REPORT

BANK MANAGEMENT SYSTEM

(Using c++)

INDEX

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ABSTRACT

The purpose of this project is in partial fulfilment of the requirement of customer using the online banking and admin control in banking system.

The design and development of this bank management system provides a more secure approach in managing bank customer information which strengthens the relationship between bank and their customers by providing the right solution that uses a multi-level security to improve customer satisfaction .the programming language used to develop this project is C++.

The domain banking system gives the day by day tally record as a complete banking it can keep the information of account type, name of the customer, address of the customer, mobile number of the customer, age of the customer and also a pin number to log-in and use the functions of bank in online mode .The exciting part of this project is it provides user and admin login at the same time both user and admin can perform their tasks in this same software without interfering each other.

INTRODUCTION

Online banking allows customer of a financial institution To conduct financial transactions on secured website operated by the institution which can be are tail bank, virtual bank, credit union or building society.

Online banking is an umbrella term for the process by which a customer may perform banking transaction electronically without visiting a brick and mortar institution the following term shall refer to one Form or another Of online banking remote electronic banking personal computer banking Internet banking virtual banking online banking home banking and phone bank BC banking an Internet or online banking is the most frequently used designations it should be noted however that the term used to describe the various type of online banking are often used interchangeably online banking is an activity that is not new to banks or their customers bank having been providing their services 2 customers electronically for years through software programme this software programs Allowed the users personal computer to dial up the bank directly in the past however banks have been very reluctant To provide their customers with banking why the Internet due to secure concerns.

FEATURES OF THIS PROJECT :-

This bank management system software can be use by both user as well as admin .User gets limited actions to perform on the other hand admin have more permission and action to perform.

Opening this bank management system software we see an interface in which we get four actions to perform.

1. User login
2. Admin login
3. Create new bank account
4. Exit.

Creating new bank account and user log in section :-

If a user first time visit this page then they can create their new bank account in which they have to fill their personal details such as:

- Account holder name.
- Age.
- Phone number.
- Address.
- Type of account.
- And lastly they have to create their own pin.

After that a confirmation message pop up and ask from user whether they want to create their new account or not. The user still have a chance to not create their new account by accidently filling their details or enter this section.so this provides flexibility to user to create or not a new bank account after entering into create new account section and filling their details.

After confirming the Confirmation message a zero balance account is created and user can use their account number as ID and the pin which they created will help to the see details of use user's bank account and perform certain actions.

If a user login into user login section they have limited but important actions to perform which are listed below.

- User can view their full account details
- User can withdraw amount.
- User can check their balance.
- User can close their account.
- User can modify their account.
- User can transfer money from their account to another account.
- User can return log in page.
- User can directly exit.

The most exciting feature for a user is they can transfer their money to another user's account without any hindrance.it a very easy process to do .they needs just account number in which user wants to transfer money. Before transferring money they will get basic information about receiver's details like name and account number of receiver's.

And if users don't want to perform any action they can return to the login page or they can exit from this bank management system software directly by choosing option and user will automatically log out.

Admin log in section:-

Admin have fixed admin ID and by entering that Admin can perform so many actions

- Create new account
- Deposit amount
- Withdraw amount
- Transfer money
- Balance inquiry
- View all bank account Holder list

- Close an account
- Modify any account details
- Log-out
- Exit

Admin can transfer money by entering sender’s account number and receiver’s account number.

If admin don't want to perform any action admin can return to login page or exit from the bank management system software.

Differences between some functions which are common in both user and admin section.

- ✓ If a user create a new account he can create only zero balance account while if admin create a new account of a user admin can create any opening balance amount as user want.

- ✓ User have limited permission to modify account details like user can only modify mobile number address, pin on the other hand admin can modify any account related details like name of the user, Account type, mobile number, age, address and pin.

- ✓ User can delete or remove only their account but admin can delete or remove any user's account.

FUNCTIONAL REQUEREMENTS

- **create_account(int);**
  This Function is used to create new bank Account of user.

- **show_account() const;**
  This function is used to display the account details.

- **modify_admin();**
  This function is used to modify account details of user.

- **modify_user();**
  This function is used to modify name, mobile no., address.

- **dep(int);**
  This function is used to deposit money in account.

- **draw(int);**
  This function is used to withdraw money from account.

- **report() const;**
  This function is used to display all account details of user's account.

- **retacno() const;**
  This function returns the account no. of user's account.

- **retdeposit() const;**
  This function returns the account balance of user's account.

- **printtype() const;**
  This function is used to display the type of account.

- **retpin() ;**
  This function returns the Pin of user's account.

- **show_transfer();**
  This function is used to display account no. and name.

- **write_account();**
  This function is used to store the new account details in the file using data file handling.

- **display_sp(int, int);**
  This function reads the file in which all account details stored and display the details of specific account no.

- **modify_account(int, int);**
  This function reads the file in which all account details stored and write the modified details of specific account no. in the file.

- **delete_account(int);**
  This function is used to close the account of specific account no.

- **display_all();**
  This function reads the file in which all account details stored and display the details of all account no.

- **deposit_withdraw(int, int);**
  This function reads the file in which all account details stored and write the modified balance after deposit and withdraw of specific account no. in the file.

- **transfer1(int);**
  This function checks whether the receiver bank account no. exists or not. If the receiver bank account no. exists then money will be deposited in the receiver bank account no.

- **transfer2(int, int);**
  This function checks whether the sender bank account no. exists or not. If the sender bank account no. exists then money will be deposited in the receiver bank account no.

NON- FUNCTIONAL REQUIREMENTS

We have use Data file handling in Bank management system.

File Handling In C++

Files are used to store data in a storage device permanently. File handling provides a mechanism to store the output of a program in a file and to perform various operations on it.

A stream is an abstraction that represents a device on which operations of input and output are performed. A stream can be represented as a source or destination of characters of indefinite length depending on its usage.

In C++ we have a set of file handling methods. These include ifstream, ofstream, and fstream. These classes are derived from fstrembase and from the corresponding iostream class. These classes, designed to manage the disk files, are declared in fstream and therefore we must include fstream and therefore we must include this file in any program that uses files.

In C++, files are mainly dealt by using three classes fstream , ifstream, ofstream.

ofstream: This Stream class signifies the output file stream and is applied to create files for writing information to files .

ifstream: This Stream class signifies the input file stream and is applied for reading information from files .

fstream: This Stream class can be used for both read and write from/to files.

All the above three classes are derived from fstreambase and from the corresponding iostream class and they are designed specifically to manage disk files.

C++ provides us with the following operations in File Handling:

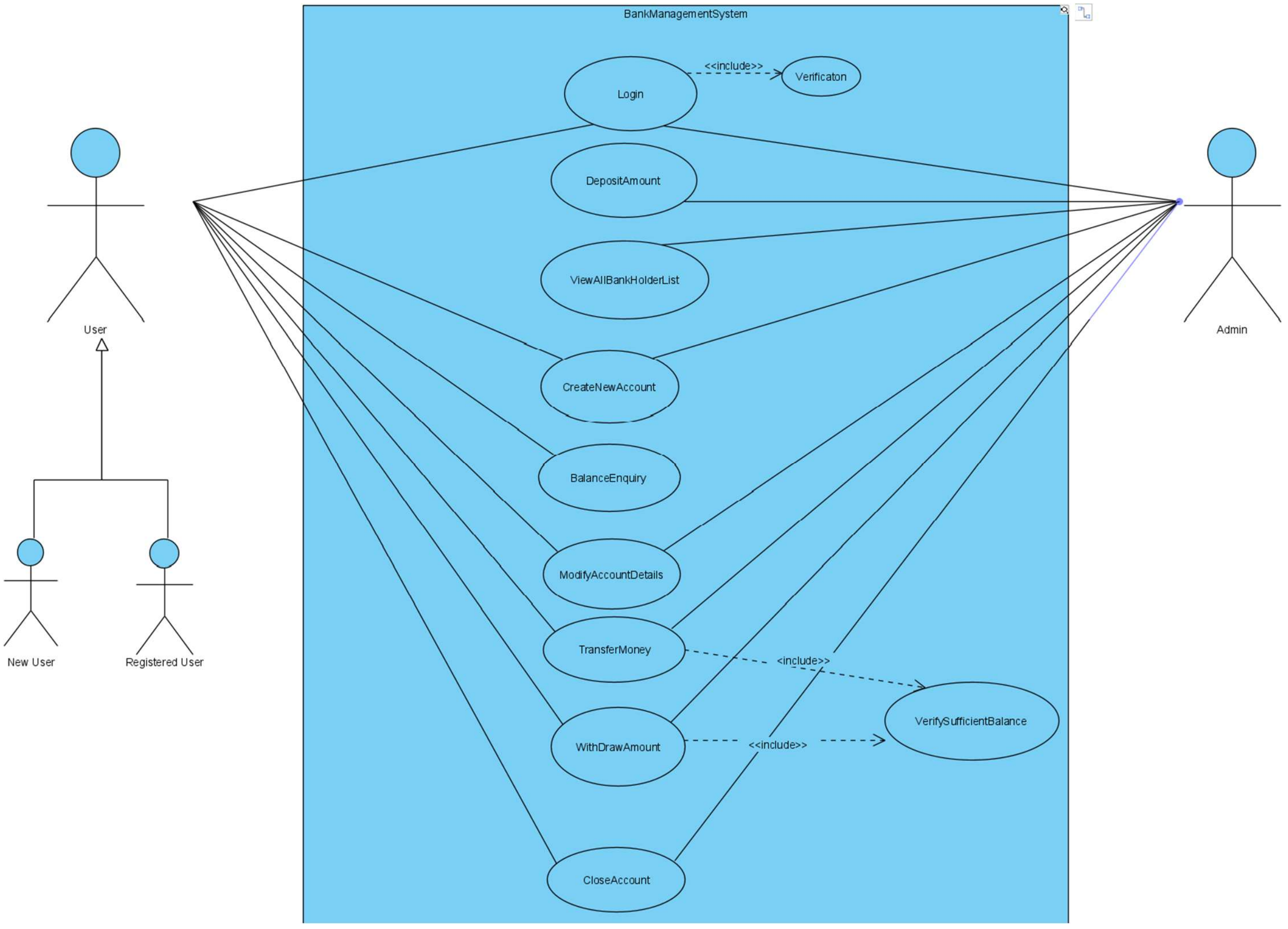
Creating a file: open()

Reading data: read()

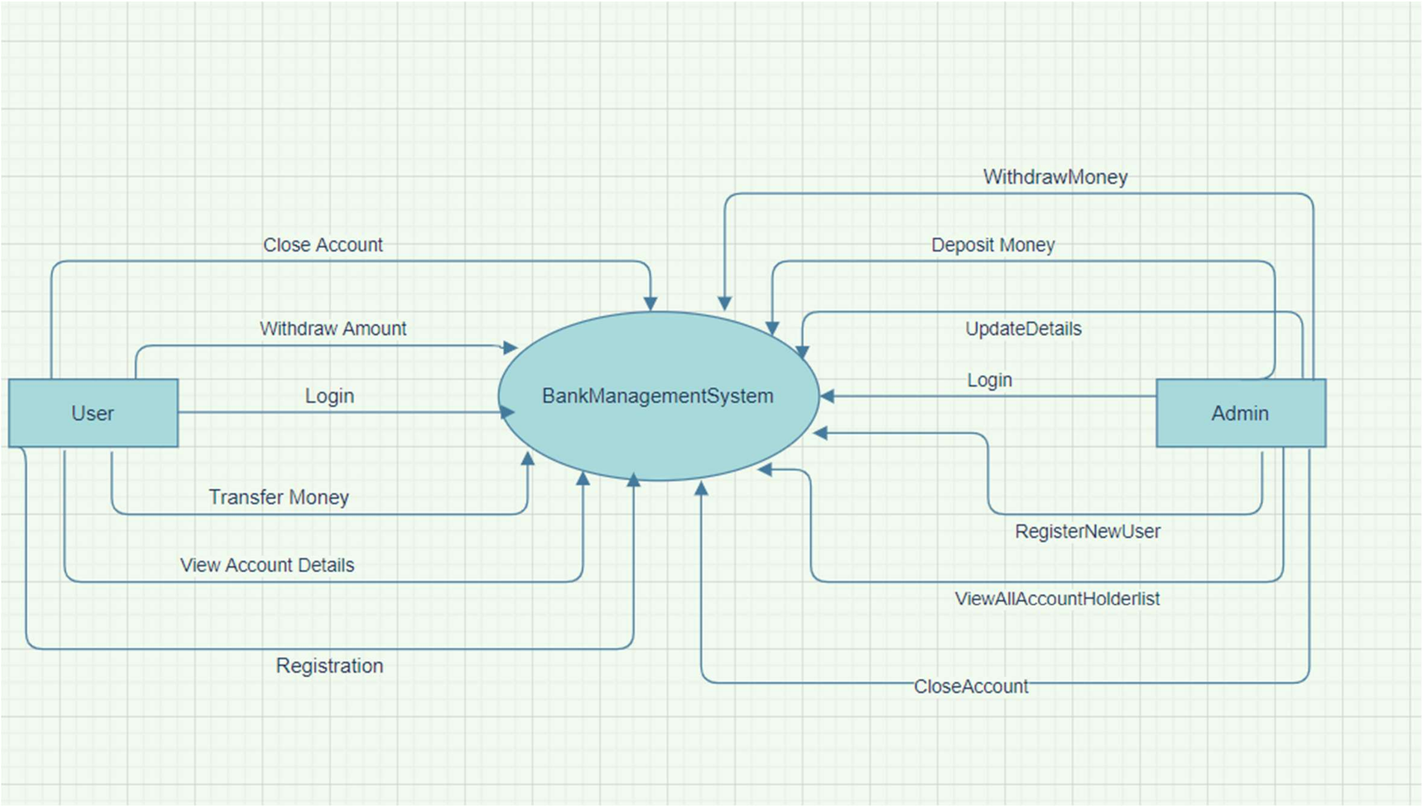
Writing new data: write()

Closing a file: close()

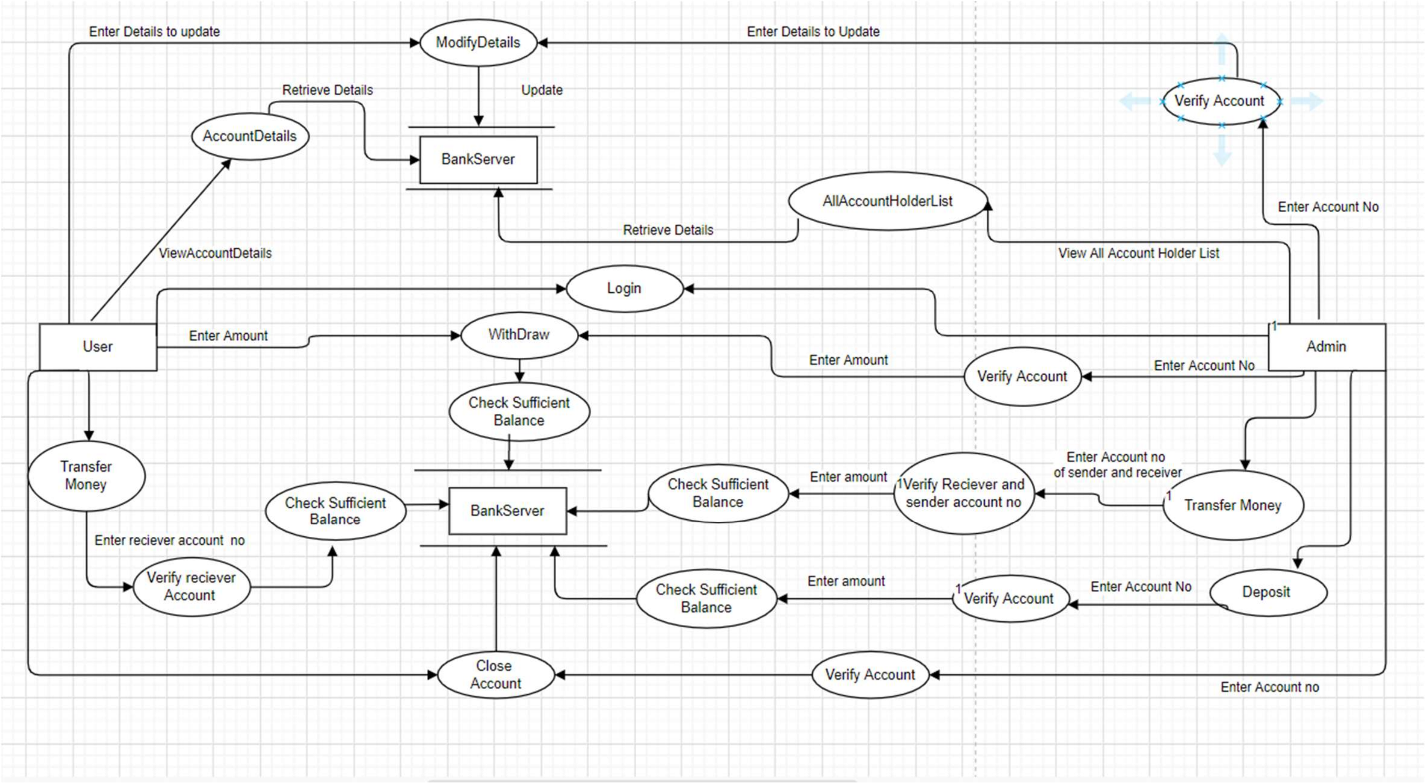
Use Case Diagram



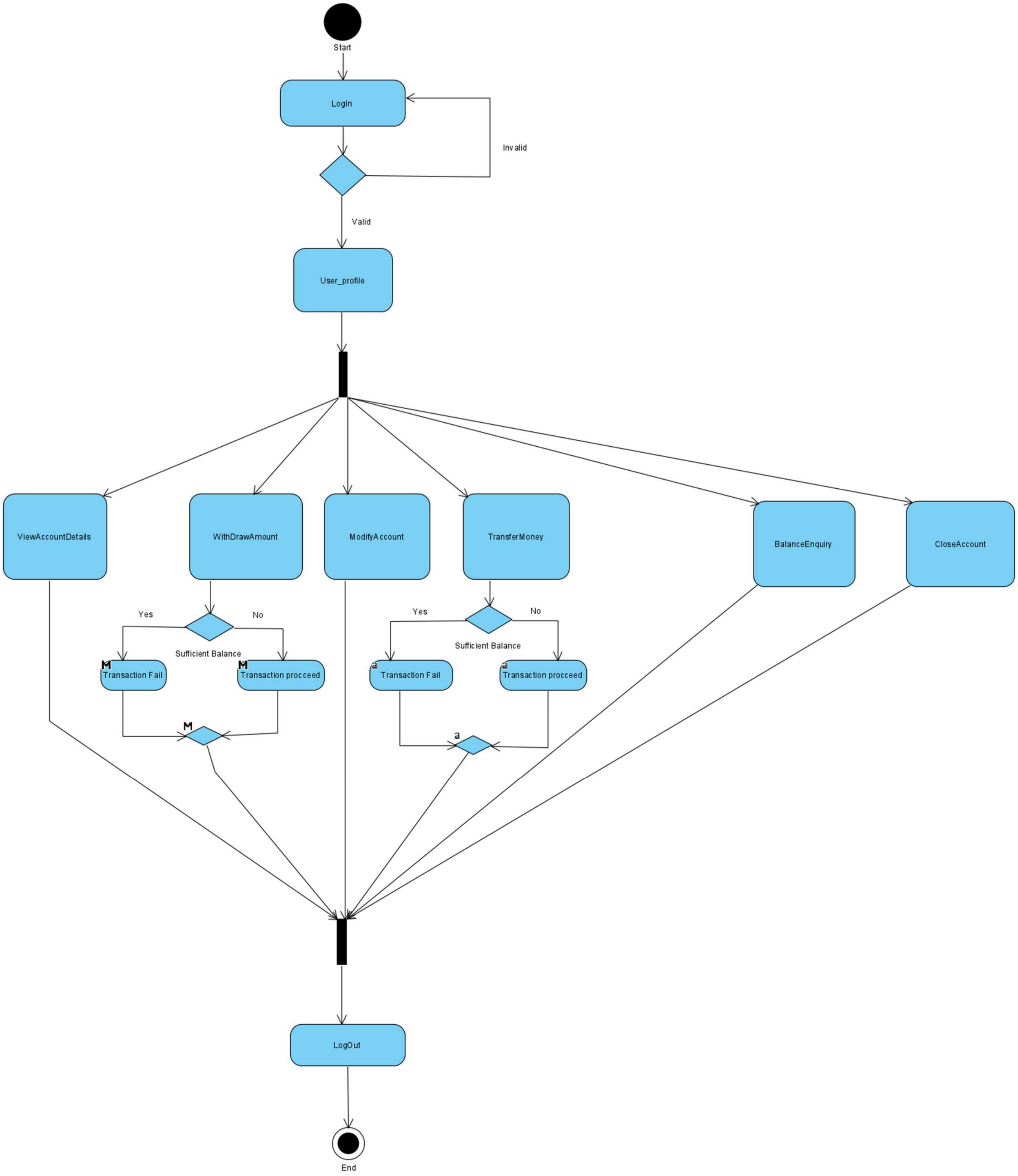
Data Flow Diagram Level-0



Data Flow Diagram Level-1



Activity Diagram



HOW TO RUN THIS (BMS) CODE

User log-in :

For user log in you have to first create account .

For creating new account you have two ways

1. You can directly create a new account from the main interface.
2. You have to go to bank and ask to admin to create a new account.

After creating account you can use your account number and pin for log in.

Admin log-in:

Id: Bankmanager

Password: 1234

CODE

NOTE: Admin id-Bankmanager , Password-1234

```
#include<iostream>

#include<fstream>

#include<string.h>

#include<cstdlib>

#include<windows.h>

int z=0;

int main();

using namespace std;

class account

{

        int acno;

        char name[100];

        long long int deposit;

  char type[50];

        long long int phoneno;

        int age;

        char address[200];

        int pin;


public:


        void create_account(int acno, int);

        void show_account() const;

        void modify_admin();

        void modify_user();

        void dep(int);

        void draw(int);

        void report(int) const;
        int retacno() const;
        int retdeposit() const;
        void printtype() const;
        int retpin() const;
        void show_transfer() const;




};

void account::create_account(int acno, int option)
{
        this->acno=acno+1;
        deposit =0;

        cout<<"\n\n\t\t\tEnter the Name of the Account holder           : ";
        cin.ignore();
   cin.getline(name,100);
   while(!strcmp(name,""))
  {cout<<"\n\n\t\t\tEnter the Name of the Account holder         : ";
   cin.getline(name,100);
        }
        label1:
        cout<<"\n\t\t\tEnter the age                              : ";
        cin>>age;
        if(age==0)
   {
     system("CLS");
     main();
   }
        if(age<18)
     {
      cout<<"\n\n\t\t\tYou Should be at least 18 years old to open bank account!!!!\n\n\t\t\tif you want to return to main menu press0!!!";
```

```
    goto label1;
  }
if(age>150)
  { cout<<"\n\n\t\t\t\tInvalid Age!!!";
   goto label1;
  }
label2:
        cout<<"\n\t\t\tEnter the phone no                              :+91  ";
        cin>>phoneno;
        if(phoneno<1000000000||phoneno>9999999999)
{
   cout<<"\n\n\t\t\t\tInvalid mobile no.!!!";
    cout<<"\n\t\t\t\tPlease Enter 10 digit mobile no!!!";
   goto label2;
}
        cout<<"\n\t\t\tEnter the address                               : ";
        cin.ignore();
        cin.getline(address,200);
         while(!strcmp(address,""))
{cout<<"\n\t\t\tEnter the address                               : ";
         cin.getline(address,200);
         }
        cout<<"\n\t\t\tEnter Type of the Account (Current(c/C)/Saving(s/S)) : ";
        string c;
        cin>>c;
        while(!(c=="c"||c=="s"||c=="C"||c=="S"))
        {cout<<"\n\n\tInvalid  Account type!!!!!! ";
        cout<<"\n\t\t\tEnter Type of the Account (Current(c)/Saving(s))     : ";
        cin>>c;
        }
        if(c=="c"||c=="C")
        {strcpy(type,"Credit");
        }
        else{strcpy(type,"Saving");
```

```
            }
            if(option==1)
   {
             cout<<"\n\t\t\tEnter initial amount to be deposit                  : ";
             cin>>deposit;
             cout<<" Rs.";
   }
     label3:
    cout<<"\n\t\t\tSet your Bank Account Pin                          : ";
             cin>>pin;
             if(pin<1000||pin>9999)
    {
       cout<<"\n\n\t\t\t\tInvalid pin!!!";
       cout<<"\n\t\t\t\tPlease Enter 4 digit pin!!!";
      goto label3;
    }
             system("CLS");
             cout<<"\n\n\t\t\tYour Account No is:  "<<this->acno<<endl;



}

void account::show_account() const
{
            cout<<"\n\t\t\tAccount No.         : "<<acno;
            cout<<"\n\t\t\tType of Account     : ";
            printtype();
            cout<<"\n\t\t\tBalance amount      : "<<deposit<<" Rs.";

}

 void account::show_transfer() const
 {
    cout<<"\n\tAccount No.        : "<<acno;
    cout<<"\n\tAccount Holder Name: "<<name<<endl;
 }



void account::modify_admin()
{
            cout<<"\n\t\t\tEnter the choice to update the details:\n";
            cout<<"\n\t\t\t1.Name ";
            cout<<"\n\t\t\t2.account Type(c/s) ";
            cout<<"\n\t\t\t3.Mobile no. ";
            cout<<"\n\t\t\t4.Age ";
            cout<<"\n\t\t\t5.Address ";
            cout<<"\n\t\t\t6.Pin ";
            cout<<"\n\t\t\t7.Return to main menu ";
            cout<<"\n\n\t\tSelect Your Option (1-7): ";

            int n;
            cin>>n;
            switch (n)
            {case 1:cout<<"\n\t\t\tModify Account Holder Name : ";
            cin.ignore();
            cin.getline(name,100);
             cout<<"\n\n\t\tRecord Updated";
            break;
            case 2:cout<<"\n\t\t\tEnter Type of the Account (Credit(C/c)/Saving(S/s)) : ";
            char c;
            cin>>c;
            while(!(c=='c'||c=='s'))
            {cout<<"\n\t\t\tEnter Type of the Account (Credit(C/c)/Saving(S/s)) :";
            cin>>c;
            }
            if(c=='c')
            {strcpy(type,"Credit");
            }
```

```
          else{strcpy(type,"Saving");
          }
           cout<<"\n\n\t\t\tRecord Updated";
          break;
          case 3:
             label2:
          cout<<"\n\t\t\tEnter the phone no                              :+91  ";
          cin>>phoneno;
          if(phoneno<1000000000||phoneno>9999999999)
{
   cout<<"\n\n\t\t\t\tInvalid mobile no.!!!";
    cout<<"\n\t\t\t\tPlease Enter 10 digit mobile no!!!";
   goto label2;
}
           cout<<"\n\n\t\t\tRecord Updated";
          break;
          case 4:label1:
          cout<<"\n\t\t\tEnter the age                                   : ";
          cin>>age;
          if(age<18)
  { cout<<"\n\n\t\t\t\tYou Should be at least 18 years old to open bank account!!!";
   goto label1;
  }
if(age>150)
  { cout<<"\n\n\t\t\t\tInvalid Age!!!";
   goto label1;
  }
 cout<<"\n\n\t\t\tRecord Updated";
break;
case 5:cout<<"\n\t\t\tModify Address : ";
cin.ignore();
          cin.getline(address,200);
 cout<<"\n\n\t\t\tRecord Updated";
          break;
```

```
         case 6:
            label3:
   cout<<"\n\t\t\tSet your Bank Account Pin                          : ";
          cin>>pin;
          if(pin<1000||pin>9999)
   {
      cout<<"\n\n\t\t\t\tInvalid pin!!!";
      cout<<"\n\t\t\t\tPlease Enter 4 digit pin!!!";
     goto label3;
   }
          cout<<"\n\n\t\t\tRecord Updated";
          break;
         case 7: break;
         default:cout<<"Wrong choice"<<endl;
         }
}
void account::modify_user()
{    cout<<"\n\t\t\tSelect the choice to update the details:\n";
         cout<<"\n\t\t\t1.Mobile no. ";
         cout<<"\n\t\t\t2.Address. ";
         cout<<"\n\t\t\t3.Pin ";
         cout<<"\n\t\t\t4.Return to main menu ";
         cout<<"\n\n\t\t\tSelect Your Option (1-4): ";
         int n;
         cin>>n;
         switch (n)
{   case 1:
   label2:
         cout<<"\n\t\t\tEnter the phone no                              :+91  ";
         cin>>phoneno;
         if(phoneno<1000000000||phoneno>9999999999)
   {
     cout<<"\n\n\t\t\t\tInvalid mobile no.!!!";
      cout<<"\n\t\t\t\tPlease Enter 10 digit mobile no!!!";
```

```
    goto label2;
  }
         cout<<"\n\n\t\t\tRecord Updated";
        break;
  case 2:cout<<"\n\t\t\tModify Address : ";
  cin.ignore();
        cin.getline(address,200);
   cout<<"\n\n\t\t\tRecord Updated";
        break;
        case 3: label3:
   cout<<"\n\t\t\tSet your Bank Account Pin                    : ";
         cin>>pin;
         if(pin<1000||pin>9999)
   {
     cout<<"\n\n\t\t\t\tInvalid pin!!!";
     cout<<"\n\t\t\t\tPlease Enter 4 digit pin!!!";
    goto label3;
   }
         cout<<"\n\n\t\t\tRecord Updated";
  case 4: break;
        default:cout<<"Wrong choice"<<endl;
}

}



void account::dep(int x)
{
        deposit+=x;

}

void account::draw(int x)
{
```

```
            deposit-=x;
            cout<<"\n\t\t\tBalance Amount: "<<deposit<<" Rs.\n\n";
}

void account::report (int option) const
{   cout<<"\n\t\tAccount No.        : "<<acno;
            cout<<"\n\t\tAccount Holder Name : ";
            cout<<name;
            cout<<"\n\t\tPhone no          : +91 "<<phoneno;
   cout<<"\n\t\tAge                : "<<age;
            cout<<"\n\t\tAddress           : "<<address;
            cout<<"\n\t\tType of Account    : ";
            cout<<type;
            if(option==1)
            cout<<"\n\t\tBalance amount     : "<<deposit<<" Rs.";
}

int account::retacno() const
{
            return acno;
}

int account::retdeposit() const
{
            return deposit;
}
int account::retpin() const
{
   return pin;
}

void account::printtype() const
{
            cout<<type;
```

```
}

void write_account(int);
void display_sp(int, int);
void modify_account(int, int);
void delete_account(int);
void display_all();
void deposit_withdraw(int, int);
void transfer1(int);
int transfer2(int, int);



int user_login()
{   system("CLS");
   int acc1;
   int pin;
   account ac;

           ifstream inFile;
           inFile.open("account.dat",ios::binary);
           if(!inFile)
           {
                       cout<<"File could not be open !! Press any Key...";
      main();
           }
           cout<<"\n\n\t\t\t\t======================\n";
           cout<<"\t\t\t\t\tUSER LOGIN";
           cout<<"\n\t\t\t\t======================\n";
   cout<<"\n\n\n\n\t\t\tEnter your bank account no: ";
   cin>>acc1;
   while(inFile.read((char *) (&ac), sizeof(account)))
           {
                       if(ac.retacno()==acc1)
                       {   cout<<"\n\n\t\t\tEnter Your Pin.: ";
```

```
                 cin>>pin;
                      if(ac.retpin()==pin)
      {
      inFile.close();
      return acc1;
      }
               }
        }
  inFile.close();
   system("CLS");
               cout<<"\n\n\tAccount number or Pin does not exist Please Enter Valid Account no. or
Password";

        main();




}



int admin_login()
{
  string id;
  int pass;

        cout<<"\n\n\t\t\t\t=====================\n";
        cout<<"\t\t\t\t\tADMIN LOGIN";
        cout<<"\n\t\t\t\t=====================\n";
  for(int i=0;i<3;i++)
  {
        cout<<"\t\t\tEnter ID of ADMIN\n\t\t\t";
        cin>>id;
        string  e="Bankmanager";
        if(id==e)
        {cout<<"\t\t\tEnter the password of ADMIN\n\t\t\t";
  cin>>pass;
        if(pass==1234)
        {return true;
        }
        }



  }



    return false;
}

int main()
{  if(z==0)
  {
        cout<<"\n\n\n\n\n\n\n\n\n\n\t\t\t\t\tBANK MANAGEMENT SYSTEM";


        cout<<"\n\t\t\t\t\tMade By:-\n\n\t\t\t\t\tNITESH KUMAR\n\t\t\t\t\tALOK KUMAR
\n\t\t\t\t\tOM PRAKASH\n";
        Sleep(2000);
        system("CLS");
  z++;
  }

        int ch;
        int ch1;
        int num;
        int a;




  cout<<"\n\n\t\t\t\t=====================\n";
```

```
            cout<<"\t\t\t\tBANK MANAGEMENT SYSTEM";
            cout<<"\n\t\t\t\t=====================\n";
       cout<<"\n\n\t\t\t\t1. USER LOGIN\t";
       cout<<"\n\t\t\t\t2. ADMIN LOGIN\t";
       cout<<"\n\t\t\t\t3. CREATE NEW BANK ACCOUNT\t";
       cout<<"\n\t\t\t\t4. EXIT\t";
       cout<<"\n\n\t\t\tSelect Your Option (1-4): ";

       cin>>ch1;

       switch(ch1)
       {
     case 1:

       a=user_login();

        label1:
       do
       {
            system("CLS");
            cout<<"\n\n\t\t\t\t==========================\n";
            cout<<"\t\t\t\t| BANK MANAGEMENT SYSTEM |" ;
            cout<<"\n\t\t\t\t==========================\n\n";
          display_sp(a,3);
                      cout<<"\n\t\t\t\t    ::MAIN MENU::\n";
                      cout<<"\n\t\t\t\t1. VIEW FULL ACCOUNT DETAILS";
                      cout<<"\n\t\t\t\t2. WITHDRAW AMOUNT";
                      cout<<"\n\t\t\t\t3. TRANSFER MONEY TO ANOTHER ACCOUNT";
                      cout<<"\n\t\t\t\t4. BALANCE ENQUIRY";
                      cout<<"\n\t\t\t\t5. CLOSE ACCOUNT";
                      cout<<"\n\t\t\t\t6. MODIFY ACCOUNT DETAILS";
                      cout<<"\n\t\t\t\t7. LOGOUT";
                      cout<<"\n\t\t\t\t8. EXIT";
                      cout<<"\n\n\t\t\t\tSelect Your Option (1-7): ";
                      cin>>ch;

                      switch(ch)
                      {
          case 1:
            system("CLS");
            cout<<"\n\n\n\n";
            display_sp(a,4);
              break;
                      case 2:
                              system("CLS");

                              deposit_withdraw(a, 2);
                              break;
          case 3:
             system("CLS");
            cout<<"\n\t\tIf you want to cancel transition or If you want to return to main menu press 0 ";
            transfer1(a);
                              break;
                      case 4:
                              system("CLS");

                              display_sp(a,1);
                              break;

                      case 5:
                              system("CLS");
            display_sp(a,3);
            cout<<"\n\n";
                              delete_account(a);
                              break;
                       case 6:
                              system("CLS");
```

```
                            modify_account(a, 1);

                            break;

                   case 7:

                      system("CLS");

                      z=1;

                            main();

                            break;

      case 8:

        system("CLS");

        cout<<"\n\n\n\n\n\n\n\n\n\n\n\t\t\t\t\tTHANKS FOR USING OUR 
SERVICES\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n";

          exit(0);


                   default :goto label1;

                  }

                  cin.ignore();

                  cin.get();

     }while(ch!=9);


             break;



case 2:system("CLS");

   if(admin_login()){

    label2:

    do

   {

          system("CLS");

          cout<<"\n\n\t\t\t\t=====================\n";

          cout<<"\t\t\t\tBANK MANAGEMENT SYSTEM";

          cout<<"\n\t\t\t\t=====================\n";


                  cout<<"\t\t\t\t    ::MAIN MENU::\n";

                  cout<<"\n\t\t\t\t1. CREATE NEW ACCOUNT";
```

```
                cout<<"\n\t\t\t\t2. DEPOSIT AMOUNT";

                cout<<"\n\t\t\t\t3. WITHDRAW AMOUNT";

                cout<<"\n\t\t\t\t4. TRANSFER AMOUNT";

                cout<<"\n\t\t\t\t5. BALANCE ENQUIRY";

                cout<<"\n\t\t\t\t6. VIEW ALL ACCOUNT HOLDER LIST";

                cout<<"\n\t\t\t\t7. CLOSE AN ACCOUNT";

                cout<<"\n\t\t\t\t8. MODIFY AN ACCOUNT";

                cout<<"\n\t\t\t\t9. LOGOUT";

                cout<<"\n\t\t\t\t10. EXIT";

                cout<<"\n\n\t\t\tSelect Your Option (1-10): ";

                cin>>ch;


                switch(ch)

                {

                case 1:

                        write_account(1);

                        break;

                case 2:

                        system("CLS");

                        cout<<"\n\n\t\t\tEnter The account No. : "; cin>>num;

                        deposit_withdraw(num, 1);

                        break;

                case 3:

                        system("CLS");

                        cout<<"\n\n\t\t\tEnter The account No. : "; cin>>num;

                        deposit_withdraw(num, 2);

                        break;

            case 4:

              system("CLS");

              cout<<"\n\t\tIf you want to cancel transition or If you want to return to main menu press 0 ";

              cout<<"\n\n\tEnter the Account no. of Sender. : "; cin>>num;

              if(num==0)

                goto label2;

              display_sp(num, 2);
```

```
        cout<<endl;

        transfer1(num);

        break;

                case 5:

                        system("CLS");

                        cout<<"\n\n\t\t\tEnter The account No. : "; cin>>num;

                        display_sp(num,1);

                        break;

                case 6:

                        display_all();

                        break;

                case 7:

                        system("CLS");

                        cout<<"\n\n\t\t\tEnter The account No. : "; cin>>num;

                        display_sp(num,3);

        cout<<"\n\n";

                        delete_account(num);

                        break;

                 case 8:

                        system("CLS");

                        cout<<"\n\n\t\t\tEnter The account No. : "; cin>>num;

                        modify_account(num, 2);

                        break;

                 case 9:

                    system("CLS");


                        main();

      case 10:

         system("CLS");

         cout<<"\n\n\n\n\n\n\n\n\n\n\n\n\t\t\t\t\tTHANKS FOR USING OUR
SERVICES\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n";

        exit(0);


                        break;
```

```
                      default :goto label2;

                      }

                      cin.ignore();

                      cin.get();

   }while(ch!=11);

   }

   else { system("CLS");

            main();

   }

   break;

case 3: write_account(0);

      system("CLS");

      cout<<"\n\n\tPlease login to continue:";

      main();

                                 break;

case 4: system("CLS");

      cout<<"\n\n\n\n\n\n\n\n\n\n\n\t\t\t\t\tTHANKS FOR USING OUR
SERVICES\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n";

     exit(0);

default:system("CLS");

      cout<<"\n\n\n\n\t\t\t\t\tPlease Enter correct option";

      z=1;

      main();

   }


           return 0;

}

int search(int acno)

{   account ac;


           ifstream inFile;

           inFile.open("account.dat",ios::binary);

           if(!inFile)

           {
                cout<<"File could not be open !! Press any Key...";
                return false;
        }
        while(inFile.read((char *) (&ac), sizeof(account)))
        {
                if(ac.retacno()==acno)
                {  inFile.close();
                        return true;
                }
        }
   return false;
}

void write_account(int n)
{   system("CLS");
   int acc;
        account ac;
        ofstream outFile;
        ifstream inFile;
        inFile.open("account.dat",ios::binary);
        outFile.open("account.dat",ios::binary|ios::app);
        int a=0;
        while(inFile.read((char *) (&ac), sizeof(account)))
        {
        a=ac.retacno();
   }
 if(a!=0)
 {ac.create_account(a,n);}
else{
   ac.create_account(1000,n);
        }
    ac.report(0);
        label:
   cout<<" \n\n\n\t\t\tAre you sure that you want to create new New Account????"<<endl;
   cout<<"\n\n\n\t\t\t1.Yes\t\t\t\t0.No"<<endl;

   cin>>acc;

   if(acc==1)

          outFile.write((char *) (&ac), sizeof(account));

          else if(acc==0)

   {


   }

   else{ system(("CLS"));

      cout<<"Please enter valid input";

      goto label;

   }

          outFile.close();

}



void display_sp(int n, int option)

{

          account ac;

          bool flag=false;

          ifstream inFile;

          inFile.open("account.dat",ios::binary);

          if(!inFile)

          {

                    cout<<"File could not be open !! Press any Key...";

                    return;

          }

          while(inFile.read((char *) (&ac), sizeof(account)))

          {

                    if(ac.retacno()==n)

                    {

                       if(option==1)

         {

           cout<<"\n\t\t\tBALANCE DETAILS\n";
```

```
                       ac.show_account();
      }
                      else if(option==2)
      {
        cout<<"\n\t Account Details:- ";
        ac.show_transfer();
      }
      else if(option==3)
        ac.show_transfer();
                      else if(option==4)
        ac.report(0);
                      flag=true;


              }
       }
  inFile.close();
       if(flag==false)
              cout<<"\n\n\t\t\tAccount number does not exist!!!!";
}




void modify_account(int n, int option)
{
       bool found=false;
       account ac;
       fstream File;
  File.open("account.dat",ios::binary|ios::in|ios::out);
       if(!File)
       {
              cout<<"File could not be open !! Press any Key...";
              return;
       }
       while(!File.eof() && found==false)
```

```
            {
                        File.read((char *) (&ac), sizeof(account));
                        if(ac.retacno()==n)
                        {
                                    ac.report(0);
                                    cout<<"\n\n\t\t\tEnter The New Details of account"<<endl;
                                    if(option==1)
             ac.modify_user();
          else if(option==2)
             ac.modify_admin();
                                    int pos=(-1)*static_cast<int>(sizeof(account));
                                    File.seekp(pos,ios::cur);
                           File.write((char *) (&ac), sizeof(account));

                           found=true;
                         }
            }
            File.close();
            if(found==false)
                        cout<<"\n\n\t\t\tAccount Not Found ";
}



void delete_account(int n)
{
            account ac;
            int acc;
            ifstream inFile;
            ofstream outFile;
            label7:


            inFile.open("account.dat",ios::binary);
```

```
    if(!inFile)
    {
        cout<<"File could not be open !! Press any Key...";
        return;
    }
    bool a=search(n);
    if(a)
    {

cout<<"\n\n\n\t\t\t\tAre You Sure that You Want To Delete This Account:";
    cout<<"\n\n\t\t\t\t\t1.Yes\t\t\t\t0.No"<<endl;
    cin>>acc;
    if(acc==1)
{

    outFile.open("Temp.dat",ios::binary);
    inFile.seekg(0,ios::beg);
    while(inFile.read((char *) (&ac), sizeof(account)))
    {
        if(ac.retacno()!=n)
        {
            outFile.write((char *) (&ac), sizeof(account));
        }
    }
inFile.close();
    outFile.close();
    remove("account.dat");
    rename("Temp.dat","account.dat");
    cout<<"\n\nAccount Deleted ..";
     }
else if(acc==0)
{
  inFile.close();
    outFile.close();
  }
  else{ system("CLS");
    cout <<"\n\n\n\t\t\tPlease Enter Valid input";
    goto label7;
  }
        }

        else {cout<<"\nAccount not found"<<endl;
        }


}


void display_all()
{
        system("CLS");
        account ac;
        ifstream inFile;
        inFile.open("account.dat",ios::binary);
        if(!inFile)
        {
                cout<<"File could not be open !! Press any Key...";
                return;
        }
        cout<<"\n\n\t\tACCOUNT HOLDER LIST";
        while(inFile.read((char *) (&ac), sizeof(account)))
        {cout<<"\n\n";
                ac.report(1);
        }
        inFile.close();
}
```

```
void deposit_withdraw(int n, int option)
{
    int amt;
    bool found=false;
    bool flag=false;
    account ac;
    int l=search(n);
    if(!l)
    {
     cout<<"\n\n\n\n\t\t\t\tInvalid Account No.!!!!";
     return;
    }

    fstream File;
 File.open("account.dat", ios::binary|ios::in|ios::out);
    if(!File)
    {
        cout<<"File could not be open !! Press any Key...";
        return;
    }
    while(!File.eof() && found==false)
    {
        File.read((char *) (&ac), sizeof(account));
        if(ac.retacno()==n)
        {
            ac.show_account();
            if(option==1)
            {
                cout<<"\n\n\t\tTO DEPOSITS AMOUNT";
                cout<<"\n\n\t\tEnter The amount to be deposited: ";
                cin>>amt;
                ac.dep(amt);
                flag=true;
            }
        if(option==2)
            {
                cout<<"\n\n\t\t\tTO WITHDRAW AMOUNT";
                cout<<"\n\n\t\t\tEnter The amount to be withdraw: ";
                cin>>amt;
                int bal=ac.retdeposit()-amt;
                if(bal<0)
                    cout<<"Insufficient balance";
                else{
                    ac.draw(amt);
    flag=true;
                }
         }
            int pos=(-1)*static_cast<int>(sizeof(ac));
            File.seekp(pos,ios::cur);
            File.write((char *) (&ac), sizeof(account));
            cout<<"\n\n\t\t\tRecord Updated";
            found=true;
     }
}
if(flag==true)
{

    system("CLS");
    cout<<"\n\n\n\n\n\n\t\t\t\t\tTransaction Processing....";
    cout<<"\n\t\t\t\t\t  Please Wait....";
    Sleep(2000);
    system("CLS");
    cout<<"\n\n\t\t\t\tTransition Successful";
                    cout<<"\n\n\n\n\t\t\t\tRecord Updated!!";
}
else
{
```

```
          system("CLS");
          cout<<"\n\n\n\n\n\n\t\t\t\t\tTransaction Processing....";
          cout<<"\n\t\t\t\t\t  Please Wait....";
          Sleep(2000);
          system("CLS");
          cout<<"\n\n\t\t\t\tTransition Failed XXXXX|";
                                    cout<<"\n\n\n\n\t\t\tInsufficient balance!!!";
    }
  File.close();
       if(found==false)
              cout<<"\n\n\t\t\tAccount Not Found ";
}
void transfer1(int n)
{
  int amt,k;
       bool found=false;
       bool flag=false;
       account ac;
       int l= search(n);
       if(!l)
  { return;
  }
       label:
       fstream File;
  File.open("account.dat", ios::binary|ios::in|ios::out);
       if(!File)
       {
              cout<<"File could not be open !! Press any Key...";
              return;
       }

  cout<<"\n\n\n\tEnter account no. to whom you want to transfer:";
       cin>>k;
```

```
      if(k==0)
{
  File.close();
  return;

}
 else if(k==n)
 {
   cout<<"\n\t\t\tYou cannot transfer to your own account!!!!!";
   goto label;
 }



while(!File.eof() && found==false)
      {
               File.read((char *) (&ac), sizeof(account));
               if(ac.retacno()==k)
               {

     display_sp(k,2);
      cout<<"\n\n\t\t\tEnter The amount to be transfer: ";
      cin>>amt;
     int e =transfer2(n,amt);
     if(e)
     {
     ac.dep(amt);
     system("CLS");
     cout<<"\n\n\n\n\n\n\t\t\t\tTransaction Processing....";
     cout<<"\n\t\t\t\t\t  Please Wait....";
     Sleep(2000);
     system("CLS");
     cout<<"\n\n\t\t\t\tTransition Successful";
     found=true;
     }
```

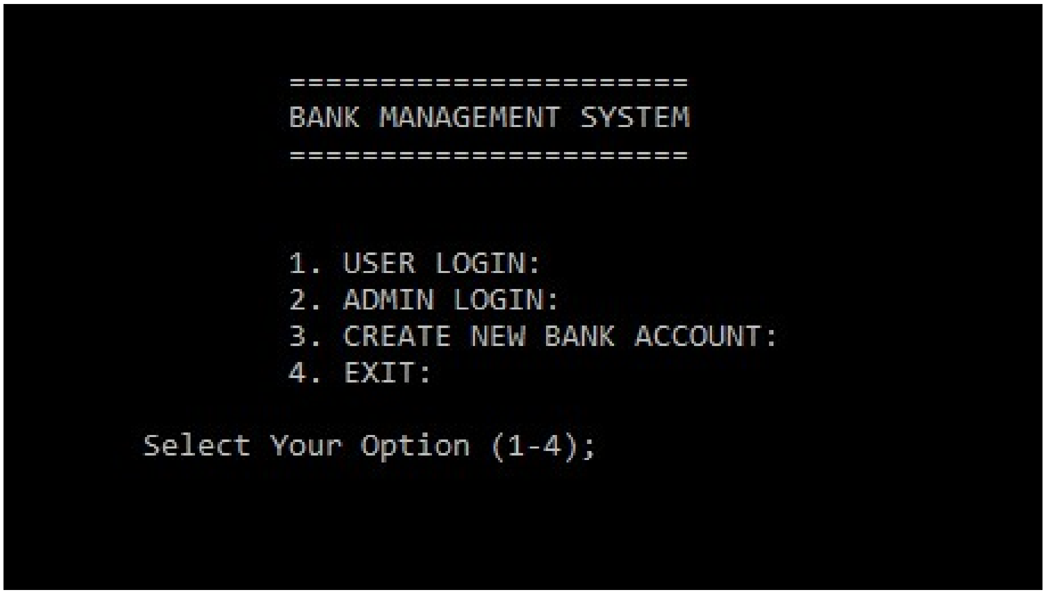
```
    else
    {


        system("CLS");
        cout<<"\n\n\n\n\n\n\t\t\t\tTransaction Processing....";
        cout<<"\n\t\t\t\t\t  Please Wait....";
        Sleep(2000);
        system("CLS");
        cout<<"\n\n\t\t\t\tTransition Failed XXXXX|";
                                  cout<<"\n\n\n\n\t\t\t\tInsufficient balance!!!";


    }
                    int pos=(-1)*static_cast<int>(sizeof(ac));
                    File.seekp(pos,ios::cur);
                    File.write((char *) (&ac), sizeof(account));


                    found=true;
     flag=true;
         }


   }




File.close();


if(flag==false)
{
cout<<"\n\t\t\t\tAccount does not exist!!!!"<<endl;
 goto label;
}
```

```
}
int transfer2(int n, int amt1)
{

    bool found=false;

    account ac;
    fstream File;
 File.open("account.dat", ios::binary|ios::in|ios::out);
    if(!File)
    {
        cout<<"\n\t\t\tFile could not be open !! Press any Key...";
        return false;
    }

    while(!File.eof() && found==false)
    {
        File.read((char *) (&ac), sizeof(account));
        if(ac.retacno()==n)
        {




     int bal=ac.retdeposit()-amt1;
                if(bal<0)
     {
      File.close();
      return false;
                }
                else {
                    ac.draw(amt1);
                    found=true;
```

```
                                     }
                              int pos=(-1)*static_cast<int>(sizeof(ac));
                              File.seekp(pos,ios::cur);
                              File.write((char *) (&ac), sizeof(account));



              }
      }



  File.close();
         if(found==false){


          return false;
         }


     return true;
}
```

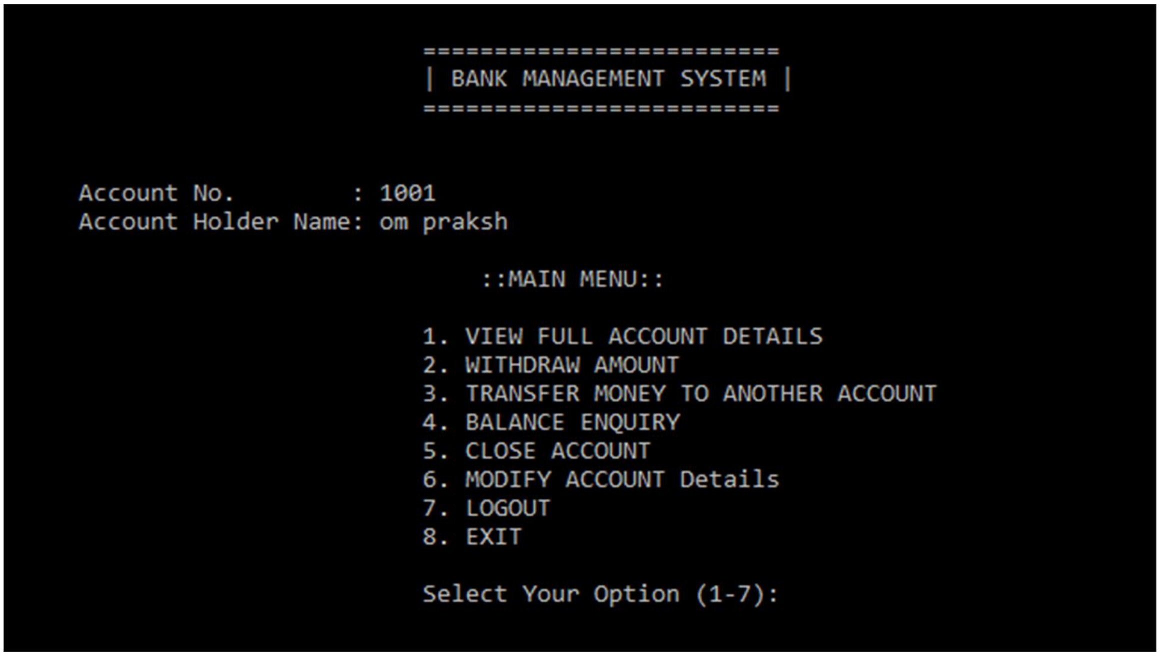
OUTPUT / SCREEN SHOTS

1.Main Interface



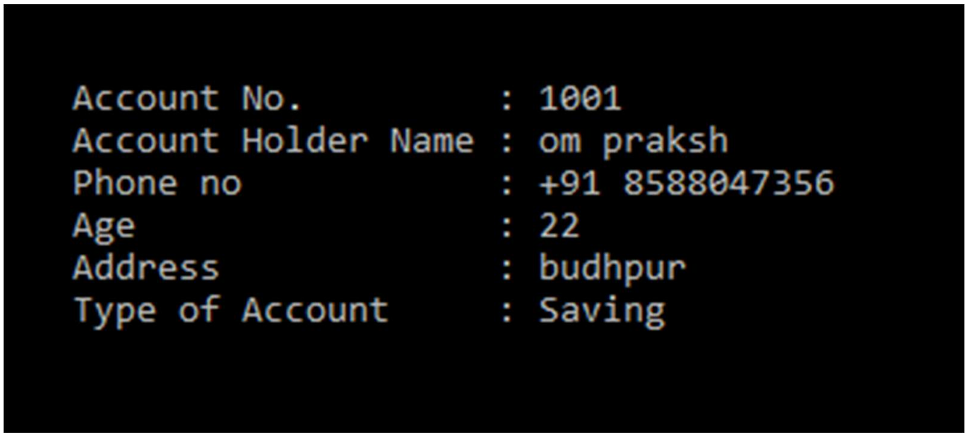
```
        ======================
        BANK MANAGEMENT SYSTEM
        ======================


        1. USER LOGIN:
        2. ADMIN LOGIN:
        3. CREATE NEW BANK ACCOUNT:
        4. EXIT:

Select Your Option (1-4);
```

2.User log-in



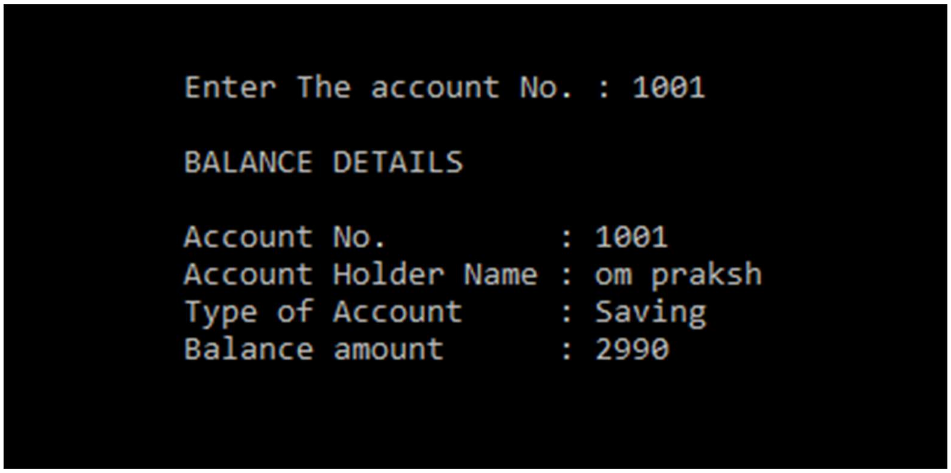
```
                        =========================
                        | BANK MANAGEMENT SYSTEM |
                        =========================


Account No.        : 1001
Account Holder Name: om praksh

                            ::MAIN MENU::

                        1. VIEW FULL ACCOUNT DETAILS
                        2. WITHDRAW AMOUNT
                        3. TRANSFER MONEY TO ANOTHER ACCOUNT
                        4. BALANCE ENQUIRY
                        5. CLOSE ACCOUNT
                        6. MODIFY ACCOUNT Details
                        7. LOGOUT
                        8. EXIT

                        Select Your Option (1-7):
```

USER FULL ACCOUNT DETAILS:



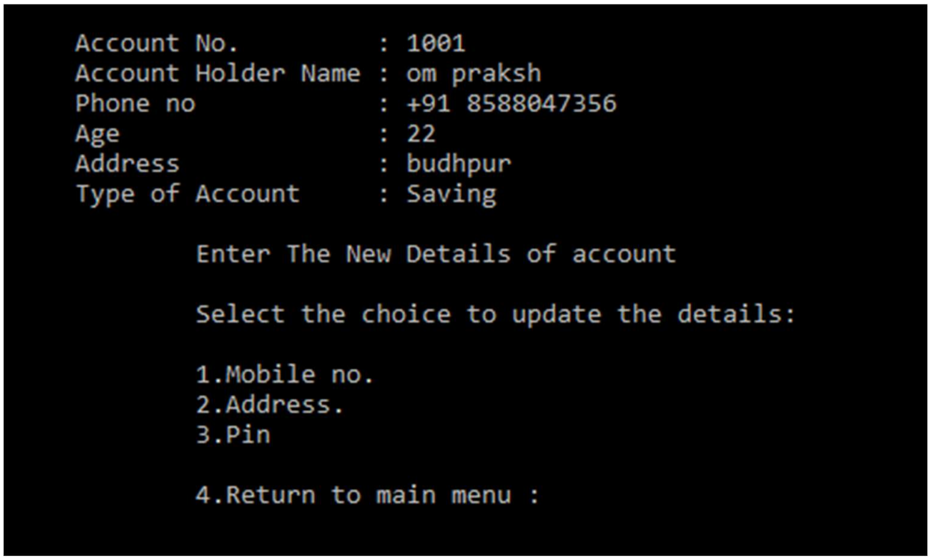
```
Account No.           : 1001
Account Holder Name : om praksh
Phone no              : +91 8588047356
Age                   : 22
Address               : budhpur
Type of Account       : Saving
```

BALANCE AMOUNT:



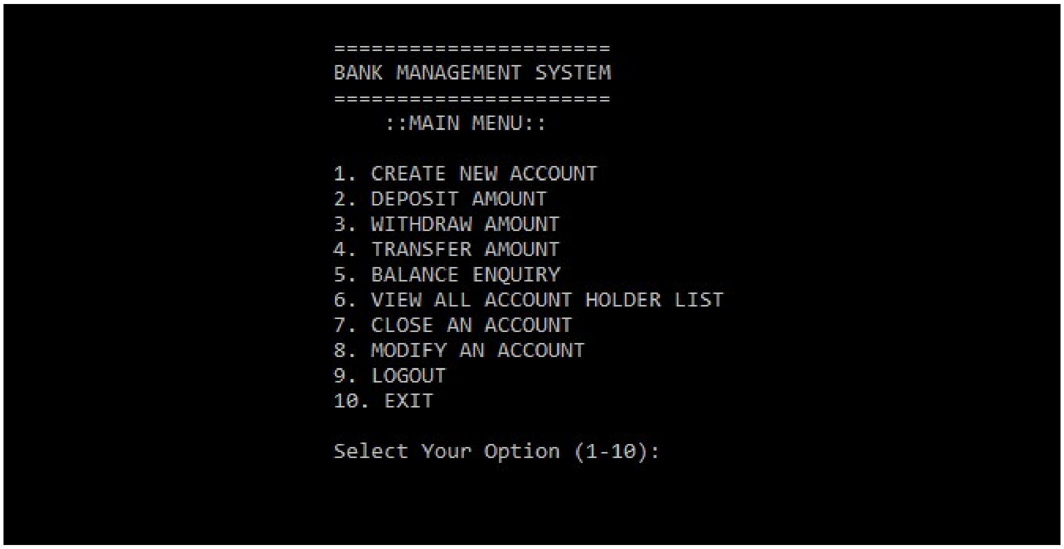
```
Enter The account No. : 1001

BALANCE DETAILS

Account No.          : 1001
Account Holder Name : om praksh
Type of Account      : Saving
Balance amount       : 2990
```

MODIFY ACCOUNT:



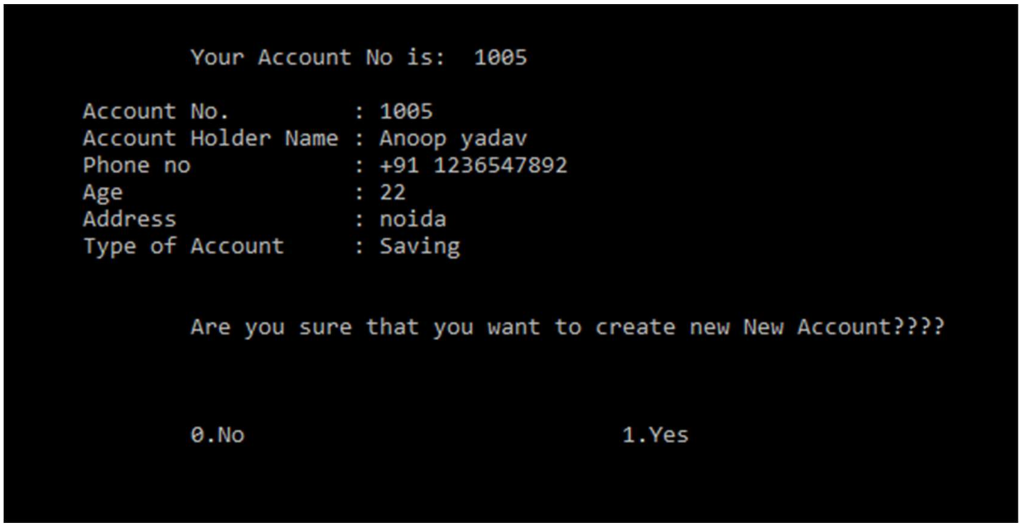
```
Account No.          : 1001
Account Holder Name : om praksh
Phone no             : +91 8588047356
Age                  : 22
Address              : budhpur
Type of Account      : Saving

        Enter The New Details of account

        Select the choice to update the details:

        1.Mobile no.
        2.Address.
        3.Pin

        4.Return to main menu :
```

2. Admin log-in



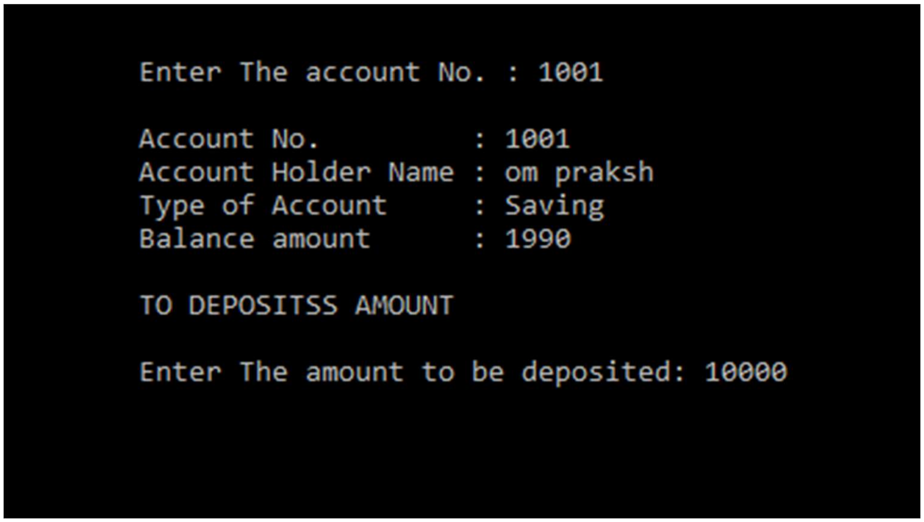
```
======================
BANK MANAGEMENT SYSTEM
======================
    ::MAIN MENU::

1. CREATE NEW ACCOUNT
2. DEPOSIT AMOUNT
3. WITHDRAW AMOUNT
4. TRANSFER AMOUNT
5. BALANCE ENQUIRY
6. VIEW ALL ACCOUNT HOLDER LIST
7. CLOSE AN ACCOUNT
8. MODIFY AN ACCOUNT
9. LOGOUT
10. EXIT

Select Your Option (1-10):
```

CREATE NEW ACCOUNT



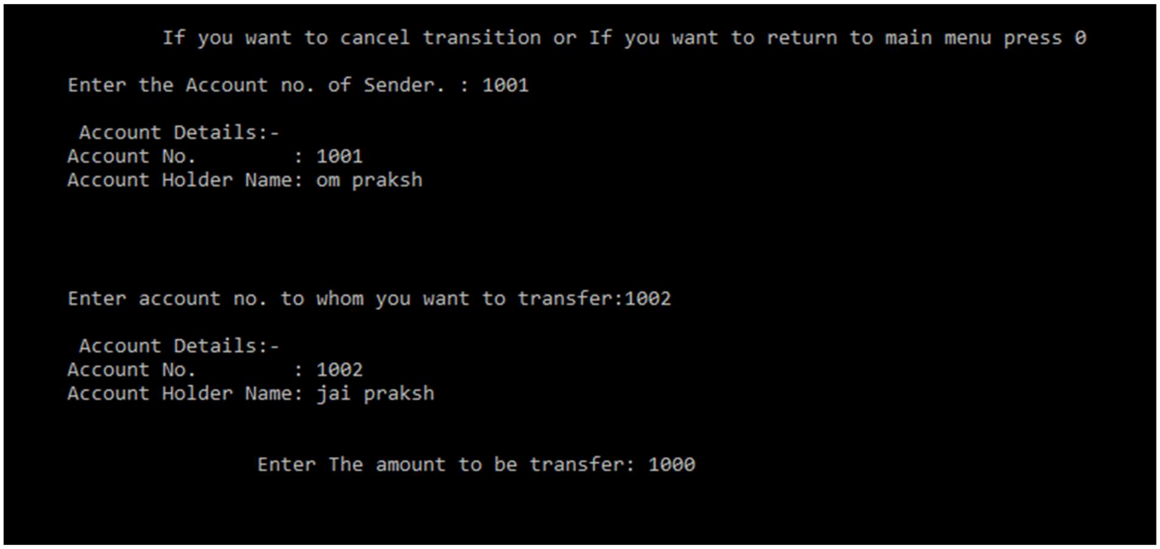
```
        Your Account No is:  1005

Account No.          : 1005
Account Holder Name  : Anoop yadav
Phone no             : +91 1236547892
Age                  : 22
Address              : noida
Type of Account      : Saving


        Are you sure that you want to create new New Account????



        0.No                            1.Yes
```

DEPOSITE AMOUNT:



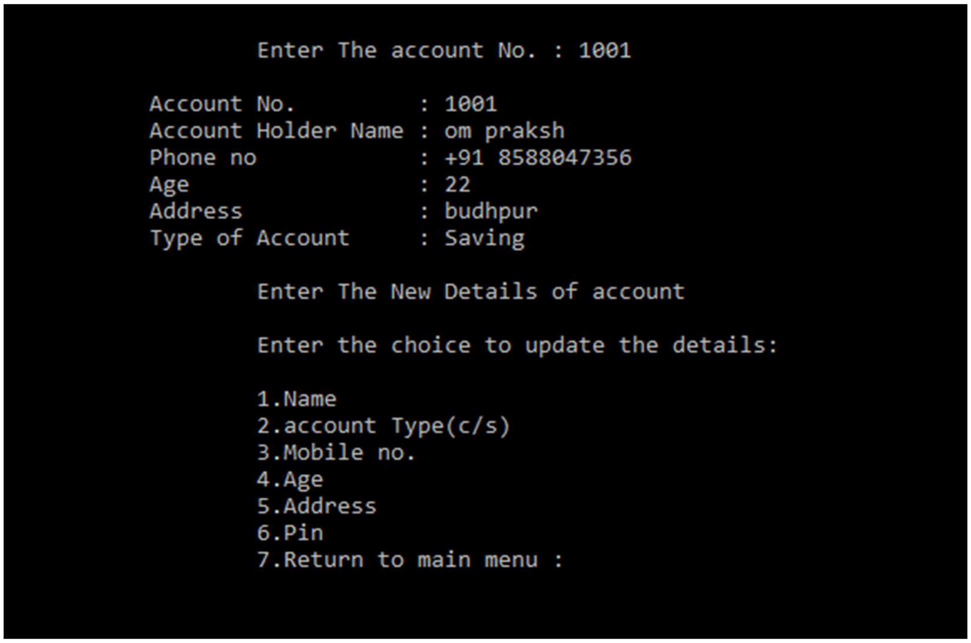
```
Enter The account No. : 1001

Account No.          : 1001
Account Holder Name  : om praksh
Type of Account      : Saving
Balance amount       : 1990

TO DEPOSITSS AMOUNT

Enter The amount to be deposited: 10000
```

TRANSFER AMOUNT:



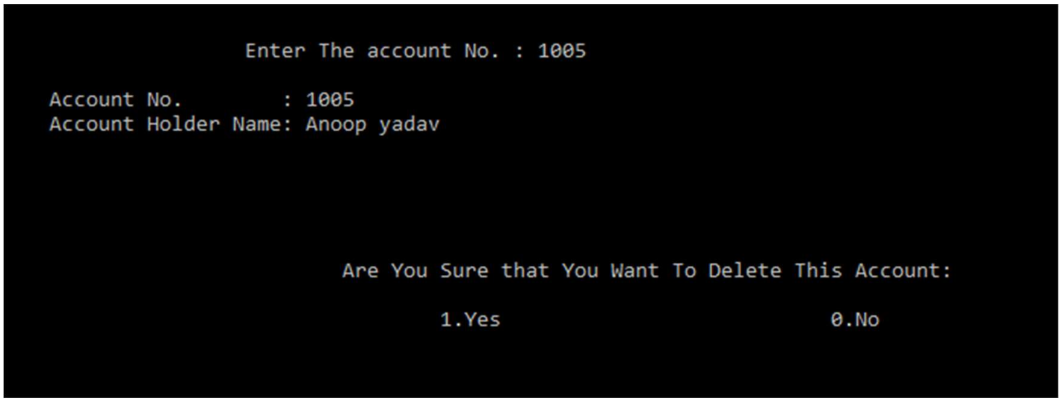
```
        If you want to cancel transition or If you want to return to main menu press 0

   Enter the Account no. of Sender. : 1001

    Account Details:-
   Account No.        : 1001
   Account Holder Name: om praksh



   Enter account no. to whom you want to transfer:1002

    Account Details:-
   Account No.        : 1002
   Account Holder Name: jai praksh

                   Enter The amount to be transfer: 1000
```

MODIFY ACCOUNT DETAILS:



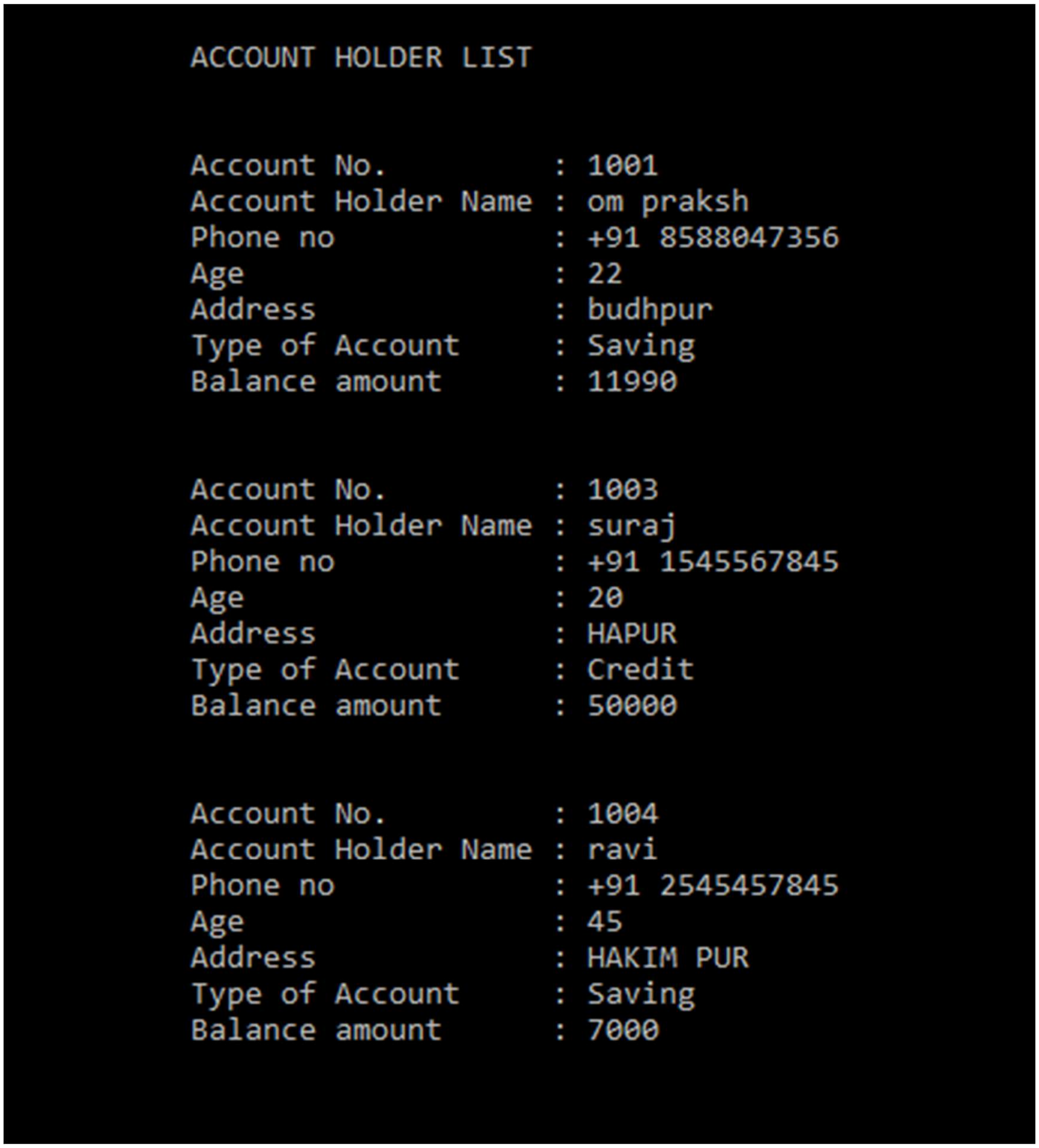
```
                  Enter The account No. : 1001

          Account No.          : 1001
          Account Holder Name : om praksh
          Phone no             : +91 8588047356
          Age                  : 22
          Address              : budhpur
          Type of Account      : Saving

                  Enter The New Details of account

                  Enter the choice to update the details:

                  1.Name
                  2.account Type(c/s)
                  3.Mobile no.
                  4.Age
                  5.Address
                  6.Pin
                  7.Return to main menu :
```

CLOSE ACCOUNT:



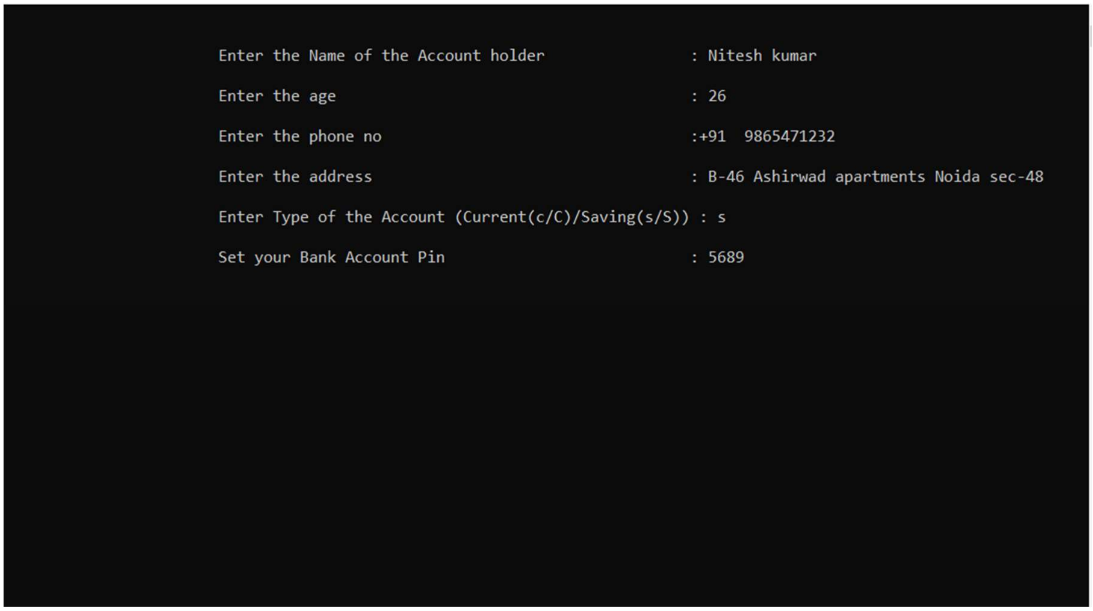
```
                     Enter The account No. : 1005

   Account No.        : 1005
   Account Holder Name: Anoop yadav




                             Are You Sure that You Want To Delete This Account:

                                     1.Yes                            0.No
```

VIEW ALL ACCOUNT HOLDER LIST:



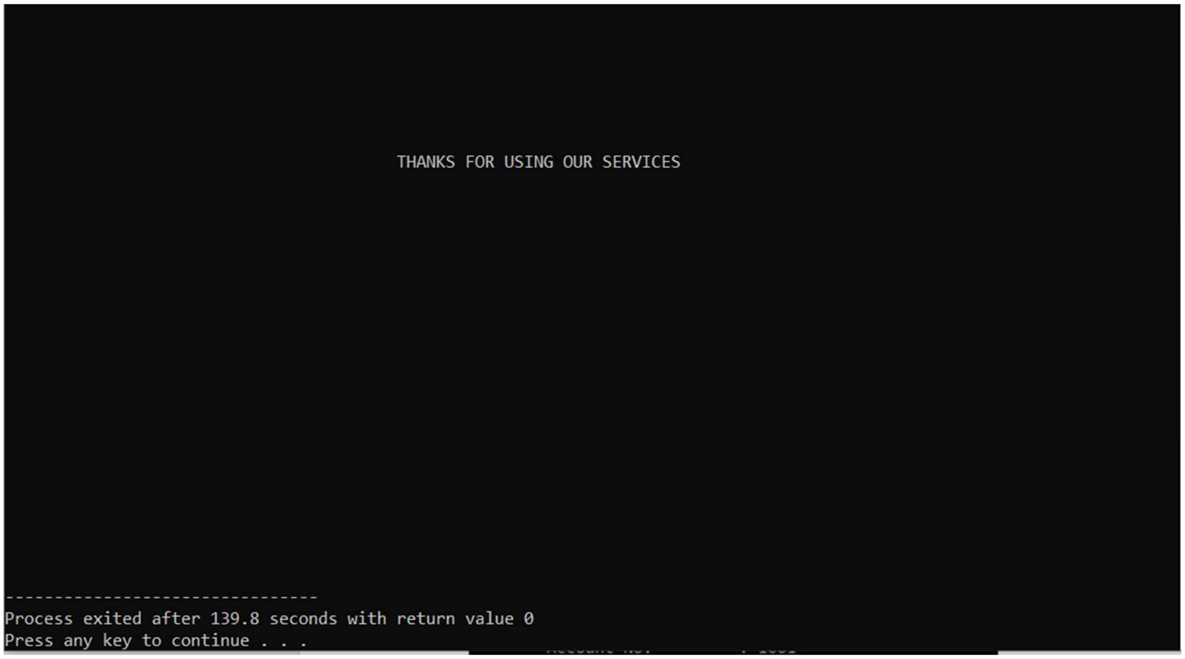
```
ACCOUNT HOLDER LIST


Account No.         : 1001
Account Holder Name : om praksh
Phone no            : +91 8588047356
Age                 : 22
Address             : budhpur
Type of Account     : Saving
Balance amount      : 11990


Account No.         : 1003
Account Holder Name : suraj
Phone no            : +91 1545567845
Age                 : 20
Address             : HAPUR
Type of Account     : Credit
Balance amount      : 50000


Account No.         : 1004
Account Holder Name : ravi
Phone no            : +91 2545457845
Age                 : 45
Address             : HAKIM PUR
Type of Account     : Saving
Balance amount      : 7000
```

3. Create new account ⇩



```
Enter the Name of the Account holder                 : Nitesh kumar

Enter the age                                        : 26

Enter the phone no                                   :+91  9865471232

Enter the address                                    : B-46 Ashirwad apartments Noida sec-48

Enter Type of the Account (Current(c/C)/Saving(s/S)) : s

Set your Bank Account Pin                            : 5689
```

4. EXIT: ⇩



```
                              THANKS FOR USING OUR SERVICES









--------------------------------
Process exited after 139.8 seconds with return value 0
Press any key to continue . . .
```

CONCLUSION

1. THIS BANK MANAGEMENT SYSTEM WILL SERVE AS A USEFUL APPROACH FOR VARIOUS BANKING OPERATIONS.
2. BANK SYSTEM DEVLOPED IS USER FRIENDLY.
3. IT GREATLY REDUCES MANUAL WORK.
4. IT HAS SOME EXTRA FEATUERES LIKE USER AND ADMIN LOGIN BOTH.
5. IT REDUCES THE TIME TAKEN.