
         //display in terminal//
          System.out.println(" \n Select the Account you want to access : \n");
          System.out.println(" Type 1 - Checking Account ");
          System.out.println(" Type 2 - Saving Account ");
          System.out.println(" Type 3 - Exit ");
          System.out.print("\n Choice : ");
          int choice=s.nextInt();     //run time choose the choice//

          switch(choice)       //switch-case is use for particular choice//
         {
            case 1:
            {
                  obj2.cheaking_acc();         //cheaking_acc method calling//
                  continue;
             }
            case 2:
            {
                   obj2.saving_acc();          //saving_acc method calling//
                   continue;
             }
             case 3:
            {
                   System.out.println("\n Thank you for using this ATM , Bye ");
                   return 0;
             }
```

```
      default :
      {
            System.out.println("\n Enter Valid Type Choice ");
      }
     }
   }while(true);
 }

 //method define//
 int cheaking_acc()
{
       Scanner s= new Scanner(System.in);      //object creation for scanner class//
      //display in terminal//
       System.out.println("\n Checking Account : \n");
       System.out.println(" Type 1 - View Balance ");
       System.out.println(" Type 2 - Withdraw Funds ");
       System.out.println(" Type 3 - Deposit Funds ");
       System.out.println(" Type 4 - Exit ");
       System.out.print("\n Choice : ");
       int use_choice=s.nextInt();    //run time choose the choice//

   switch(use_choice)    //switch-case is use for particular choice//
   {
     case 1:
     {
          System.out.println("\n Checking Account Balance : "+cheaking_acc_bal);
           return 0;
     }
     case 2:
     {
          System.out.println(" \n Checking Account Balance : "+cheaking_acc_bal);
          System.out.print(" Amount you want to withdraw from Checking Account : ");
          double withdraw_from_cheaking=s.nextInt();          //run time give the input//

              if(cheaking_acc_bal>=withdraw_from_cheaking)        //condition cheak//
              {
                    //decrease withdraw amount//
                    cheaking_acc_bal=cheaking_acc_bal - withdraw_from_cheaking;
                    System.out.println("\n New Checking Account Balance :
                    "+cheaking_acc_bal);
               }
              else
              {
                     System.out.println("\n Balance cannot be Negative . ");
              }
              return 0;
```

```
        }
        case 3:
        {
                System.out.println(" \n Checking Account Balance : "+cheaking_acc_bal);
                System.out.print(" Amount you want to deposit from Checking Account : ");
                double deposit_from_cheaking = s.nextInt();          //run time give the input//
                  //add deposit amount//
                cheaking_acc_bal = cheaking_acc_bal + deposit_from_cheaking;
                System.out.println(" \n New Checking Account Balance :
                 "+cheaking_acc_bal);
                 return 0;
        }
        case 4:
        {
                System.out.println(" \n Thank you for using this ATM , Bye \n");
                return 0;
        }
        default :
        {
                System.out.println("\n Enter Valid Type Choice ");
        }
       }
       return 0;
}
  int saving_acc()
  {
          Scanner s= new Scanner(System.in);          //object creation for scanner class//
          //display in terminal//
          System.out.println("\n Saving Account : \n");
          System.out.println(" Type 1 - View Balance ");
          System.out.println(" Type 2 - Withdraw Funds ");
          System.out.println(" Type 3 - Deposit Funds ");
          System.out.println(" Type 4 - Exit ");
          System.out.print("\n Choice : ");
          int use_choice=s.nextInt();

   switch(use_choice)     //switch-case is use for particular choice//
 {
 case 1:
{
          System.out.println("\n Saving Account Balance : "+saving_acc_bal);
           return 0;
 }
  case 2:
 {
           System.out.println("\n Saving Account Balance : "+saving_acc_bal);
```

```
                System.out.print(" Amount you want to withdraw from Saving Account : ");
                double withdraw_from_saving = s.nextInt();          //run time give the input//

                 if(saving_acc_bal>=withdraw_from_saving)
                 {
                     //decrease withdraw amount//
                    saving_acc_bal = saving_acc_bal - withdraw_from_saving;
                    System.out.println("\n New Saving Account Balance : "+saving_acc_bal);
                 }
                else
                 {
                     System.out.println("\n Balance cannot be Negative . ");
                 }
                 return 0;
              }

             case 3:
             {
                    System.out.println("\n Saving Account Balance : "+saving_acc_bal);
                    System.out.print(" Amount you want to deposit from Saving Account : ");
                   double deposit_from_saving=s.nextInt();                //run time give the input//
                  //add deposit amount//
                    saving_acc_bal = saving_acc_bal + deposit_from_saving;
                    System.out.println("\n New Checking Account Balance : "+saving_acc_bal);
                    return 0;
             }
             case 4:
             {
                    System.out.println("\n Thank you for using this ATM , Bye ");
                    return 0;
             }
             default :
             {
                    System.out.println("\n Enter Valid Type Choice ");
             }
           }
           return 0;
      }
  }
class AtmSystem
{
   public static void main(String arg[])
   {
         // do-while loop use for statement repetation//
   do{
          Scanner s= new Scanner(System.in);
```

```
            double x,y,customer_number,customer_pin;
             x=801191032;          // 1 person ,customer number and pin already store //
             y=123456;
             System.out.println(" \n Welcome to ATM System! \n");
             System.out.print(" Enter Your Customer Number : ");
             customer_number=s.nextDouble();      //Run time enter the number//
             System.out.print(" Enter Your Pin Number : ");
             customer_pin=s.nextDouble();         //Run time enter the pin//

             Account obj1=new Account();     // object creation for Account class//

               // if statement cheak customer number and pin right or not//
                  if(x==customer_number && y==customer_pin)
                  {
                       obj1.option();             //option method calling//
                   }
                    else
                   {
                       System.out.println("\n Wrong Customer Number and Pin Number! \n");
                       System.out.println("****************************************");
                    }
             } while(true);
        }
}
```

3.2 Output Screen :

```
C:\Users\pc\Desktop\V1>Javac Atm.java

C:\Users\pc\Desktop\V1>java Atm

 Welcome to ATM System!

 Enter Your Customer Number : 0801191032
 Enter Your Pin Number : 123456

 Select the Account you want to access :

 Type 1 - Checking Account
 Type 2 - Saving Account
 Type 3 - Exit

 Choice : 1

 Checking Account :

 Type 1 - View Balance
 Type 2 - Withdraw Funds
 Type 3 - Deposit Funds
 Type 4 - Exit

 Choice : 3

 Checking Account Balance : 0.0
 Amount you want to deposit from Checking Account : 10000

 New Checking Account Balance : 10000.0

 Select the Account you want to access :

 Type 1 - Checking Account
 Type 2 - Saving Account
 Type 3 - Exit
```

```
Saving Account Balance : 0.0
Amount you want to deposit from Saving Account : 25000

New Checking Account Balance : 25000.0

Select the Account you want to access :

Type 1 - Checking Account
Type 2 - Saving Account
Type 3 - Exit

Choice : 2

Saving Account :

Type 1 - View Balance
Type 2 - Withdraw Funds
Type 3 - Deposit Funds
Type 4 - Exit

Choice : 2

Saving Account Balance : 25000.0
Amount you want to withdraw from Saving Account : 4000

New Saving Account Balance : 21000.0

Select the Account you want to access :

Type 1 - Checking Account
Type 2 - Saving Account
Type 3 - Exit

Choice : 2

Saving Account :

Type 1 - View Balance
Type 2 - Withdraw Funds
Type 3 - Deposit Funds
Type 4 - Exit

Choice : 1
```

Chapter 4
Conclusion

- The Project on "ATM-System " has been developed as the best flexible and efficient project within the available resources and time.

- In future we are planning to add new feature like Finger Print Reader and Eye Detection System for Authentication of user security purpose.

- Care has been taken at each step to make it more user friendly so that users can add new feature where ever necessary while using this automated system. It May be Enhanced for Requirement of User.