**SOURCE CODE**

***Class 1***

**package** jdbcdemo;

**import** java.awt.\*;

**import** java.awt.event.\*;

**import** java.io.FileNotFoundException;

**import** java.io.FileOutputStream;

**import** java.awt.FlowLayout;

**import** java.sql.\*;

**import** javax.swing.\*;

**import** net.sf.dynamicreports.jasper.builder.JasperReportBuilder;

**import** net.sf.dynamicreports.report.builder.DynamicReports;

**import** net.sf.dynamicreports.report.builder.column.Columns;

**import** net.sf.dynamicreports.report.builder.component.Components;

**import** net.sf.dynamicreports.report.builder.datatype.DataTypes;

**import** net.sf.dynamicreports.report.constant.HorizontalTextAlignment;

**import** net.sf.dynamicreports.report.exception.DRException;

**public** **class** Driver **extends** JFrame **implements** ActionListener

{

ass z = **new** ass();

// test y = new test();

**static** JLabel *label1*,*label2*,*label3*,*sep*;

**static** JButton *sign*,*create*,*deposit*,*withdraw*,*trans*,*view*,*close*,*clear*,*delete*,*report*;

**static** JTextField *txtA1*;

**static** JTextField *txtA2*;

**static** Connection *con*;

**static** Statement *st1*,*st2*,*st3*;

**static** ResultSet *rs1*;

**int** numd;

**int** numf;

**int** nume;

**public** Driver()

{

**super**("Bank");

setLayout(**new** FlowLayout());

**try** {

*con* = DriverManager.*getConnection* ("jdbc:mysql://localhost:3306/bank", "root", "Iamthehero123");

*st1*=*con*.createStatement();

*rs1*=*st1*.executeQuery("select \* from account\_table");

}

**catch**(Exception e)

{

System.***out***.println("there was some error in establishing connection : "+e);

}

*sep* = **new** JLabel("Existing User Signin : ");

add(*sep*);

*label1* = **new** JLabel(" Account Number : ");

add(*label1*);

*txtA1* = **new** JTextField(15);

add(*txtA1*);

*label2* = **new** JLabel(" Name : ");

add(*label2*);

*txtA2* = **new** JTextField(15);

add(*txtA2*);

*sign*=**new** JButton("SIGN IN");

add(*sign*);

*sep* = **new** JLabel(" ");

add(*sep*);

*sep* = **new** JLabel(" ");

add(*sep*);

*sep* = **new** JLabel("New User Signin : ");

add(*sep*);

*create*=**new** JButton("CREATE ACCOUNT");

add(*create*);

*sep* = **new** JLabel(" ");

add(*sep*);

*sep* = **new** JLabel(" ");

add(*sep*);

*deposit*=**new** JButton("DEPOSIT");

add(*deposit*);

*withdraw*=**new** JButton("WITHDRAW");

add(*withdraw*);

*trans*=**new** JButton("TRANSACTION");

add(*trans*);

*view*=**new** JButton("VIEW ACCOUNT");

add(*view*);

*clear*=**new** JButton("CLEAR");

add(*clear*);

*delete*=**new** JButton("DELETE ACCOUNT");

add(*delete*);

*report*=**new** JButton("GENERATE REPORT");

add(*report*);

*sep* = **new** JLabel(" ");

add(*sep*);

*close*=**new** JButton("CLOSE");

add(*close*);

*create*.addActionListener(**this**);

*deposit*.addActionListener(**this**);

*withdraw*.addActionListener(**this**);

*trans*.addActionListener(**this**);

*view*.addActionListener(**this**);

*clear*.addActionListener(**this**);

*delete*.addActionListener(**this**);

*report*.addActionListener(**this**);

*close*.addActionListener(**this**);

*sign*.addActionListener(**this**);

*deposit*.setEnabled(**false**);

*withdraw*.setEnabled(**false**);

*trans*.setEnabled(**false**);

*view*.setEnabled(**false**);

*delete*.setEnabled(**false**);

*report*.setEnabled(**false**);

}

**public** **static** **boolean** isNumeric(String str)

{

**return** str.matches("-?\\d+(\\.\\d+)?"); //match a number with optional '-' and decimal.

}

**public** **void** actionPerformed(ActionEvent e)

{

**if**(e.getSource()==*create*)

{

String stra = JOptionPane.*showInputDialog*(**null**,"Please enter the NAME to open a CURRENT ACCOUNT");

String strb = JOptionPane.*showInputDialog*(**null**,"Please enter the ACCOUNT NUMBER");

**if**((stra==**null** || strb==**null**) || (*isNumeric*(strb)==**false**))

{

JOptionPane.*showMessageDialog*(**null**," Either any one or both the values were left blank or account no. not valid");

*deposit*.setEnabled(**false**);

*withdraw*.setEnabled(**false**);

*trans*.setEnabled(**false**);

*view*.setEnabled(**false**);

*create*.setEnabled(**true**);

*sign*.setEnabled(**true**);

*delete*.setEnabled(**false**);

*report*.setEnabled(**false**);

}

**else**

{

**try**

{

*st2*=*con*.createStatement();

JOptionPane.*showMessageDialog*(**null**, stra);

z.*banks*(1, Integer.*parseInt*(strb), stra, 0, 0, 0);

*st2*.close();

*txtA1*.setText(strb);

*txtA2*.setText(stra);

}

**catch**(Exception e2)

{

}

*deposit*.setEnabled(**true**);

*withdraw*.setEnabled(**true**);

*trans*.setEnabled(**true**);

*view*.setEnabled(**true**);

*create*.setEnabled(**true**);

*sign*.setEnabled(**true**);

*delete*.setEnabled(**true**);

}

}

**else** **if**(e.getSource()==*sign*)

{

String num=*txtA1*.getText();

**try**

{

*st1*.close();

*st1*=*con*.createStatement();

*rs1*=*st1*.executeQuery("Select \* from account\_table where AccNum Like '"+num+"'");

JOptionPane.*showMessageDialog*(**null**,"Sign in successful");

*rs1*.next();

*txtA1*.setText(*rs1*.getString("AccNum"));

*txtA2*.setText(*rs1*.getString("UserName"));

}

**catch**(Exception e2)

{

**if**(num.equals("0000") && *txtA2*.getText().equals("Akash")){

JOptionPane.*showMessageDialog*(**null**,"Admin Access Granted");

}

**else**{

JOptionPane.*showMessageDialog*(**null**,"Invalid Account Number");

}

}

*deposit*.setEnabled(**true**);

*withdraw*.setEnabled(**true**);

*trans*.setEnabled(**true**);

*view*.setEnabled(**true**);

*create*.setEnabled(**false**);

*delete*.setEnabled(**true**);

**if**(num.equals("0000") && *txtA2*.getText().equals("Akash")){

*report*.setEnabled(**true**);

}

}

**else** **if**(e.getSource()==*deposit*)

{

String strc = JOptionPane.*showInputDialog*(**null**,"Please enter the amount to be DEPOSITED");

numd=Integer.*parseInt*(strc);

**int** numb=Integer.*parseInt*(*txtA1*.getText());

**if** (numd<=0)

{

JOptionPane.*showMessageDialog*(**null**," NO Amount Deposited");

}

**else**

{

**try**

{

**int** num,num1;

*st3*=*con*.createStatement();

*rs1*=*st3*.executeQuery("select \* from account\_table where AccNum like '"+*txtA1*.getText()+"'");

*rs1*.next();

num1=Integer.*parseInt*(*rs1*.getString("Deposit"));

num=Integer.*parseInt*(*rs1*.getString("Balance"));

JOptionPane.*showMessageDialog*(**null**,"Amount Deposited Successfully , Amount is "+numd);

numf=num+numd;

num1=num1+numd;

z.*banks*(2, numb, *txtA2*.getText(), num1, numf, 0);

*st3*.close();

}

**catch**(Exception e2)

{

JOptionPane.*showMessageDialog*(**null**,"Amount can not be DEPOSITED");

}

}

}

**else** **if**(e.getSource()==*withdraw*)

{

String strd = JOptionPane.*showInputDialog*(**null**,"Please enter the amount to be WITHDRAWN");

nume=Integer.*parseInt*(strd);

**int** numc=Integer.*parseInt*(*txtA1*.getText());

**try**

{

**int** num1;

*st3*=*con*.createStatement();

*rs1*=*st3*.executeQuery("select \* from account\_table where Accnum like '"+*txtA1*.getText()+"'");

*rs1*.next();

numf = Integer.*parseInt*(*rs1*.getString("Balance"));

**if**(numf<=nume)

{

JOptionPane.*showMessageDialog*(**null**,"Sorry can not Withdraw, no sufficient Balance");

}

**else**

{

num1=Integer.*parseInt*(*rs1*.getString("Withdraw"));

JOptionPane.*showMessageDialog*(**null**,"Amount Withdrawn is "+nume);

numf=numf-nume;

num1=num1+nume;

z.*banks*(3, numc, *txtA2*.getText(), 0, numf, num1);

}}

**catch**(Exception e2)

{

JOptionPane.*showMessageDialog*(**null**," Can't WITHDRAW ");

}

}

**else** **if**(e.getSource()==*view*)

{

String num=*txtA1*.getText();

**try**

{

*st3*=*con*.createStatement();

*rs1*=*st3*.executeQuery("select \* from account\_table where Accnum like '"+num+"'");

*rs1*.next();

numf=Integer.*parseInt*(*rs1*.getString("AccNum"));

String userName = *rs1*.getString("UserName");

**int** dep = Integer.*parseInt*(*rs1*.getString("Deposit"));

**int** bal = Integer.*parseInt*(*rs1*.getString("Balance"));

**int** with = Integer.*parseInt*(*rs1*.getString("Withdraw"));

JOptionPane.*showMessageDialog*(**null**,"Account is: "+numf +

"\nUsername: "+userName + "\nDeposit: "+dep+"\nBalance: "+bal+

"\nWithdraw: "+with);

}

**catch**(Exception e2)

{

JOptionPane.*showMessageDialog*(**null**," Balance null ");

}

}

**else** **if**(e.getSource()==*trans*)

{

String strq = JOptionPane.*showInputDialog*(**null**,"Enter the ACCOUNT NUMBER to view the TRANSACTION DONE");

**int** numk=Integer.*parseInt*(strq);

**int** numa=Integer.*parseInt*(*txtA1*.getText());

**if**(numk==numa)

{

JOptionPane.*showMessageDialog*(**null**,"Amount Deposited is "+numd);

JOptionPane.*showMessageDialog*(**null**,"Amount Withdrawn is "+nume);

}

**else**

{

JOptionPane.*showMessageDialog*(**null**,"The Account Number is not the same as in the TEXTFIELD");

}

}

**else** **if**(e.getSource()==*delete*)

{

String strq = JOptionPane.*showInputDialog*(**null**,"Enter the ACCOUNT NUMBER to DELETE");

**int** numk=Integer.*parseInt*(strq);

**int** numa=Integer.*parseInt*(*txtA1*.getText());

**if**(numk==numa)

{

z.*banks*(4, numa, "", 0, 0, 0);

}

**else**

{

JOptionPane.*showMessageDialog*(**null**,"The Account Number is not the same as in the TEXTFIELD");

}

}

**else** **if**(e.getSource()==*report*)

{

Connection connection = **null**;

**try** {

Class.*forName*("com.mysql.jdbc.Driver");

connection = DriverManager.*getConnection*(

"jdbc:mysql://localhost:3306/bank", "root", "Iamthehero123");

} **catch** (SQLException k) {

k.printStackTrace();

**return**;

} **catch** (ClassNotFoundException k) {

k.printStackTrace();

**return**;

}

JasperReportBuilder report = DynamicReports.*report*();//a new report

report

.columns(

Columns.*column*("Accoun No.", "AccNum", DataTypes.*integerType*()),

Columns.*column*("Username", "UserName", DataTypes.*stringType*()),

Columns.*column*("Deposit", "Deposit", DataTypes.*integerType*()),

Columns.*column*("Balance", "Balance", DataTypes.*integerType*()),

Columns.*column*("Withdraw", "Withdraw", DataTypes.*integerType*()))

.title(//title of the report

Components.*text*("Bank Management Report")

.setHorizontalTextAlignment(HorizontalTextAlignment.***CENTER***))

.pageFooter(Components.*pageXofY*())//show page number on the page footer

.setDataSource("SELECT AccNum, UserName, Deposit, Balance, Withdraw FROM account\_table",

connection);

**try** {

//show the report

report.show();

//export the report to a pdf file

report.toPdf(**new** FileOutputStream("c:/report.pdf"));

} **catch** (DRException k) {

k.printStackTrace();

} **catch** (FileNotFoundException k) {

k.printStackTrace();

}

}

**else** **if**(e.getSource()==*clear*)

{

*txtA1*.setText("");

*txtA2*.setText("");

*deposit*.setEnabled(**false**);

*withdraw*.setEnabled(**false**);

*trans*.setEnabled(**false**);

*view*.setEnabled(**false**);

*create*.setEnabled(**true**);

*sign*.setEnabled(**true**);

*delete*.setEnabled(**false**);

}

**else** **if**(e.getSource()==*close*)

{

System.*exit*(0);

}

}

**public** **static** **void** main(String args[])

{

Driver obj = **new** Driver();

obj.setDefaultCloseOperation(JFrame.***EXIT\_ON\_CLOSE***);

obj.setSize(250,320);

obj.setVisible(**true**);

}}

*Class 2*

package jdbcdemo;

import java.sql.\*;

import javax.swing.JOptionPane;

public class ass {

public static void main(String[] args) {

}

public static void banks(int k, int i, String z, int num1, int num2, int num3){

try{

//1. Get a connection to database

Connection myConn = DriverManager.getConnection("jdbc:mysql://localhost:3306/bank", "root", "Iamthehero123");

//2. Create a statement

Statement myStmt = myConn.createStatement();

if (k==1){

String rr = "insert into account\_table "

+ " (AccNum, UserName, Deposit, Balance, Withdraw)"

+ " values ("+i+",'" +z.toString()+"', 0, 0, 0)";

myStmt.executeUpdate(rr);

JOptionPane.showMessageDialog(null,"ACCOUNT Created Successfully");

}

if (k==2) {

String ss="update account\_table set Deposit="+num1+" where AccNum="+i+"";

String aa="update account\_table set Balance="+num2+" where AccNum="+i+"";

myStmt.executeUpdate(ss);

myStmt.executeUpdate(aa);

}

if (k==3) {

String pp="update account\_table set Withdraw="+num3+" where AccNum="+i+"";

String pp1="update account\_table set Balance="+num2+" where AccNum="+i+"";

myStmt.executeUpdate(pp);

myStmt.executeUpdate(pp1);

}

if (k==4){

String rr = "delete from account\_table where AccNum="+i+"";

myStmt.executeUpdate(rr);

JOptionPane.showMessageDialog(null,"ACCOUNT Deletion Successfully");

}

// //4. Process the result

ResultSet myRs = myStmt.executeQuery("select \* from account\_table");

while(myRs.next()) {

System.out.println(myRs.getString("AccNum") + ", " + myRs.getString("UserName")+ ", " + myRs.getString("Deposit")+ ", " + myRs.getString("Balance")+ ", " + myRs.getString("Withdraw"));

}

}

catch (Exception exc) {

if (k==1) {

JOptionPane.showMessageDialog(null," There is already a user with same ACCOUNT NUMBER ,Give another ACCOUNT NUMBER ");

}

}

}

}