#include<iostream>

using namespace std;

#include<ctype.h>

#include<string.h>

#include<iomanip>

#include<conio.h>

#include<stdio.h>

#include<fstream>

class account

{

int acno;

char name[50];

int deposit;

char type;

public:

void create\_account();

void show\_account();

void modify();

void dep(int);

void draw(int);

void report();

int retacno();

int retdeposit();

char rettype();

};

void account::create\_account()

{

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

cin>>acno;

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

cin>>name;

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()

{

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

cout<<"\nAccount Holder Name : ";

cout<<name;

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

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

}

void account::modify()

{

cout<<"\nThe account No."<<acno;

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

gets(name);

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

cin>>type;

type=toupper(type);

cout<<"\nEnter The amount : ";

cin>>deposit;

}

void account::dep(int x)

{

deposit+=x;

}

void account::draw(int x)

{

deposit-=x;

}

void account::report()

{

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

}

int account::retacno()

{

return acno;

}

int account::retdeposit()

{

return deposit;

}

char account::rettype()

{

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);

int main()

{

char ch;

int num;

do

{

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

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

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

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

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

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

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

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

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

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

//cin.ignore();1

cin>>ch;

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";

}

}while(!ch);

return 0;

}

void write\_account()

{

account ac;

ofstream outFile;

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

ac.create\_account();

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

outFile.close();

}

void display\_sp(int n)

{

account ac;

int flag=0;

ifstream inFile;

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

if(!inFile)

{

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

return;

}

cout<<"\nBALANCE DETAILS\n";

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

{

if(ac.retacno()==n)

{

ac.show\_account();

flag=1;

}

}

inFile.close();

if(flag==0)

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

}

void modify\_account(int n)

{

int found=0;

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.read((char \*) &ac, sizeof(account)) && found==0)

{

if(ac.retacno()==n)

{

ac.show\_account();

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

ac.modify();

int pos=(-1)\*sizeof(account);

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

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

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

found=1;

}

}

File.close();

if(found==0)

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((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\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\n";

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

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

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

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

{

ac.report();

}

inFile.close();

}

void deposit\_withdraw(int n, int option)

{

int amt;

int found=0;

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.read((char \*) &ac, sizeof(account)) && found==0)

{

if(ac.retacno()==n)

{

ac.show\_account();

if(option==1)

{

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

cout<<"\n\nEnter 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)\* sizeof(ac);

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

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

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

found=1;

}

}

File.close();

if(found==0)

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

}