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**Certificate**

This is to certify that **Rohan Sharma** of **Class XII-D**,   
**Nav Jeevan Aadarsh Public Senior Secondary School**, Gautampuri, Delhi has successfully completed his project in computer practical for the Board Examination as prescribed by CBSE in the year 2018-2019.

Date: ……………………….. Registration No. :…………………

**Signature of Internal Signature of External**

**Examiner Examiner**

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***SYNOPSIS***

Project Category:

Management

Aim

To input, maintain and process data in a bank through Data file handling, Classes and Structures.

Requirement:

This project shows the working of a banking account system and cover the basic functionality of a Bank Account Management System. To develop a project for solving financial applications of a customer in banking environment in order to nurture the needs of an end banking user by providing various ways to perform banking tasks.

Also to enable the user’s work space to have additional functionalities which are not provided under a conventional banking project. The Bank Management System undertaken as a project is based on relevant technologies. This project has been developed to carry out the processes easily and quickly, which is not possible with the manuals systems, which are overcome by this software.

The content management system deals with data entry, validation confirm and updating whiles the interactive system deals with system interaction with the administration and users. Thus, above features of this project will save transaction time and therefore increase the efficiency of the system.

Header Files used and their purpose

1) **Iostream.h:**

* cin
* cout

2) **Conio.h:**

* clrscr();
* getch();

3) **String.h:**

* strcmp();

4) S**tdio.h:**

* gets();
* puts();
* remove();

5) **Fstream.h:**

* ofstream();
* ifstream();
* fstream();

6) **Iomanip.h:**

* setw()

7) **Stdlib.h:**

* exit();

8) **Ctype.h:**

* sleep();

**Data Files**

1. **acc.dat //To keep record of accounts**
2. **temp.dat //To keep exchange data of original account**

**//with the modified one**

**Global Classes, Functions and prototypes**

**Classes:**

**Class account //to hold all the variables relating to accounts**

**Functions:**

**void create\_account(); //Appends the record**

**void show\_account(); //For shows a particular acc.**

**void modify(); //For modifying account database**

**void dep(int); // For depositing money into an account**

**void draw(int); //for withdrawing money from account**

**void credits(); //To show the credits of the developer**

**void help(); // To show the help menu**

**int retacno() const; // To pass account no. as return value**

**int retdeposit() const; // To pass the amount deposited as return value**

**char rettype() const; // To pass the account type as return value**

**void write\_account(); // To store the new acc.**

**void display\_sp(int); //To display acc for balance enquiry**

**void modify\_account(int); //To store modifications**

**void delete\_account(int); // To delete account**

**void display\_all(); // To display all stored account**

**void deposit\_withdraw(int, int); // To store deposit and withdraw amount**

**Main Menu**

**Exit**

**Withdraw Money**

**NEW ACCOUNT**

**Deposit Money**

**HELP**

**FLOW CHART**

**BALANCE ENQUIRY**

**DELETE**

**MODIFY**

**DISPLAY ALL**

#include<iostream.h>

#include<stdio.h> //For return and remove functions

#include<fstream.h>

#include<conio.h>

#include<ctype.h>

#include<iomanip.h> //For data manipulation

#include<string.h>

class account

{

int acno;

char name[50];

long int deposit;

char type;

public:

void create\_account();

void show\_account() const;

void modify();

void dep(int);

void draw(int);

void credits();

void help();

void report() const;

int retacno() const;

int retdeposit() const;

char rettype() const;

};

void help()

{

cout<<"\n\n\t\t\tWelcome to Bank of Hindostan\n\nGood Day Sir/Mam,\n\tMy name is Cortana and I am the AI designed by JUGGADU Pvt. Inc., under the supervision of CHETAN SINGH. Below, I will explain each of the options on the main screen:-\n\n\n1.This option is for those users who need to open new account in our bank.\n\n2.Deposit option provides a safer and easier way to deposit money to your account with latest 256bit payment Gateway.\n\n3.Withdraw option provides a safer and easier way to withdraw money from your account with latest 256bit payment Gateway.\n\n4.Balance Enquiry is accessible to all those who have your account no. so keep it a secret.\n\n5.This option enables you to get access to all the database and get information of each account holder.\n\n6.Enter the account no, and WOOSH!!!!!, its deleted.\n\n\t\tFor online support press enter";

getch();

clrscr();

cout<<"Connecting to Online Support\n\nPress Enter For force connection or in case not connected to online support";

getch();

clrscr();

cout<<"It seems we are facing some technical issues with the server bridge....\n\t\tPress Enter To Continue";

getch();

clrscr();

cout<<"\t\t\nREDIRECTING TO MAIN MENU.............";

}

void account::create\_account()

{

clrscr();

cout<<"\n\t\t\tEnter the Account No. : ";

cin>>acno;

cout<<"\n\n\t\t\tEnter the Name of the Account holder : ";

cin.ignore();

cin.getline(name,50);

cout<<"\n\t\t\tEnter Type of the Account (C/S) : ";

cin>>type;

type=toupper(type);

cout<<"\n\t\t\tEnter The Initial amount : ";

cin>>deposit;

cout<<"\n\n\t\t\tAccount Created..";

}

void account::show\_account() const

{

cout<<"\n\t\t\tAccount No. : "<<acno;

cout<<"\n\t\t\tAccount Holder Name : ";

cout<<name;

cout<<"\n\t\t\tType of Account : "<<type;

cout<<"\n\t\t\tBalance amount : "<<deposit;

}

void account::modify()

{

cout<<"\n\t\t\tAccount No. : "<<acno;

cout<<"\n\t\t\tModify Account Holder Name : ";

cin.ignore();

cin.getline(name,50);

cout<<"\n\t\t\tModify Type of Account : ";

cin>>type;

type=toupper(type);

cout<<"\n\t\t\tModify Balance amount : ";

cin>>deposit;

}

void credits()

{

clrscr();

cout<<"\n\nThe Project is a result of dedication of Chetan

Singh of Class XII-D";

getch();

}

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);

int main()

{

int num,ch;

do

{

clrscr();

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

cout<<"\t\t\t\t BANK OF HINDOSTAN\n\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\t 1. NEW ACCOUNT";

cout<<"\n\t\t\t\t 2. DEPOSIT AMOUNT";

cout<<"\n\t\t\t\t 3. WITHDRAW AMOUNT";

cout<<"\n\t\t\t\t 4. BALANCE ENQUIRY";

cout<<"\n\t\t\t\t 5. ALL ACCOUNT HOLDER LIST";

cout<<"\n\t\t\t\t 6. CLOSE AN ACCOUNT";

cout<<"\n\t\t\t\t 7. MODIFY AN ACCOUNT";

cout<<"\n\t\t\t\t 8. HELP";

cout<<"\n\t\t\t\t 9. CREDITS";

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

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

cin>>ch;

switch(ch)

{

case 1:

write\_account();

break;

case 2:

clrscr();

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

deposit\_withdraw(num, 1);

break;

case 3:

clrscr();

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

deposit\_withdraw(num, 2);

break;

case 4:

clrscr();

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

display\_sp(num);

break;

case 5:

display\_all();

break;

case 6:

clrscr();

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

delete\_account(num);

break;

case 7:

clrscr();

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

modify\_account(num);

break;

case 8:

clrscr();

help();

break;

case 9:

clrscr();

credits();

break;

case 10:

{ clrscr();

cout<<"\n\n\t\t\tThanks for using Bank Of Hindostan";

break;

}

default :cout<<"\a";

}

cin.ignore();

cin.get();

}while(ch!=10);

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

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\n\t\t\tAccount 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\n\t\t\tEnter The New Details of account"<<endl;

ac.modify();

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

File.seekp(pos,ios::cur); //fncallat1353

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

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

found=true;

}}

File.close();

if(found==false)

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

}

void display\_all()

{

clrscr();

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(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\t\t\tTO DEPOSITSS AMOUNT";

cout<<"\n\n\t\t\tEnter The amount to be deposited: ";

cin>>amt;

ac.dep(amt);

}

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<<"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\t\tRecord Updated";

found=true;

} }

File.close();

if(found==false)

cout<<"\n\n\t\t\tRecord Not Found ";

}

**MAIN MENU**

**New Account**

**Deposit Money**

**Withdraw Money**

**Balance Enquiry**

**Modify**

**HELP**

**CREDITS**

**Account Deletion**

**Display All Records**

**EXIT**

**BIBLOGRAPHY**

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