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CLASS: B.E

SECTION:B

SEMESTER:4th

SUBJECT:OOPJ

PROJECT NAME: SIMPLE BANK APPLICATIONS

CODE:

```
package BankApplicationx;
import java.io.BufferedReader;
import java.io.FileNotFoundException;
import java.io.FileReader;
import java.io.IOException;
import java.util.LinkedList;
import java.util.List;
import java.util.Scanner;
import java.lang.*;
import java.io.*;
import npancard.*;
class NewThread extends Thread{
/*Thread t;
NewThread(){
       t=new Thread(this,"demo");
        System.out.println("guj");*/
```

```
//}
       @Override
       public void run() {
              // TODO Auto-generated method stub
              System.out.println("WELCOME TO SBI BANK SERVICES");
              System.out.println("*****************************);
              //IMPLemnt_interface b = new IMPLemnt_interface();
              //b.timetable();
              //System.out.println("********************************);
      }
}
class NewThread1 extends Thread{
       public void run() {
IMPLemnt_interface b = new IMPLemnt_interface();
              b.timetable();
              System.out.println("****************************);
      }
}
```

```
public class ACCOUNTS {
       public static void main(String[] args) {
               NewThread t = new NewThread();
               t.start();
               NewThread1 e=new NewThread1();
               e.start();
               district w=new district(7889);
               w.dist();
               Scanner sc=new Scanner(System.in);
               int password;
               System.out.println("KINDLY ENTER YOUR USER MPIN");
               password=sc.nextInt();
               System.out.println(password);
               if(password==501)
               {
               System.out.println("enter name");
```

String name=sc.next();

```
System.out.println(name);
       System.out.println("customer name string length is "+name.length());
       System.out.println("enter id of the customer");
       int id=sc.nextInt();
       System.out.println(id);
       int sum, sub;
       bankaccounts abj1 = new bankaccounts(name,id);
       //pancard d =new pancard(customername,customerid,pannumber);
       //NewThread t = new NewThread();
w.statee();
       //t.start();
       abj1.showmenu();
       }
       else
       {
               System.out.println("ACTION DENIED");
       }
```

}

```
}
class bankaccounts{
       String customername;
       int customerid;
       int previoustransaction;
       int balance;
       class zeroamountexep extends Exception{
                zeroamountexep(String msg){
                        System.out.println(msg);
                }
       }
bankaccounts()
       {
               System.out.println("hello");
       }
bankaccounts(String customername,int customerid)
{
this();
       this.customername=customername;
       this.customerid=customerid;
}
public synchronized int deposit(int amount) throws zeroamountexep
{
```

```
if(amount!=0)
       {int sum=balance+amount;
              balance=balance+amount;
              previoustransaction=amount;
              System.out.println("deposited INR "+amount+" Available balance is "+sum);
       }
       else
       {
       throw new zeroamountexep("zero amount cannot be deposited");
       }
       return amount;
}
public synchronized void withdraw(int amount) throws zeroamountexep{
       if(amount!=0 && balance>=amount) {
              int sub=balance-amount;
              balance=balance-amount;
              previoustransaction=-amount;
              System.out.println("withdrawn INR "+amount +" Available balance is "+sub);
              }
       else
       {
              throw new zeroamountexep("zero amount And amount greater than balance cannot be
withdrawn");
       }
}
```

```
void gettransaction() {
       if(previoustransaction>0) {
              System.out.println("deposited INR "+previoustransaction);
       }
       else if(previoustransaction<0) {</pre>
              System.out.println("withdrawan INR "+Math.abs(previoustransaction));
       }
       else
       {
              System.out.println("NO TRANSACTION OCCURED");
       }
}
void showmenu()
{
       char option='\0';
       Scanner sc=new Scanner(System.in);
       System.out.println("****************************);
       System.out.println("WELCOME "+customername);
       System.out.println("Your id is "+customerid);
              //pancard d =new pancard(customername,customerid,pannumber);
       System.out.println("choose any valid option from below");
       System.out.println("***************************);
       System.out.println("1. CHECK BALANCE");
```

```
System.out.println("2. DEPOSIT");
System.out.println("3. PREVIOUS TRANSACTION");
System.out.println("4. WITHDRAW");
System.out.println("5. EXIT");
do
{
      System.out.println("enter en option");
      option=sc.next().charAt(0);
      System.out.println("\n");
      switch(option)
      {
      case '1':
             System.out.println("******************************);
             System.out.println("Your current balance is INR = "+balance);
             System.out.println("******************************);
             break;
      case '2':
             System.out.println("*********************************);
             System.out.println("enter amount to be deposited");
             System.out.println("*******************************);
             try {
                    int amount=sc.nextInt();
                    deposit(amount);
```

```
} catch (Exception e) {
             System.out.println(e);
       }
       break;
case '3':
       System.out.println("********************************);
       System.out.println("enter amount to be withdrawn");
      System.out.println("********************************);
      int amount2=sc.nextInt();
       try {
             withdraw(amount2);
       } catch (zeroamountexep e) {
             System.out.println(e);
             //e.printStackTrace();
       }
       break;
case '4':
      System.out.println("********************************);
       gettransaction();
      System.out.println("********************************);
       System.out.println("\n");
       break;
       default:
```

```
System.out.println("invalid option please enter again");
}
        }while(option!='5');
}
}
class state extends bankaccounts{
        int IFSC;
        state(int IFSC){
                System.out.println("IFSC CODE"+ "7889");
        }
        void statee() {
                System.out.println("THE BANK LOCATED IN KARNATAKA");
        }
}
class district extends state{
        district(int IFSC) {
                super(IFSC);
        }
        void dist() {
```

```
System.out.println("THE BANK LOCATED IN MYSORE DISTRICT");
     }
}
package npancard;
public class IMPLemnt_interface implements TIMETABLE_INFACE{
     public static void main(String[] args) {
     }
     public Object timetable;
     @Override
     public void timetable() {
           System.out.println("here the bank working hours and time table");
          System.out.println("HAVE A GOOD DAY"+" START YOUR DAY WITH POSITIVE
THOGHTS");
          System.out.println("10:00 to 5:00"+ "from MONDAY TO SATURDAY");
           System.out.println("SECOND SATURDAY HOLIDAY");
          System.out.println("SUNDAY HOLIDAY");
     }
}
package npancard;
public interface TIMETABLE_INFACE {
 void timetable();}
```

```
output:
WELCOME TO SBI BANK SERVICES
************
here the bank working hours and time table
************
HAVE A GOOD DAY START YOUR DAY WITH POSITIVE THOGHTS
***************
10:00 to 5:00from MONDAY TO SATURDAY
SECOND SATURDAY HOLIDAY
SUNDAY HOLIDAY
***********
hello
IFSC CODE7889
THE BANK LOCATED IN MYSORE DISTRICT
KINDLY ENTER YOUR USER MPIN
501
501
enter name
pallavi
pallavi
customer name string length is 7
enter id of the customer
1234
1234
hello
THE BANK LOCATED IN KARNATAKA
***********
WELCOME pallavi
Your id is 1234
choose any valid option from below
***********
1. CHECK BALANCE
2. DEPOSIT
3. PREVIOUS TRANSACTION
4. WITHDRAW
5. EXIT
enter en option
***************
Your current balance is INR = 0
      enter en option
2
*************
enter amount to be deposited
*************
```

deposited INR 200 Available balance is 200

```
enter en option
***************
Your current balance is INR = 200
*************
enter en option
*************
enter amount to be withdrawn
************
670
zero amount And amount greater than balance cannot be withdrawn
BankApplicationx.bankaccounts$zeroamountexep
enter en option
*************
deposited INR 200
**************
enter en option
************
enter amount to be withdrawn
**************
withdrawn INR 100 Available balance is 100
enter en option
*************
enter amount to be deposited
**************
zero amount cannot be deposited
BankApplicationx.bankaccounts$zeroamountexep
enter en option
```