**Name Hira Nasir**

**Class BSSE5(A)MOR**

**RollNo 20-Arid-767**

**Subject Software Construction**

**Code**

package javaapplication150;

import java.util.Scanner;

import java.util.Set;

class Customer {

public String accno;

public String name;

public String acc\_type;

public long balance;

Scanner sc = new Scanner(System.in);

//method to open new account

public void openAccount() {

System.out.print("Enter Account No: ");

accno = sc.next();

System.out.print("Enter Account type: ");

acc\_type = sc.next();

System.out.print("Enter Name: ");

name = sc.next();

System.out.print("Enter Balance: ");

balance = sc.nextLong();

}

//method to display account details

public void showAccount() {

System.out.println("Name of account holder: " + name);

System.out.println("Account no.: " + accno);

System.out.println("Account type: " + acc\_type);

System.out.println("Balance: " + balance);

}

//method to deposit money

public void deposit() {

long amt;

System.out.println("Enter the amount you want to deposit: ");

amt = sc.nextLong();

balance = balance + amt;

}

//method to withdraw money

public void withdrawal() {

long amt;

System.out.println("Enter the amount you want to withdraw: ");

amt = sc.nextLong();

if (balance >= amt) {

balance = balance - amt;

System.out.println("Balance after withdrawal: " + balance);

} else {

System.out.println("Your balance is less than " + amt + "\tTransaction failed...!!" );

}

}

//method to search an account number

public boolean search(String ac\_no) {

if (accno.equals(ac\_no)) {

showAccount();

return (true);

}

return (false);

}

public void applyloan()

{

long amt;

System.out.print("Enter the amount you want to get loan");

amt=sc.nextLong();

if(balance<=amt)

{

System.out.println("apply for loan");

}

else

{

System.out.println("You do not apply for this loan");

}

}

}

class Accountant{

public int id;

public String name;

public long balance;

public String accno;

Scanner sc = new Scanner(System.in);

Accountant(String name)

{

this.name = name;

}

public String getAccountantName()

{

return this.name;

}

public void openAccount() {

System.out.print("Assign Account No: ");

accno = sc.next();

System.out.print("assign id: ");

int id = sc.nextInt();

System.out.print("Enter balance");

balance=sc.nextLong();

System.out.print("Enter Name");

name=sc.next();

}

public void Loanrequest()

{

long amt;

System.out.print("Enter the amount you want to get loan");

amt=sc.nextLong();

if(balance<=amt)

{

System.out.println("accept loan request");

}

else

{

System.out.println("delete loan request");

}

}

public void provideinfo(){

System.out.println("provide info to the user");

accno=sc.next();

if(accno.equals(accno)){

System.out.println("Give account info");

}

else{

System.out.println("sorry you cannot have this account");

}

}

public void transaction()

{

if(balance>0)

{

System.out.println("do a transaction");

balance=sc.nextLong();

}

else

{

System.out.println("sorry your balance is not enough");

}

}

}

class Loan{

public String name;

public String acc\_type;

public String acc\_no;

public long balance;

Scanner sc=new Scanner(System.in);

public void LoanApproval()

{

long amt;

System.out.print("Enter the amount you want to get loan");

amt=sc.nextLong();

if(balance<=amt)

{

System.out.println("accept for loan");

}

else

{

System.out.println("Not accepted loan");

}

}

public void verifydocument()

{

System.out.print("the document is right and match coustomer id");

}

}

class Bank{

public String name;

public String location;

Bank(String name)

{

this.name = name;

}

public String getBankName()

{

return this.name;

}

}

public class JavaApplication150 {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

Loan loan=new Loan();

Bank bankObj=new Bank("NBP bank");

Accountant accountantObj=new Accountant("Rohan");

System.out.println(accountantObj.getAccountantName()+" is accountant of

"+bankObj.getBankName());

//create initial accounts

System.out.print("How many number of customers do you want to input? ");

int n = sc.nextInt();

Customer C[] = new Customer[n];

for (int i = 0; i < C.length; i++) {

C[i] = new Customer();

C[i].openAccount();

}

// loop runs until number 5 is not pressed to exit

int ch;

do {

System.out.println("\n \*\*\*Banking System Application\*\*\*");

System.out.println("1. Display all account details \n 2. Search by Account number\n 3. Deposit the amount \n 4. Withdraw the amount \n 5.Aplly for loan\n 6.Exit ");

System.out.println("Enter your choice: ");

ch = sc.nextInt();

switch (ch) {

case 1:

for (int i = 0; i < C.length; i++) {

C[i].showAccount();

}

break;

case 2:

System.out.print("Enter account no. you want to search: ");

String ac\_no = sc.next();

boolean found = false;

for (int i = 0; i < C.length; i++) {

found = C[i].search(ac\_no);

if (found) {

break;

}

}

if (!found) {

System.out.println("Search failed! Account doesn't exist..!!");

}

break;

case 3:

System.out.print("Enter Account no. : ");

ac\_no = sc.next();

found = false;

for (int i = 0; i < C.length; i++) {

found = C[i].search(ac\_no);

if (found) {

C[i].deposit();

break;

}

}

if (!found) {

System.out.println("Search failed! Account doesn't exist..!!");

}

break;

case 4:

System.out.print("Enter Account No : ");

ac\_no = sc.next();

found = false;

for (int i = 0; i < C.length; i++) {

found = C[i].search(ac\_no);

if (found) {

C[i].withdrawal();

break;

}

}

if (!found) {

System.out.println("Search failed! Account doesn't exist..!!");

}

break;

case 5:

{

System.out.print("Enter Account No : ");

ac\_no = sc.next();

found = false;

for (int i = 0; i < C.length; i++) {

found = C[i].search(ac\_no);

if (found) {

C[i].applyloan();

break;

}

}

if (!found) {

System.out.println("Search failed! Account doesn't exist..!!");

}

break;

}

case 6:

System.out.println("See you soon...");

break;

}

}

while (ch != 6);

}

}

**Output**





