**BANK MANAGEMENT SYSTEM**

Source Code:-

#include<iostream>

#include<fstream>

#include<cctype>

#include<iomanip>

using namespace std;

class account

{

int acno;

char name[50];

int deposit;

char type;

public:

void create\_account();

void show\_account() const;

void modify();

void dep(int);

void draw(int);

void report() const;

int retacno() const;

int retdeposit() const;

char rettype() const;

};

void account::create\_account()

{

cout<<"\nEnter The account No. :";

cin>>acno;

cout<<"\n\nEnter The Name of The account Holder : ";

cin.ignore();

cin.getline(name,50);

cout<<"\nEnter Type of The account (C/S) : ";

cin>>type;

type=toupper(type);

cout<<"\nEnter The Initial amount(>=500 for Saving and >=1000 for current ) : ";

cin>>deposit;

cout<<"\n\n\nAccount Created..";

}

void account::show\_account() const

{

cout<<"\nAccount No. : "<<acno;

cout<<"\nAccount Holder Name : ";

cout<<name;

cout<<"\nType of Account : "<<type;

cout<<"\nBalance amount : "<<deposit;

}

void account::modify()

{

cout<<"\nAccount No. : "<<acno;

cout<<"\nModify Account Holder Name : ";

cin.ignore();

cin.getline(name,50);

cout<<"\nModify Type of Account : ";

cin>>type;

type=toupper(type);

cout<<"\nModify Balance amount : ";

cin>>deposit;

}

void account::dep(int x)

{

deposit+=x;

}

void account::draw(int x)

{

deposit-=x;

}

void account::report() const

{

cout<<acno<<setw(10)<<" "<<name<<setw(10)<<" "<<type<<setw(6)<<deposit<<endl;

}

int account::retacno() const

{

return acno;

}

int account::retdeposit() const

{

return deposit;

}

char account::rettype() const

{

return type;

}

void write\_account();

void display\_sp(int);

void modify\_account(int);

void delete\_account(int);

void display\_all();

void deposit\_withdraw(int, int);

void intro();

int main()

{

char ch;

int num;

intro();

do

{

system("cls");

cout<<"\n\n\n\t\t\t\t\t\t\t\t\t\t\t\tMAIN MENU";

cout<<"\n\n\t\t\t\t\t\t\t\t\t\t\t\t01. NEW ACCOUNT";

cout<<"\n\n\t\t\t\t\t\t\t\t\t\t\t\t02. DEPOSIT AMOUNT";

cout<<"\n\n\t\t\t\t\t\t\t\t\t\t\t\t03. WITHDRAW AMOUNT";

cout<<"\n\n\t\t\t\t\t\t\t\t\t\t\t\t04. BALANCE ENQUIRY";

cout<<"\n\n\t\t\t\t\t\t\t\t\t\t\t\t05. ALL ACCOUNT HOLDER LIST";

cout<<"\n\n\t\t\t\t\t\t\t\t\t\t\t\t06. CLOSE AN ACCOUNT";

cout<<"\n\n\t\t\t\t\t\t\t\t\t\t\t\t07. MODIFY AN ACCOUNT";

cout<<"\n\n\t\t\t\t\t\t\t\t\t\t\t\t08. EXIT";

cout<<"\n\n\t\t\t\t\t\t\t\t\t\t\t\tSelect Your Option (1-8) ";

cin>>ch;

system("cls");

switch(ch)

{

case '1':

write\_account();

break;

case '2':

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

deposit\_withdraw(num, 1);

break;

case '3':

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

deposit\_withdraw(num, 2);

break;

case '4':

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

display\_sp(num);

break;

case '5':

display\_all();

break;

case '6':

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

delete\_account(num);

break;

case '7':

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

modify\_account(num);

break;

case '8':

cout<<"\n\n\tThanks for using bank managemnt system";

break;

default :cout<<"a";

}

cin.ignore();

cin.get();

}while(ch!='8');

return 0;

}

void write\_account()

{

account ac;

ofstream outFile;

outFile.open("account.dat",ios::binary|ios::app);

ac.create\_account();

outFile.write(reinterpret\_cast<char \*> (&ac), sizeof(account));

outFile.close();

}

void display\_sp(int n)

{

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;

}

cout<<"\nBALANCE DETAILSn";

while(inFile.read(reinterpret\_cast<char \*> (&ac), sizeof(account)))

{

if(ac.retacno()==n)

{

ac.show\_account();

flag=true;

}

}

inFile.close();

if(flag==false)

cout<<"\n\nAccount number does not exist";

}

void modify\_account(int n)

{

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(reinterpret\_cast<char \*> (&ac), sizeof(account));

if(ac.retacno()==n)

{

ac.show\_account();

cout<<"\n\nEnter The New Details of account"<<endl;

ac.modify();

int pos=(-1)\*static\_cast<int>(sizeof(account));

File.seekp(pos,ios::cur);

File.write(reinterpret\_cast<char \*> (&ac), sizeof(account));

cout<<"\n\n\t Record Updated";

found=true;

}

}

File.close();

if(found==false)

cout<<"\n\n Record Not Found ";

}

void delete\_account(int n)

{

account ac;

ifstream inFile;

ofstream outFile;

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

if(!inFile)

{

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

return;

}

outFile.open("Temp.dat",ios::binary);

inFile.seekg(0,ios::beg);

while(inFile.read(reinterpret\_cast<char \*> (&ac), sizeof(account)))

{

if(ac.retacno()!=n)

{

outFile.write(reinterpret\_cast<char \*> (&ac), sizeof(account));

}

}

inFile.close();

outFile.close();

remove("account.dat");

rename("Temp.dat","account.dat");

cout<<"\n\n\tRecord Deleted ..";

}

void display\_all()

{

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\n";

cout<<"\t\t-------------------\n";

cout<<"\n\n\n\nA/c no. NAME Type Balance\n";

cout<<"------- ------ ---- -------\n";

while(inFile.read(reinterpret\_cast<char \*> (&ac), sizeof(account)))

{

ac.report();

}

inFile.close();

}

void deposit\_withdraw(int n, int option)

{

int amt;

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(reinterpret\_cast<char \*> (&ac), sizeof(account));

if(ac.retacno()==n)

{

ac.show\_account();

if(option==1)

{

cout<<"\n\n\tTO DEPOSITE AMOUNT ";

cout<<"n\n\Enter The amount to be deposited";

cin>>amt;

ac.dep(amt);

}

if(option==2)

{

cout<<"\n\n\tTO WITHDRAW AMOUNT ";

cout<<"\n\nEnter The amount to be withdraw";

cin>>amt;

int bal=ac.retdeposit()-amt;

if((bal<500 && ac.rettype()=='S') || (bal<1000 && ac.rettype()=='C'))

cout<<"Insufficience balance";

else

ac.draw(amt);

}

int pos=(-1)\*static\_cast<int>(sizeof(ac));

File.seekp(pos,ios::cur);

File.write(reinterpret\_cast<char \*> (&ac), sizeof(account));

cout<<"\n\n\t Record Updated";

found=true;

}

}

File.close();

if(found==false)

cout<<"\n\n Record Not Found ";

}

void intro()

{

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

cout<<"\n\n\n\n\t\t\t\t\t\t\t\t\t\t\t\tMADE BY : Shivam Choudhary";

cin.get();

}

Output:-

BANK MANAGEMENT SYSTEM

MADE BY : Shivam Choudhary

MAIN MENU

01. NEW ACCOUNT

02. DEPOSIT AMOUNT

03. WITHDRAW AMOUNT

04. BALANCE ENQUIRY

05. ALL ACCOUNT HOLDER LIST

06. CLOSE AN ACCOUNT

07. MODIFY AN ACCOUNT

08. EXIT

Select Your Option (1-8) 1

For New Account:- press 1

Enter The account No. :3210

Enter The Name of The account Holder : Suraj Sen

Enter Type of The account (C/S) : S

Enter The Initial amount(>=500 for Saving and >=1000 for current ) : 4000

Account Created..

For Balance Enqury:- press 4

MAIN MENU

01. NEW ACCOUNT

02. DEPOSIT AMOUNT

03. WITHDRAW AMOUNT

04. BALANCE ENQUIRY

05. ALL ACCOUNT HOLDER LIST

06. CLOSE AN ACCOUNT

07. MODIFY AN ACCOUNT

08. EXIT

Select Your Option (1-8) 4

Enter The account No. : 3210

BALANCE DETAILS

Account No. : 3210

Account Holder Name : Suraj Sen

Type of Account : S

Balance amount : 4000

For ALL ACCOUNT HOLDER LIST:- Press 5

MAIN MENU

01. NEW ACCOUNT

02. DEPOSIT AMOUNT

03. WITHDRAW AMOUNT

04. BALANCE ENQUIRY

05. ALL ACCOUNT HOLDER LIST

06. CLOSE AN ACCOUNT

07. MODIFY AN ACCOUNT

08. EXIT

Select Your Option (1-8) 5

ACCOUNT HOLDER LIST

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A/c no. NAME Type Balance

------- -------- ------ ----------

3765 Sonai Sen S 25000

4956 Rupam Sen S 15000

6792 Chiku Sen S 8000

4567 Raj Kumar S 20000

3210 Suraj Sen S 4000

For DEPOSIT AMOUNT:- Press 2

MAIN MENU

01. NEW ACCOUNT

02. DEPOSIT AMOUNT

03. WITHDRAW AMOUNT

04. BALANCE ENQUIRY

05. ALL ACCOUNT HOLDER LIST

06. CLOSE AN ACCOUNT

07. MODIFY AN ACCOUNT

08. EXIT

Select Your Option (1-8) 2

Enter The account No. : 6792

Account No. : 6792

Account Holder Name : Chiku Sen

Type of Account : S

Balance amount : 8000

TO DEPOSITE AMOUNT

Enter the Amount:-2000

Record Updated

ACCOUNT HOLDER LIST

----------------------------------

A/c no. NAME Type Balance

------- --------- ---- -----------

3765 Sonai Sen S 25000

4956 Rupam Sen S 15000

6792 Chiku Sen S 10000

4567 Raj Kumar S 20000

3210 Suraj Sen S 4000

For WITHDRAW AMOUNT:- Press 3

MAIN MENU

01. NEW ACCOUNT

02. DEPOSIT AMOUNT

03. WITHDRAW AMOUNT

04. BALANCE ENQUIRY

05. ALL ACCOUNT HOLDER LIST

06. CLOSE AN ACCOUNT

07. MODIFY AN ACCOUNT

08. EXIT

Select Your Option (1-8) 3

Enter The account No. : 4956

Account No. : 4956

Account Holder Name : Rupam Sen

Type of Account : S

Balance amount : 15000

TO WITHDRAW AMOUNT

Enter The amount to be withdraw 5000

Record Updated

ACCOUNT HOLDER LIST

----------------------------------

A/c no. NAME Type Balance

------- --------- ------ ----------

3765 Sonai Sen S 25000

4956 Rupam Sen S 10000

6792 Chiku Sen S 10000

4567 Raj Kumar S 20000

3210 Suraj Sen S 4000

For CLOSE AN ACCOUNT:- Press 6

MAIN MENU

01. NEW ACCOUNT

02. DEPOSIT AMOUNT

03. WITHDRAW AMOUNT

04. BALANCE ENQUIRY

05. ALL ACCOUNT HOLDER LIST

06. CLOSE AN ACCOUNT

07. MODIFY AN ACCOUNT

08. EXIT

Select Your Option (1-8) 6

Enter The account No. : 3210

Record Deleted ..

ACCOUNT HOLDER LIST

-----------------------------------

A/c no. NAME Type Balance

------- --------- ------ -----------

3765 Sonai Sen S 25000

4956 Rupam Sen S 10000

6792 Chiku Sen S 10000

4567 Raj Kumar S 20000

For MODIFY AN ACCOUNT:- Press 7

MAIN MENU

01. NEW ACCOUNT

02. DEPOSIT AMOUNT

03. WITHDRAW AMOUNT

04. BALANCE ENQUIRY

05. ALL ACCOUNT HOLDER LIST

06. CLOSE AN ACCOUNT

07. MODIFY AN ACCOUNT

08. EXIT

Select Your Option (1-8) 7

Enter The account No. : 6792

Account No. : 6792

Account Holder Name : Chiku Sen

Type of Account : S

Balance amount : 10000

Enter The New Details of account

Account No. : 6792

Modify Account Holder Name : Joy Sen

Modify Type of Account : 2976

Modify Balance amount :

Record Updated

ACCOUNT HOLDER LIST

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A/c no. NAME Type Balance

------- ---------- ------ ----------

3765 Sonai Sen S 25000

4956 Rupam Sen S 10000

6792 Joy Sen S 2976

4567 Raj Kumar S 20000

For EXIT:-Press 8

MAIN MENU

01. NEW ACCOUNT

02. DEPOSIT AMOUNT

03. WITHDRAW AMOUNT

04. BALANCE ENQUIRY

05. ALL ACCOUNT HOLDER LIST

06. CLOSE AN ACCOUNT

07. MODIFY AN ACCOUNT

08. EXIT

Select Your Option (1-8) 8

Thanks for using bank managemnt system

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Process exited after 1283 seconds with return value 0

Press any key to continue . . .