JAVA AWT BASED- REGISTRATION FORM- SQL CONNECTIVITY USING JDBC

Report

Submitted in partial fulfilment of the Requirements for the award of the Degree of

BACHELOR OF ENGINEERING

In

INFORMATION TECHNOLOGY

By

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BONAFIDE CERTIFICATE

This is to Certify that this project report titled "ONLINE ADAPTIVE ASSESSMENT FEEDBACK FROM" is the bonafied project work of Ms. VYUHA KANDULA bearing Roll.no:1602-18-737-119 who carried out this project under my supervision in the IV semester for the academic year 2019-2020.

Signature Signature external examiner internal examiner

AIM:

To create a **Java GUI online adaptive assessment feedback form** which takes the values like: student ID, student name, email, phone number, course, gender from the user. These values are to be updated in the database using **JDBC connectivity**.

ABSTRACT:

Requirement analysis:

THE BASIC OBJECTIVE OF ONLINE ADAPTIVE SYSTEM IS TO ANALYSE THE CATEGORY OF STUDENTS TO WHICH THE BELONGS TO BASED ON TEST CONDUCTED.

This project **ONLINE ADAPTIVE ASSESSMENT PLATFROM**, As a continous effort to improve and increase education system we implemented an online assessment server.its purpose is to ease the students examination process and to provide a transparent and object assessment.the application is developed using sql and javascript. Using admistration module, one can add or remove questions, question categories, can create test and set parameters in it. And immediately after exam this gives all details like no.of questions correct, wrong, total no.of questions, attended questions.after that examine_cell will examine the test details and give us the unique rank of particular student and total score, then results will be released and student will be assessed to particular category they belongs to .

THE DATA BASE CONTAINS 4 ENTITIES. THEY ARE

- 1. STUDENTS-WHICH CONTAINS STUDENT DETAILS FOR ENROLLMENT TO EXAM
- 2.**TEST**-WHICH CONTAINS EXAM DETAILS
- 3.EXAMINE_CELL-WHICH ASSESS THE MARKS OF STUDENTS
- 4.RESULTS-WHICH GIVES THE RESULT TO STUDENTS

THE DATABASE CONSISTS OF 4 RELATIONSHIP SETS

THEY ARE:

REGISTERS: WHICH RESGISTER THE DETAILS

CHECKS: WHICH CHECKS THE TEST RESULT AND EXAMINES

EXAM_RESULT: AFTER ASSESSMENT THIS GIVES THE RESULTS

RELEASES: FINALLY AFTER ASSESSEMENT RESULTS ARE RELEASED TO STUDENTS

list of attributes with their domain types:

student_s:

sid: number(10)

sname: char(10)

email:varchar2(25)

phnnumber:number(10)

course:var(10)

test:

total_questions:number(10)

atemptted_questions:number(10)

correct_answers:number(10)

wrong_answer:

number(10)

tid:number(10)

examine_cell

sid:number

rank:number

total_score:number

medal_gained:char

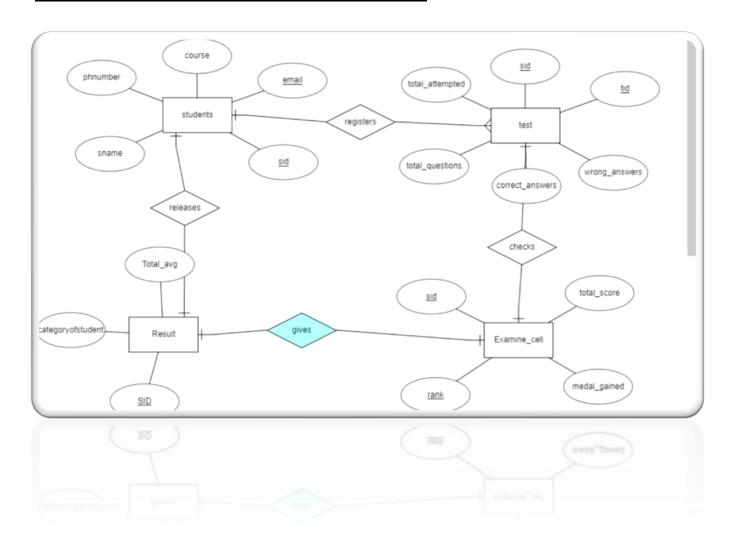
results:

total_avg:number

category of student:varchar

sid:number

ENTITY RELATIONSHIP DIAGRAM:&



MAPPING CARDINATES:

STUDENTS TO TEST: MANY TO ONE

TEST TO EXAMINE CELL: ONE TO ONE

EXAMINE_CELL TO RESULT: ONE TO ONE

RESULT TO STUDENTS: ONE TO ONE

DDL COMMANDS:

STUDENT_S:

SQL>CREATE TABLE STUDENT_S(SID NUMBER(),SNAME VARCHAR(),EMAIL VARCHAR2(),PHNNUM NUMBER(),COURSE VARCHAR(),GENDER VARCHAR

(),PRIMARY KEY SID());

REGISTERS:

SQL>CREATE TABLE REGISTERS (SID NUMBER(10),TID NUMBER(10),FOREIGN KEY(SID)
REFERENCES STUDENT_S,FOREIGN KEY(TID) REFERENCES TEST);

TEST:

SQL>CREATE TABLE TEST(TID NUMBER(10),SID NUMBER(10),TOT_ATTEMPTED NUMBER(),TOT_QUESTIONS NUMBER(), CRT_ANSWR NUMBER(),WRNG_ANSWR NUMBER(),PRIMARY KEY TID(),FOREIGN KEY(SID) REFERENCES STUDENT_S);

CHECKS:

SQL>CREATE TABLE CHECKS(TID NUMBER(),SID NUMBER(),RANK VARCHAR(),

FOREIGN KEY(SID) REFERENCES STUDENT_S, FOREIGN KEY(TID) REFERENCES TEST, FOREIGN KEY(RANK) REFERENCES EXAMINE CELL);

EXAMINE_CELL:

SQL>CREATE TABLE EXAMINE_CELL(SID NUMBER(),RANK VARCHAR(),TOTAL_SCORE NUMBER(10),MEDAL VARCHAR(),PRIMARY KEY(SID),FOREIGN KEY(SID) REFRENCES STUDENT_S);

EXAMINE_RESULT:

SQL>CREATE TABLE EXAMINE_RESULT(RID NUMBER(10),SID NUMBER(10),RANK VARCHAR(10),FOREIGN KEY(RID) REFERENCES RESULTS,FOREIGN KEY(SID) REFERENCES STUDENT S);

RESULTS:

SQL>CREATE TABLE RESULTS(RID NUMBER(10),SID NUMBER(10),TOT_AVG NUMBER(10),CATEGORY VARCHAR2(10) PRIMARY KEY(RID) ,FOREIGN KEY(SID) REFERENCES STUDENT_S);

RELEASES:

SQL>CREATE TABLE RELEASES(RID NUMBER(10),SID NUMBER(10),FOREGIN KEY(RID) REFERENCES RESULT,FOREGIN KEY(SID) REFERENCES STUDENT_S);

DML COMMANDS:

STUDENT_S:

INSERT INTO STUDENT_S TABLE VALUES(&SID,'&SNAME','&EMAIL',&PHNNUM,'&COURSE','&GENDER');

SQL> SELECT * FROM STUDENT_S;

SID SNAME	PHNNUM EMAIL	COURSE
GENDER		

	1 vyuha	9441133198 vyu@gmail.com	cse
f			
	2 greta	9876543212 gk&gmail.com	it
f			
	3 keerthana	9848438982 kg@gmail.com	it
f			
	SID SNAME	PHNNUM EMAIL	COURSE
	NDER		
	4 sujitha	8736273831 ts@gmail.com	it
f	4 Sujitila	0700270001 to@gmail.com	it.
•	5 karthik	7685940323 rk@gmail.com	eee
m		Ü	
	6 maneeth	9867453212 sm@gmail.com	ece
m			
S	ID SNAME	PHNNUM EMAIL	COURSE
GE	NDER		
	107 greta	9881 g@gmail.com	it
f			
	119 vyuha	9848438980 v@gmail.com	it
f			

8 rows selected.

REGISTERS:

INSERT INTO REGISTERS VALUES(&SID,&RID);

SQL> SELECT * FROM REGISTERS;

SID	TID
1	101
2	102
3	103
4	104
5	105
6	106

6 rows selected.

TEST:

INSERT INTO TEST

VALUES(&TID,&SID,&TOT_ATTEMPT,&CRT_ANSWR,&WRNG_ANSWR,&TOT_QUEST);

SQL> SELECT * FROM TEST;

DBMS PROJECT

ONLINE ADAPTIVE ASSESSMENT FEEDBACK FORM

5	9	10	9	0	105
6	10	10	10	0	106
2	10	7	6	1	109

6 rows selected.

CHECKS:

INSERT INTO CHECKS VALUES(&TID,&SID,'&RANK');

SQL> SELECT * FROM CHECKS;

TID	SID	RANK
102	1	3
102	1	3
103	3	6
104	4	5
105	5	2
106	6	1
102	2	4

7 rows selected.

EXAMINE_CELL:

INSERT INTO EXAMINE_CELL VALUES(&SID,&TOT_SCORE,'&MEDAL_GAINED','&RANK');

SQL> SELECT * FROM EXAMINE_CELL;

SID T	RANK		
1	8 gold	3	
2	8 gold	4	
3	7 silver	6	
4	7 silver	5	
5	9 gold	2	
6	10 gold	1	

6 rows selected.

EXAMINE_RESULT:

INSERT INTO EXAMINE_RESULT VALUES(&RID,&SID,'&RANK');
SQL> SELECT * FROM GIVES;

RID	SID	RANK
202	2	4
203	3	6
204	4	5
205	5	2

RESULTS:

 $INSERT\ INTO\ RESULTS\ \ VALUES(\&RID,\&TOT_AVG,\&RID,'\&CATEGORY');$

SQL> SELECT * FROM RESULTS;

SID	TOTAL_/	AVG	RID CATEGORY
1	80	201 a1	
2	80	202 a1	
3	70	203 a2	
4	70	204 a2	
5	90	205 a2	
6	100	206 a1	1

6 rows selected.

RESELEASES:

INSERT INTO RELEASES VALUES(&RID,&SID);

SQL> SELECT * FROM RELEASES;

S	SID	RID
	1	201
	2	202
	3	203
	4	204
	5	205

6 206

SOFTWARE USED:

Java Eclipse, Oracle 11g Database, Java SE version 7, SQL*Plus.

Java AWT:

Java AWT (Abstract Window Toolkit) is an API to develop GUI or window-based applications in java.

Java AWT components are platform-dependent i.e. components are displayed according to the view of operating system. AWT is heavyweight i.e. its components are using the resources of OS.

The java.awt package provides classes for AWT API such as TextField, Label, TextArea, Jbutton, CheckBox, Choice, List etc.

SQL:

Structure Query Language(SQL) is a database query language used for storing and managing data in Relational DBMS. SQL was the first commercial language introduced for E.F Codd's **Relational** model of database. Today almost all RDBMS (MySql, Oracle, Infomix, Sybase, MS Access) use **SQL** as the standard database query language. SQL is used to perform all types of data operations in RDBMS.

Java-SQL Connectivity using JDBC:

Java Database Connectivity (JDBC) is an application programming interface (API) for the programming language Java, which defines how a client may access a database. It is a Java-based data access technology used for Java database connectivity. It is part of the Java Standard Edition platform, from Oracle Corporation. It provides methods to query and update data in a database and is oriented towards relational databases.

The connection to the database can be performed using Java programming (JDBC API) as:

Thus, the connection from Java to Oracle database is performed and therefore, can be used for updating tables in the database directly.

IMPLEMENTATION:

```
package oasf;
import java.awt.EventQueue;
import javax.swing.JFrame;
import javax.swing.SpringLayout;
```

```
import java.awt.Color;
import javax.swing.JMenuBar;
import javax.swing.JMenu;
import java.awt.CardLayout;
import javax.swing.JMenuItem;
import java.awt.event.ActionListener;
import java.awt.event.ActionEvent;
import javax.swing.JLabel;
public class oasform {
private JFrame frame;
public static void main(String[] args) {
        EventQueue.invokeLater(new Runnable() {
                          public void run() {
                                   try {
                                           oasform window = new oasform();
                                           window.getFrame().setVisible(true);
                                   } catch (Exception e) {
                                           e.printStackTrace();
                                   }
                 });
}
        public oasform() {
                 initialize();
        }
        private void initialize() {
                 setFrame(new JFrame());
```

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ONLINE ADAPTIVE ASSESSMENT FEEDBACK FORM

```
getFrame().getContentPane().setBackground(Color.CYAN);
                SpringLayout springLayout = new SpringLayout();
                getFrame().getContentPane().setLayout(springLayout);
                JMenuBar menuBar_1 = new JMenuBar();
                springLayout.putConstraint(SpringLayout.NORTH, menuBar_1, 23, SpringLayout.NORTH,
getFrame().getContentPane());
                springLayout.putConstraint(SpringLayout.WEST, menuBar 1, 0, SpringLayout.WEST,
getFrame().getContentPane());
                getFrame().getContentPane().add(menuBar_1);
                JMenu mnResult = new JMenu("Result");
                getFrame().getContentPane().add(mnResult);
                JMenuItem mntmInsertResult = new JMenuItem("Insert Result");
                mnResult.add(mntmInsertResult);
                JMenuItem mntmModifyResult = new JMenuItem("Modify Result");
                mnResult.add(mntmModifyResult);
                JMenuItem mntmDeleteResult = new JMenuItem("Delete Result");
                mnResult.add(mntmDeleteResult);
                JMenu mnProvideresult 1 = new JMenu("Provide Result");
                springLayout.putConstraint(SpringLayout.WEST, mnProvideresult 1, 15, SpringLayout.EAST,
menuBar_1);
                springLayout.putConstraint(SpringLayout.SOUTH, mnProvideresult_1, 0, SpringLayout.SOUTH,
mnResult);
                getFrame().getContentPane().add(mnProvideresult_1);
                JMenuItem mntmInsertProvideresult_1 = new JMenuItem("Insert Provide_result");
                mnProvideresult_1.add(mntmInsertProvideresult_1);
                JMenuItem mntmModifyProvideresult_1 = new JMenuItem("Modify Provide_result");
                mnProvideresult_1.add(mntmModifyProvideresult_1);
                JMenuItem mntmDeleteProvideresult 1 = new JMenuItem("Delete Provide result");
```

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ONLINE ADAPTIVE ASSESSMENT FEEDBACK FORM

```
mnProvideresult_1.add(mntmDeleteProvideresult_1);
                JLabel lblWelcome = new JLabel("WELCOME");
                frame.getContentPane().add(lblWelcome);
                JLabel lblTo = new JLabel("TO");
                springLayout.putConstraint(SpringLayout.WEST, lblTo, 250, SpringLayout.WEST,
frame.getContentPane());
                springLayout.putConstraint(SpringLayout.NORTH, lblWelcome, 0, SpringLayout.NORTH, lblTo);
                springLayout.putConstraint(SpringLayout.EAST, lblWelcome, -22, SpringLayout.WEST, lblTo);
                frame.getContentPane().add(lblTo);
                JLabel lblOnlineAdaptiveAssessment = new JLabel("ONLINE ADAPTIVE ASSESSMENT FEEDBACK
FORM");
                springLayout.putConstraint(SpringLayout.SOUTH, lblTo, -6, SpringLayout.NORTH,
lblOnlineAdaptiveAssessment);
                springLayout.putConstraint(SpringLayout.NORTH, lblOnlineAdaptiveAssessment, 101,
SpringLayout.NORTH, frame.getContentPane());
                springLayout.putConstraint(SpringLayout.EAST, lblOnlineAdaptiveAssessment, -25, SpringLayout.EAST,
frame.getContentPane());
                frame.getContentPane().add(lblOnlineAdaptiveAssessment);
                getFrame().setBounds(100, 100, 450, 300);
                getFrame().setDefaultCloseOperation(JFrame.EXIT ON CLOSE);
                JMenuBar menuBar = new JMenuBar();
                getFrame().setJMenuBar(menuBar);
                JMenu mnStudents = new JMenu("Students");
                menuBar.add(mnStudents);
                JMenuItem mntmInsertStudent = new JMenuItem("Insert Student");
                mntmInsertStudent.addActionListener(new ActionListener() {
                        public void actionPerformed(ActionEvent arg0) {
                                try {
```

```
SUI1 window = new SUI1();
                        window.getFrame().setVisible(true);
                } catch (Exception e) {
                        e.printStackTrace();
                }
        }
});
mnStudents.add(mntmInsertStudent);
JMenuItem mntmModifyStudent = new JMenuItem("Modify Student");
mnStudents.add(mntmModifyStudent);
JMenuItem mntmDeleteStudent = new JMenuItem("Delete Student");
mnStudents.add(mntmDeleteStudent);
JMenu mnRegister = new JMenu("Register");
menuBar.add(mnRegister);
JMenuItem mntmDeleteRegister = new JMenuItem("Delete Register");
mnRegister.add(mntmDeleteRegister);
JMenuItem mntmModifyRegister = new JMenuItem("Modify Register");
mnRegister.add(mntmModifyRegister);
JMenuItem mntmInsertRegister = new JMenuItem("Insert Register");
mnRegister.add(mntmInsertRegister);
JMenu mnTests = new JMenu("Tests");
menuBar.add(mnTests);
JMenuItem mntmDeleteTest = new JMenuItem("Delete Test");
mnTests.add(mntmDeleteTest);
JMenuItem mntmModifyTest = new JMenuItem("Modify Test");
mnTests.add(mntmModifyTest);
JMenuItem mntmInsertTest = new JMenuItem("Insert Test");
mnTests.add(mntmInsertTest);
```

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ONLINE ADAPTIVE ASSESSMENT FEEDBACK FORM

```
JMenu mnChecks = new JMenu("Checks");
       menuBar.add(mnChecks);
       JMenuItem mntmDeleteChecks = new JMenuItem("Delete Checks");
       mnChecks.add(mntmDeleteChecks);
       JMenuItem mntmModifyChecks = new JMenuItem("Modify Checks");
       mnChecks.add(mntmModifyChecks);
       JMenuItem mntmInsertChecks = new JMenuItem("Insert Checks");
       mnChecks.add(mntmInsertChecks);
       JMenu mnExaminecell = new JMenu("Examine_cell");
       menuBar.add(mnExaminecell);
       JMenuItem mntmModifyExaminecell = new JMenuItem("Modify Examine_Cell");
        mnExaminecell.add(mntmModifyExaminecell);
       JMenuItem mntmInsertExaminecell = new JMenuItem("Insert Examine_cell");
       mnExaminecell.add(mntmInsertExaminecell);
       JMenuItem mntmDeleteExaminecell = new JMenuItem("Delete Examine_cell");
       mnExaminecell.add(mntmDeleteExaminecell);
       JMenu mnProvideresult = new JMenu("provide result");
        menuBar.add(mnProvideresult);
       JMenuItem mntmInsertProvideresult = new JMenuItem("Insert Provide_result");
       mnProvideresult.add(mntmInsertProvideresult);
       JMenuItem mntmDeleteProvideresult = new JMenuItem("Delete Provide_result");
       mnProvideresult.add(mntmDeleteProvideresult);
       JMenuItem mntmModifyProvideresult = new JMenuItem("Modify Provide_result");
        mnProvideresult.add(mntmModifyProvideresult);
public JFrame getFrame() {
       return frame;
```

ROLL NO:1602-18-737-119 Name: Vyuha Kandula

}

```
}
        public void setFrame(JFrame frame) {
                 this.frame = frame;
        }
}
STUDENT_S TABLE GUI:
package oasf;
import java.awt.EventQueue;
import java.awt.*;
import java.awt.event.*;
import java.sql.*;
import javax.swing.JFrame;
import java.awt.CardLayout;
import javax.swing.SpringLayout;
import java.awt.Color;
import javax.swing.JFormattedTextField;
import javax.swing.JLabel;
import javax.swing.JTextField;
import javax.swing.JToggleButton;
public class SUI1 {
        private JFrame frame;
        private JTextField t1;
        private JTextField t2;
        private JTextField t3;
        private JTextField t4;
        private JTextField t5;
        private JTextField t6;
```

```
Connection connection;
Statement statement;
public static void main(String[] args) {
        EventQueue.invokeLater(new Runnable() {
                 public void run() {
                          try {
                                   SUI1 window = new SUI1();
                                   window.getFrame().setVisible(true);
                          } catch (Exception e) {
                                   e.printStackTrace();
                          }
         });
}
public SUI1() {
        initialize();
        try
         {
                 Class.forName("oracle.jdbc.driver.OracleDriver");
        catch (Exception e)
         {
                 System.err.println("Unable to find and load driver");
                 System.exit(1);
         }
        connectToDB();
}
```

```
public void connectToDB()
                try
                  connection = DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:xe","vyuha","vasavi");
                  statement = connection.createStatement();
                 }
                catch (SQLException connectException)
                  System.out.println(connectException.getMessage());
                  System.out.println(connectException.getSQLState());
                  System.out.println(connectException.getErrorCode());
                  System.exit(1);
                 }
        private void initialize() {
                setFrame(new JFrame());
                getFrame().getContentPane().setBackground(Color.PINK);
                SpringLayout springLayout = new SpringLayout();
                getFrame().getContentPane().setLayout(springLayout);
                JFormattedTextField ta = new JFormattedTextField();
                springLayout.putConstraint(SpringLayout.NORTH, ta, -44, SpringLayout.SOUTH,
getFrame().getContentPane());
                springLayout.putConstraint(SpringLayout.WEST, ta, -153, SpringLayout.EAST,
getFrame().getContentPane());
```

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ONLINE ADAPTIVE ASSESSMENT FEEDBACK FORM

```
springLayout.putConstraint(SpringLayout.SOUTH, ta, 0, SpringLayout.SOUTH,
getFrame().getContentPane());
                springLayout.putConstraint(SpringLayout.EAST, ta, -34, SpringLayout.EAST,
getFrame().getContentPane());
                getFrame().getContentPane().add(ta);
                JLabel lblStuden = new JLabel("Student id:");
                getFrame().getContentPane().add(lblStuden);
                JLabel lblStudentName = new JLabel("Student Name:");
                springLayout.putConstraint(SpringLayout.EAST, lblStuden, 0, SpringLayout.EAST, lblStudentName);
                getFrame().getContentPane().add(lblStudentName);
                JLabel lblContact = new JLabel("Contact:");
                springLayout.putConstraint(SpringLayout.SOUTH, lblStudentName, -6, SpringLayout.NORTH,
lblContact);
                getFrame().getContentPane().add(lblContact);
                JLabel lblEmain = new JLabel("Email:");
                springLayout.putConstraint(SpringLayout.SOUTH, lblContact, -6, SpringLayout.NORTH, lblEmain);
                getFrame().getContentPane().add(lblEmain);
                JLabel lblCourse = new JLabel("Course:");
                getFrame().getContentPane().add(lblCourse);
                JLabel lblGender = new JLabel("Gender:");
                springLayout.putConstraint(SpringLayout.WEST, lblEmain, 0, SpringLayout.WEST, lblGender);
                springLayout.putConstraint(SpringLayout.NORTH, lblGender, 163, SpringLayout.NORTH,
getFrame().getContentPane());
```

ONLINE ADAPTIVE ASSESSMENT FEEDBACK FORM

```
springLayout.putConstraint(SpringLayout.SOUTH, lblCourse, -6, SpringLayout.NORTH, lblGender);
                getFrame().getContentPane().add(lblGender);
                t1 = new JTextField();
                springLayout.putConstraint(SpringLayout.NORTH, t1, 10, SpringLayout.NORTH,
getFrame().getContentPane());
                springLayout.putConstraint(SpringLayout.NORTH, lblStuden, 3, SpringLayout.NORTH, t1);
                springLayout.putConstraint(SpringLayout.EAST, t1, -34, SpringLayout.EAST,
getFrame().getContentPane());
                getFrame().getContentPane().add(t1);
                t1.setColumns(10);
                t2 = new JTextField();
                springLayout.putConstraint(SpringLayout.EAST, lblStudentName, -8, SpringLayout.WEST, t2);
                springLayout.putConstraint(SpringLayout.NORTH, t2, 6, SpringLayout.SOUTH, t1);
                springLayout.putConstraint(SpringLayout.EAST, t2, -34, SpringLayout.EAST,
getFrame().getContentPane());
                getFrame().getContentPane().add(t2);
                t2.setColumns(10);
                t3 = new JTextField();
                springLayout.putConstraint(SpringLayout.EAST, lblContact, -8, SpringLayout.WEST, t3);
                springLayout.putConstraint(SpringLayout.WEST, t3, 0, SpringLayout.WEST, t1);
                getFrame().getContentPane().add(t3);
                t3.setColumns(10);
                t4 = new JTextField();
                springLayout.putConstraint(SpringLayout.WEST, t4, 18, SpringLayout.EAST, lblEmain);
                springLayout.putConstraint(SpringLayout.NORTH, lblEmain, 3, SpringLayout.NORTH, t4);
```

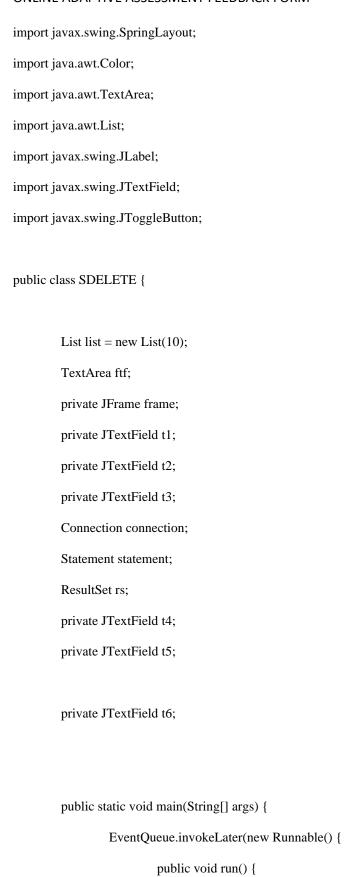
ONLINE ADAPTIVE ASSESSMENT FEEDBACK FORM

```
springLayout.putConstraint(SpringLayout.SOUTH, t3, -2, SpringLayout.NORTH, t4);
                getFrame().getContentPane().add(t4);
                t4.setColumns(10);
                t5 = new JTextField();
                springLayout.putConstraint(SpringLayout.EAST, lblCourse, -12, SpringLayout.WEST, t5);
                springLayout.putConstraint(SpringLayout.NORTH, t5, 134, SpringLayout.NORTH,
getFrame().getContentPane());
                springLayout.putConstraint(SpringLayout.EAST, t5, -34, SpringLayout.EAST,
getFrame().getContentPane());
                springLayout.putConstraint(SpringLayout.SOUTH, t4, -6, SpringLayout.NORTH, t5);
                getFrame().getContentPane().add(t5);
                t5.setColumns(10);
                t6 = new JTextField();
                springLayout.putConstraint(SpringLayout.EAST, lblGender, -8, SpringLayout.WEST, t6);
                springLayout.NORTH, t6, 0, SpringLayout.NORTH, lblGender);
                springLayout.putConstraint(SpringLayout.EAST, t6, 0, SpringLayout.EAST, ta);
                getFrame().getContentPane().add(t6);
                t6.setColumns(10);
                JToggleButton tglbtnInsert = new JToggleButton("Insert");
                tglbtnInsert.addActionListener(new ActionListener() {
                        public void actionPerformed(ActionEvent arg0) {
                                 try
                                  Statement statement = connection.createStatement();
                                         //insert into students values(1,5,3);
```

```
String query= "INSERT INTO STUDENT_S VALUES(" + t1.getText() + ",""
+t2.getText()+ "'," +t3.getText() + ","" + t4.getText() + "',"" + t5.getText() + "',""+t6.getText()+"")";
                                   int i = statement.executeUpdate(query);
                                   ta.setText("\nInserted" + i + " rows successfully");
                                  catch (SQLException e)
                                   ta.setText(e.getMessage());
                                   ta.setText("SQLState: " + e.getSQLState() + "\n");
                                   ta.setText("VendorError: " + e.getErrorCode() + "\n");
                                   }
                 });
                 springLayout.putConstraint(SpringLayout.NORTH, tglbtnInsert, 0, SpringLayout.NORTH, lblGender);
                 springLayout.putConstraint(SpringLayout.WEST, tglbtnInsert, 10, SpringLayout.WEST,
getFrame().getContentPane());
                 getFrame().getContentPane().add(tglbtnInsert);
                 JToggleButton tglbtnBack = new JToggleButton("Back");
                 tglbtnBack.addActionListener(new ActionListener() {
                          public void actionPerformed(ActionEvent arg0) {
                                  try {
                                           oasform window = new oasform();
                                           window.getFrame().setVisible(true);
                                   } catch (Exception e) {
                                           e.printStackTrace();
                                  }
                          }
                 });
```

ONLINE ADAPTIVE ASSESSMENT FEEDBACK FORM

```
springLayout.putConstraint(SpringLayout.SOUTH, tglbtnBack, -10, SpringLayout.SOUTH,
getFrame().getContentPane());
                springLayout.putConstraint(SpringLayout.EAST, tglbtnBack, 0, SpringLayout.EAST, lblEmain);
                getFrame().getContentPane().add(tglbtnBack);
                getFrame().setBounds(100, 100, 450, 300);
                getFrame().setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        }
        public JFrame getFrame() {
                return frame;
        }
        public void setFrame(JFrame frame) {
                this.frame = frame;
        }
}
DELETE:
package oasf;
import java.awt.EventQueue;
import java.awt.*;
import java.awt.event.*;
import java.sql.*;
import java.time.LocalDateTime;
import java.time.format.DateTimeFormatter;
import javax.swing.JFrame;
import java.awt.CardLayout;
```



```
try {
                                  SDELETE window = new SDELETE();
                                  window.getFrame().setVisible(true);
                          } catch (Exception e) {
                                  e.printStackTrace();
                          }
        });
}
public SDELETE() {
        try
        {
                 Class.forName("oracle.jdbc.driver.OracleDriver");
        }
        catch (Exception e)
        {
                 System.err.println("Unable to find and load driver");
                 System.exit(1);
        }
        connectToDB();
        initialize();
}
private void connectToDB() {
        // TODO Auto-generated method stub
        try
         connection = DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:xe","vyuha","vasavi");
```

```
statement = connection.createStatement();
              }
              catch (SQLException connectException)
              {
               System.out.println(connectException.getMessage());
               System.out.println(connectException.getSQLState());
               System.out.println(connectException.getErrorCode());
               System.exit(1);
              }
}
      private void loadList()
      {
              try
               rs = statement.executeQuery("SELECT SID FROM STUDENT_S");
               while (rs.next())
               {
                       list.add(rs.getString("SID"));
               }
              catch (SQLException e)
               ftf.append(e.getMessage());
              }
      }
```

```
/**
         * Initialize the contents of the frame.
         */
        private void initialize() {
                setFrame(new JFrame());
                 getFrame().getContentPane().setBackground(Color.PINK);
                 getFrame().setBounds(100, 100, 450, 300);
                 getFrame (). setDefaultCloseOperation (JFrame.EXIT\_ON\_CLOSE);
                SpringLayout springLayout = new SpringLayout();
                springLayout.putConstraint(SpringLayout.WEST, list, 0, SpringLayout.WEST, frame.getContentPane());
                 getFrame().getContentPane().setLayout(springLayout);
                TextArea ftf = new TextArea();
                springLayout.putConstraint(SpringLayout.NORTH, ftf, -61, SpringLayout.SOUTH,
frame.getContentPane());
                 springLayout.putConstraint(SpringLayout.WEST, ftf, 220, SpringLayout.WEST, frame.getContentPane());
                 springLayout.putConstraint(SpringLayout.SOUTH, ftf, 0, SpringLayout.SOUTH, frame.getContentPane());
                 springLayout.putConstraint(SpringLayout.EAST, ftf, -10, SpringLayout.EAST, frame.getContentPane());
                 getFrame().getContentPane().add(ftf);
                loadList();
                 list.addItemListener(new ItemListener() {
                         public void itemStateChanged(ItemEvent arg0) {
                                  try
                                  {
                                          rs = statement.executeQuery("SELECT * FROM STUDENT_S where SID
="+list.getSelectedItem());
                                          rs.next();
                                          t1.setText(rs.getString("SID"));
```

```
t2.setText(rs.getString("SNAME"));
                                          t3.setText(rs.getString("PHNNUM"));
                                          t4.setText(rs.getString("EMAIL"));
                                          t5.setText(rs.getString("COURSE"));
                                          t6.setText(rs.getString("GENDER"));
                                  }
                                  catch (SQLException selectException)
                                          ftf.append(selectException.getMessage());
                         }
                 });
                getFrame().getContentPane().add(list);
                JLabel lblFid = new JLabel("sid");
                 springLayout.putConstraint(SpringLayout.WEST, lblFid, 37, SpringLayout.EAST, list);
                 getFrame().getContentPane().add(lblFid);
                JLabel lblSuggestions = new JLabel("sname");
                 springLayout.putConstraint(SpringLayout.NORTH, lblSuggestions, 6, SpringLayout.SOUTH, lblFid);
                 springLayout.putConstraint(SpringLayout.WEST, lblSuggestions, 14, SpringLayout.EAST, list);
                 getFrame().getContentPane().add(lblSuggestions);
                JLabel lblComplaints = new JLabel("pnum");
                 springLayout.putConstraint(SpringLayout.NORTH, lblComplaints, 6, SpringLayout.SOUTH,
lblSuggestions);
```

ONLINE ADAPTIVE ASSESSMENT FEEDBACK FORM

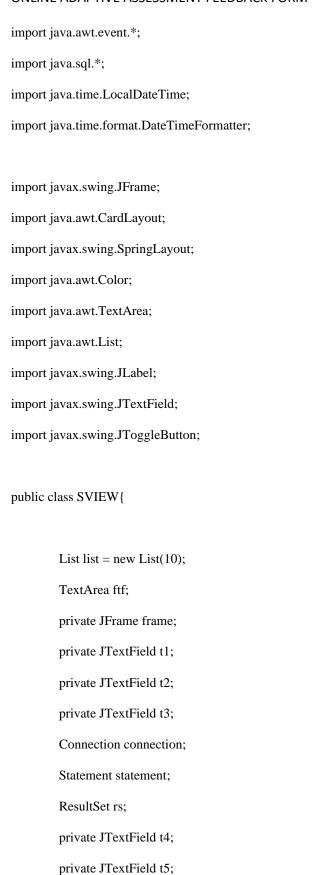
```
springLayout.putConstraint(SpringLayout.EAST, lblComplaints, 0, SpringLayout.EAST, lblFid);
                 getFrame().getContentPane().add(lblComplaints);
                t1 = new JTextField();
                springLayout.putConstraint(SpringLayout.WEST, t1, 9, SpringLayout.EAST, lblFid);
                springLayout.putConstraint(SpringLayout.NORTH, lblFid, 3, SpringLayout.NORTH, t1);
                springLayout.putConstraint(SpringLayout.NORTH, t1, 10, SpringLayout.NORTH,
frame.getContentPane());
                getFrame().getContentPane().add(t1);
                t1.setColumns(10);
                t2 = new JTextField();
                springLayout.putConstraint(SpringLayout.NORTH, t2, -3, SpringLayout.NORTH, lblSuggestions);
                 springLayout.putConstraint(SpringLayout.WEST, t2, 6, SpringLayout.EAST, lblSuggestions);
                getFrame().getContentPane().add(t2);
                t2.setColumns(10);
                t3 = new JTextField();
                springLayout.putConstraint(SpringLayout.NORTH, t3, -3, SpringLayout.NORTH, lblComplaints);
                springLayout.putConstraint(SpringLayout.WEST, t3, 0, SpringLayout.WEST, t1);
                t3.addActionListener(new ActionListener() {
                         public void actionPerformed(ActionEvent e) {
                                 DateTimeFormatter dtf = DateTimeFormatter.ofPattern("yyyy/MM/dd HH:mm:ss");
                                   LocalDateTime now = LocalDateTime.now();
                                   t3.setText(dtf.format(now));
                         }
                 });
                 getFrame().getContentPane().add(t3);
```

```
t3.setColumns(10);
                 JToggleButton tglbtnUpdate = new JToggleButton("DELETE");
                 springLayout.putConstraint(SpringLayout.SOUTH, tglbtnUpdate, -10, SpringLayout.SOUTH,
frame.getContentPane());
                 springLayout.putConstraint(SpringLayout.SOUTH, list, -6, SpringLayout.NORTH, tglbtnUpdate);
                 springLayout.putConstraint(SpringLayout.WEST, tglbtnUpdate, 0, SpringLayout.WEST,
getFrame().getContentPane());
                 tglbtnUpdate.addActionListener(new ActionListener() {
                         public void actionPerformed(ActionEvent e) {
                                  try
                                          Statement statement = connection.createStatement();
                                          int i = statement.executeUpdate("DELETE FROM STUDENT_S WHERE SID
= "
                                                           + list.getSelectedItem());
                                          ftf.append("\nDeleted" + i + " rows successfully");\\
                                          t1.setText(null);
                                          t2.setText(null);
                                          t3.setText(null);
                                          t4.setText(null);
                                          t5.setText(null);
                                          t6.setText(null);
                                          list.removeAll();
                                          loadList();
                                  }
                                  catch (SQLException insertException)
                                  {
```

```
ftf.append(insertException.getMessage());
                 });
                getFrame().getContentPane().add(tglbtnUpdate);
                JToggleButton tglbtnBack = new JToggleButton("BACK");
                springLayout.putConstraint(SpringLayout.EAST, tglbtnBack, -30, SpringLayout.WEST, ftf);
                 tglbtnBack.addActionListener(new ActionListener() {
                         public void actionPerformed(ActionEvent e) {
                                  try {
                                          oasform window = new oasform();
                                          (window).getFrame().setVisible(true);
                                  } catch (Exception es) {
                                          es.printStackTrace();
                                  }
                         }
                 });
                springLayout.putConstraint(SpringLayout.SOUTH, tglbtnBack, -10, SpringLayout.SOUTH,
getFrame().getContentPane());
                 getFrame().getContentPane().add(tglbtnBack);
                JLabel label = new JLabel("");
                springLayout.putConstraint(SpringLayout.NORTH, label, 6, SpringLayout.SOUTH, lblComplaints);
                springLayout.putConstraint(SpringLayout.WEST, label, 14, SpringLayout.EAST, list);
                 frame.getContentPane().add(label);
```

```
JLabel label_1 = new JLabel("");
springLayout.putConstraint(SpringLayout.NORTH, label_1, 16, SpringLayout.SOUTH, t3);
springLayout.putConstraint(SpringLayout.WEST, label_1, 17, SpringLayout.EAST, list);
frame.getContentPane().add(label_1);
JLabel lblNewLabel = new JLabel("");
frame.getContentPane().add(lblNewLabel);
JLabel lblEmail = new JLabel("email");
springLayout.putConstraint(SpringLayout.NORTH, lblEmail, 6, SpringLayout.SOUTH, lblComplaints);
springLayout.putConstraint(SpringLayout.EAST, lblEmail, 0, SpringLayout.EAST, lblFid);
frame.getContentPane().add(lblEmail);
JLabel lblCourse = new JLabel("course");
springLayout.putConstraint(SpringLayout.EAST, lblCourse, 0, SpringLayout.EAST, lblSuggestions);
frame.getContentPane().add(lblCourse);
JLabel lblGender = new JLabel("gender");
springLayout.putConstraint(SpringLayout.WEST, lblGender, 14, SpringLayout.EAST, list);
springLayout.putConstraint(SpringLayout.SOUTH, lblCourse, -6, SpringLayout.NORTH, lblGender);
frame.getContentPane().add(lblGender);
t4 = new JTextField();
springLayout.putConstraint(SpringLayout.NORTH, t4, 2, SpringLayout.SOUTH, t3);
springLayout.putConstraint(SpringLayout.EAST, t4, 0, SpringLayout.EAST, t1);
frame.getContentPane().add(t4);
t4.setColumns(10);
```

```
t5 = new JTextField();
                springLayout.putConstraint(SpringLayout.NORTH, t5, 122, SpringLayout.NORTH,
frame.getContentPane());
                springLayout.putConstraint(SpringLayout.EAST, t5, 0, SpringLayout.EAST, t1);
                frame.getContentPane().add(t5);
                t5.setColumns(10);
                t6 = new JTextField();
                springLayout.putConstraint(SpringLayout.NORTH, lblGender, 3, SpringLayout.NORTH, t6);
                springLayout.putConstraint(SpringLayout.NORTH, t6, 6, SpringLayout.SOUTH, t5);
                springLayout.putConstraint(SpringLayout.EAST, t6, 0, SpringLayout.EAST, t1);
                frame.getContentPane().add(t6);
                t6.setColumns(10);
        }
        public JFrame getFrame() {
                return frame;
        }
        public void setFrame(JFrame frame) {
                this.frame = frame;
        }
}
MODIFY:
package oasf;
import java.awt.EventQueue;
import java.awt.*;
```



```
private JTextField t6;
public static void main(String[] args) {
         EventQueue.invokeLater(new Runnable() {
                 public void run() {
                          try {
                                   SVIEW window = new SVIEW();
                                   window.getFrame().setVisible(true);
                          } catch (Exception e) {
                                   e.printStackTrace();
                          }
                  }
         });
}
public SVIEW() {
         try
         {
                 Class.forName("oracle.jdbc.driver.OracleDriver");
         }
         catch (Exception e)
         {
                 System.err.println("Unable to find and load driver");
                 System.exit(1);
         }
         connectToDB();
         initialize();
```

```
}
      private void connectToDB() {
              // TODO Auto-generated method stub
              try
               connection = DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:xe","vyuha","vasavi");
               statement = connection.createStatement();
               }
              catch (SQLException connectException)
               System.out.println(connectException.getMessage());
               System.out.println(connectException.getSQLState());
               System.out.println(connectException.getErrorCode());\\
               System.exit(1);
}
      private void loadList()
              try
               rs = statement.executeQuery("SELECT SID FROM STUDENT_S");
               while (rs.next())
                {
                       list.add(rs.getString("SID"));
               }
               }
```

DBMS PROJECT

ONLINE ADAPTIVE ASSESSMENT FEEDBACK FORM

```
catch (SQLException e)
                 ftf.append(e.getMessage());
                 }
        }
        /**
        * Initialize the contents of the frame.
        private void initialize() {
                setFrame(new JFrame());
                getFrame().getContentPane().setBackground(Color.PINK);
                getFrame().setBounds(100, 100, 450, 300);
                getFrame().setDefaultCloseOperation(JFrame.EXIT ON CLOSE);
                SpringLayout springLayout = new SpringLayout();
                springLayout.putConstraint(SpringLayout.WEST, list, 0, SpringLayout.WEST, frame.getContentPane());
                getFrame().getContentPane().setLayout(springLayout);
                TextArea ftf = new TextArea();
                springLayout.putConstraint(SpringLayout.NORTH, ftf, -61, SpringLayout.SOUTH,
frame.getContentPane());
                springLayout.putConstraint(SpringLayout.WEST, ftf, 220, SpringLayout.WEST, frame.getContentPane());
                springLayout.putConstraint(SpringLayout.SOUTH, ftf, 0, SpringLayout.SOUTH, frame.getContentPane());
                springLayout.putConstraint(SpringLayout.EAST, ftf, -10, SpringLayout.EAST, frame.getContentPane());
                getFrame().getContentPane().add(ftf);
                loadList();
```

```
list.addItemListener(new ItemListener() {
                         public void itemStateChanged(ItemEvent arg0) {
                                  try
                                          rs = statement.executeQuery("SELECT*FROM\ STUDENT\_S\ where\ SID
="+list.getSelectedItem());
                                          rs.next();
                                          t1.setText(rs.getString("SID"));
                                          t2.setText(rs.getString("SNAME"));
                                          t3.setText(rs.getString("PHNNUM"));
                                          t4.setText(rs.getString("EMAIL"));
                                          t5.setText(rs.getString("COURSE"));
                                          t6.setText(rs.getString("GENDER"));
                                  }
                                  catch (SQLException selectException)
                                  {
                                          ftf.append(selectException.getMessage());
                                  }
                         }
                 });
                 getFrame().getContentPane().add(list);
                 JLabel lblFid = new JLabel("sid");
                 springLayout.putConstraint(SpringLayout.WEST, lblFid, 37, SpringLayout.EAST, list);
                 getFrame().getContentPane().add(lblFid);
```

ONLINE ADAPTIVE ASSESSMENT FEEDBACK FORM

```
JLabel lblSuggestions = new JLabel("sname");
                springLayout.putConstraint(SpringLayout.NORTH, lblSuggestions, 6, SpringLayout.SOUTH, lblFid);
                springLayout.putConstraint(SpringLayout.WEST, lblSuggestions, 14, SpringLayout.EAST, list);
                getFrame().getContentPane().add(lblSuggestions);
                JLabel lblComplaints = new JLabel("pnum");
                springLayout.putConstraint(SpringLayout.NORTH, lblComplaints, 6, SpringLayout.SOUTH,
lblSuggestions);
                springLayout.putConstraint(SpringLayout.EAST, lblComplaints, 0, SpringLayout.EAST, lblFid);
                getFrame().getContentPane().add(lblComplaints);
                t1 = new JTextField();
                springLayout.putConstraint(SpringLayout.WEST, t1, 9, SpringLayout.EAST, lblFid);
                springLayout.putConstraint(SpringLayout.NORTH, lblFid, 3, SpringLayout.NORTH, t1);
                springLayout.putConstraint(SpringLayout.NORTH, t1, 10, SpringLayout.NORTH,
frame.getContentPane());
                getFrame().getContentPane().add(t1);
                t1.setColumns(10);
                t2 = new JTextField();
                springLayout.putConstraint(SpringLayout.NORTH, t2, -3, SpringLayout.NORTH, lblSuggestions);
                springLayout.putConstraint(SpringLayout.WEST, t2, 6, SpringLayout.EAST, lblSuggestions);
                getFrame().getContentPane().add(t2);
                t2.setColumns(10);
                t3 = new JTextField();
                springLayout.putConstraint(SpringLayout.NORTH, t3, -3, SpringLayout.NORTH, lblComplaints);
                springLayout.putConstraint(SpringLayout.WEST, t3, 0, SpringLayout.WEST, t1);
                t3.addActionListener(new ActionListener() {
```

```
public void actionPerformed(ActionEvent e) {
                                 DateTimeFormatter dtf = DateTimeFormatter.ofPattern("yyyy/MM/dd HH:mm:ss");
                                  LocalDateTime now = LocalDateTime.now();
                                  t3.setText(dtf.format(now));
                });
                getFrame().getContentPane().add(t3);
                t3.setColumns(10);
                JToggleButton tglbtnUpdate = new JToggleButton("MODIFY");
                springLayout.putConstraint(SpringLayout.SOUTH, tglbtnUpdate, -10, SpringLayout.SOUTH,
frame.getContentPane());
                springLayout.putConstraint(SpringLayout.SOUTH, list, -6, SpringLayout.NORTH, tglbtnUpdate);
                springLayout.putConstraint(SpringLayout.WEST, tglbtnUpdate, 0, SpringLayout.WEST,
getFrame().getContentPane());
                tglbtnUpdate.addActionListener(new ActionListener() {
                        public void actionPerformed(ActionEvent e) {
                                 try
                                 {
                                         Statement statement = connection.createStatement();
                                         int i = statement.executeUpdate("UPDATE STUDENT_S"
                                         + "SET SNAME="" + t2.getText() + "", "
                                         + "SET PHNNUM = " + t3.getText()+","
                                         + " SET EMAIL=""+ t4.getText()+"","
                                         +"SET COURSE =""+ t5.getText()+"","
                                         +"SET GENDER =""+ t6.getText() + "" WHERE SID = "
```

```
+ list.getSelectedItem());
                          ftf.append("\nUpdated" + i + " \ rows \ successfully");\\
                          list.removeAll();
                          loadList();
                 }
                 catch (SQLException insertException)
                 {
                          ftf.append(insertException.getMessage());
                 }
});
getFrame().getContentPane().add(tglbtnUpdate);
JToggleButton tglbtnBack = new JToggleButton("BACK");
springLayout.putConstraint(SpringLayout.EAST, tglbtnBack, -30, SpringLayout.WEST, ftf);
tglbtnBack.addActionListener(new ActionListener() {
        public void actionPerformed(ActionEvent e) {
                 try {
                          oasform window = new oasform();
                          (window).getFrame().setVisible(true);
                 } catch (Exception es) {
                          es.printStackTrace();
                 }
```

```
}
                 });
                springLayout.putConstraint(SpringLayout.SOUTH, tglbtnBack, -10, SpringLayout.SOUTH,
getFrame().getContentPane());
                getFrame().getContentPane().add(tglbtnBack);
                JLabel label = new JLabel("");
                springLayout.putConstraint(SpringLayout.NORTH, label, 6, SpringLayout.SOUTH, lblComplaints);
                springLayout.putConstraint(SpringLayout.WEST, label, 14, SpringLayout.EAST, list);
                frame.getContentPane().add(label);
                JLabel label_1 = new JLabel("");
                 springLayout.putConstraint(SpringLayout.NORTH, label_1, 16, SpringLayout.SOUTH, t3);
                 springLayout.putConstraint(SpringLayout.WEST, label_1, 17, SpringLayout.EAST, list);
                 frame.getContentPane().add(label_1);
                JLabel lblNewLabel = new JLabel("");
                frame.getContentPane().add(lblNewLabel);
                JLabel lblEmail = new JLabel("email");
                springLayout.putConstraint(SpringLayout.NORTH, lblEmail, 6, SpringLayout.SOUTH, lblComplaints);
                springLayout.putConstraint(SpringLayout.EAST, lblEmail, 0, SpringLayout.EAST, lblFid);
                frame.getContentPane().add(lblEmail);
                JLabel lblCourse = new JLabel("course");
                springLayout.putConstraint(SpringLayout.EAST, lblCourse, 0, SpringLayout.EAST, lblSuggestions);
                 frame.getContentPane().add(lblCourse);
                JLabel lblGender = new JLabel("gender");
```

ONLINE ADAPTIVE ASSESSMENT FEEDBACK FORM

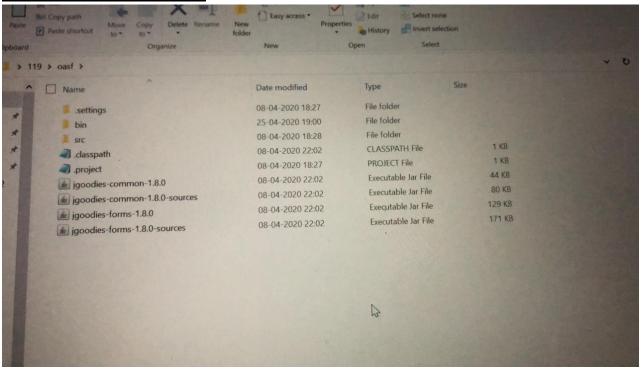
```
springLayout.putConstraint(SpringLayout.WEST, lblGender, 14, SpringLayout.EAST, list);
        springLayout.putConstraint(SpringLayout.SOUTH, lblCourse, -6, SpringLayout.NORTH, lblGender);
        frame.getContentPane().add(lblGender);
        t4 = new JTextField();
        springLayout.putConstraint(SpringLayout.NORTH, t4, 2, SpringLayout.SOUTH, t3);
        springLayout.putConstraint(SpringLayout.EAST, t4, 0, SpringLayout.EAST, t1);
        frame.getContentPane().add(t4);
        t4.setColumns(10);
        t5 = new JTextField();
        springLayout.putConstraint(SpringLayout.NORTH, t5, 122, SpringLayout.NORTH,
frame.getContentPane());
        springLayout.putConstraint(SpringLayout.EAST, t5, 0, SpringLayout.EAST, t1);
        frame.getContentPane().add(t5);
        t5.setColumns(10);
        t6 = new JTextField();
        springLayout.putConstraint(SpringLayout.NORTH, lblGender, 3, SpringLayout.NORTH, t6);
        springLayout.putConstraint(SpringLayout.NORTH, t6, 6, SpringLayout.SOUTH, t5);
        springLayout.putConstraint(SpringLayout.EAST, t6, 0, SpringLayout.EAST, t1);
        frame.getContentPane().add(t6);
        t6.setColumns(10);
}
public JFrame getFrame() {
        return frame;
public void setFrame(JFrame frame) {
        this.frame = frame;
}
```

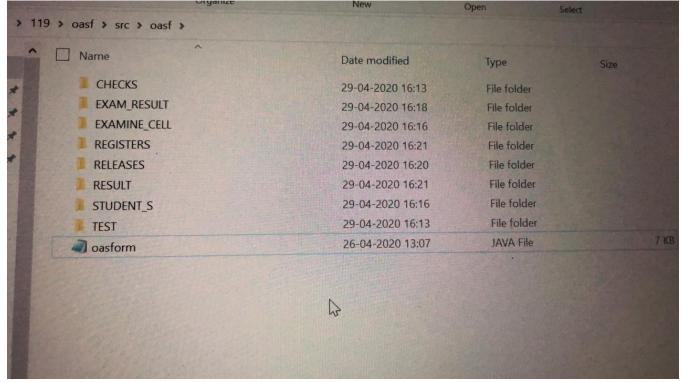
}

GITHUB LINK:

https://github.com/vyuhakandula/dbms

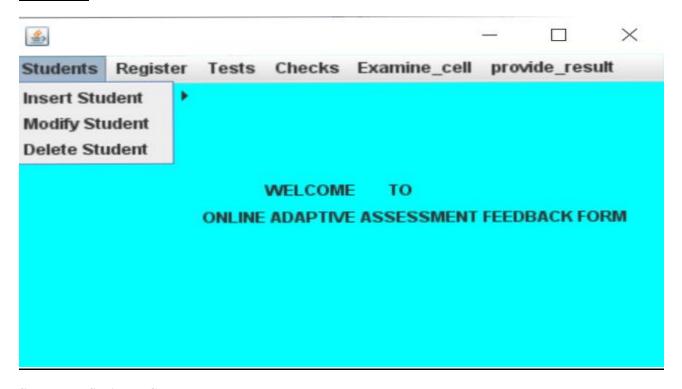
FOLDER STRUCTURE:





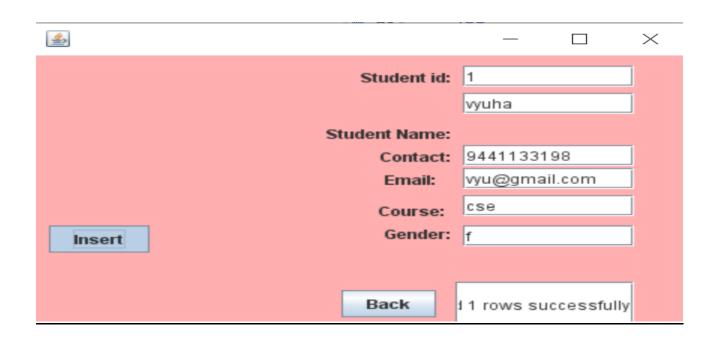
OUTPUT SCREENSHOTS OF GUI:

MAIN GUI:



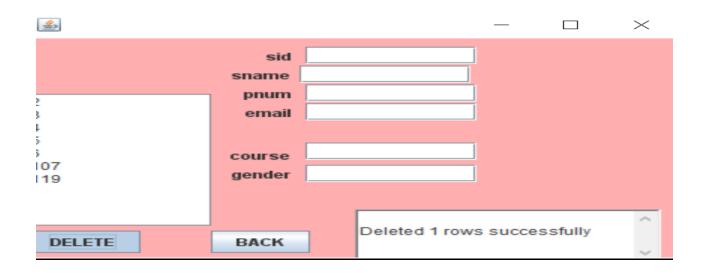
STUDENT_S TABLE GUI:

INSERT:



DELETE GUI:

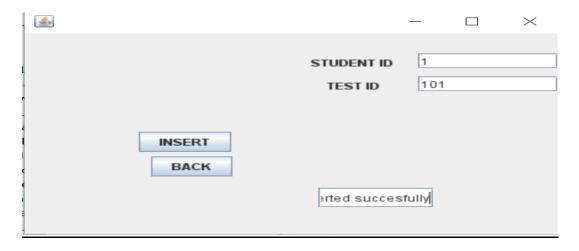


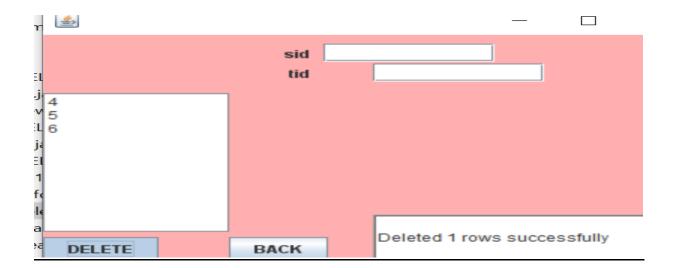


MODIFY GUI:

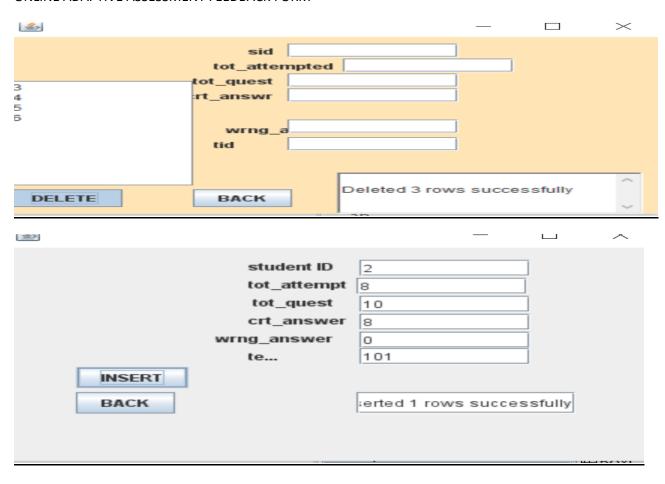
4				_		\times
	sid	1				
sname		sneha				
1	pnum	9441133198				
2	email	email vyu@gmail.com				
3						
5	course	cse				
107	gender	f				
119						
			updated succ	essfully		^
MODIFY	ВАСК					~
III DAGA			<			>

Registers GUI:

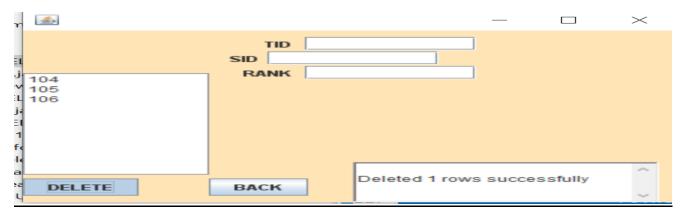


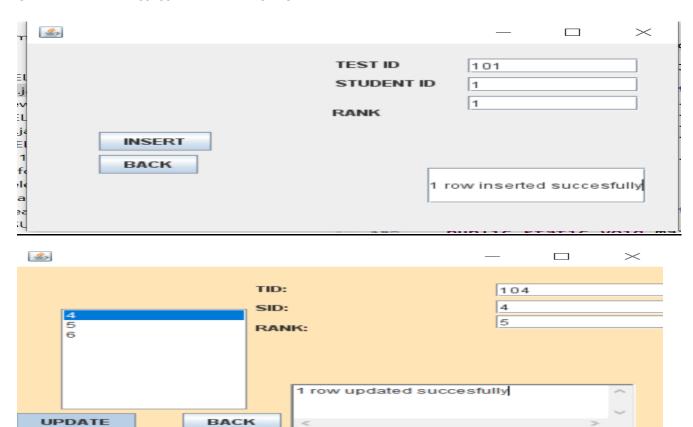


TestGUI:

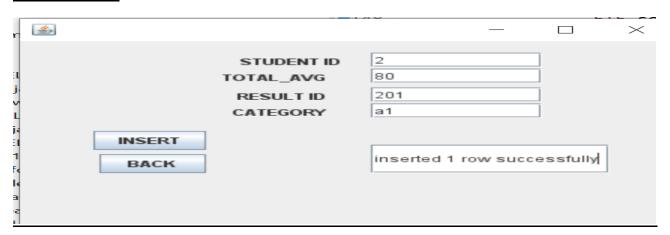


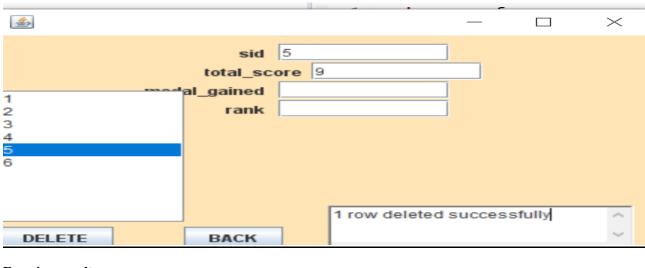
Checks GUI:



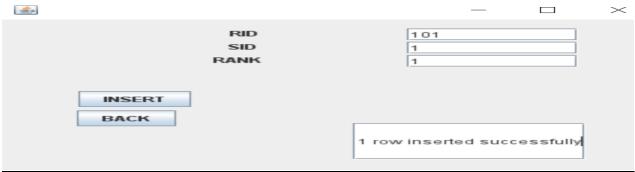


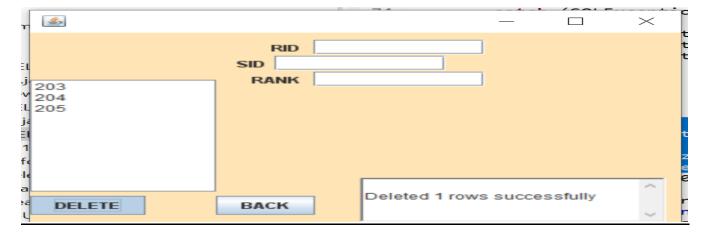
ExamineCell GUI:



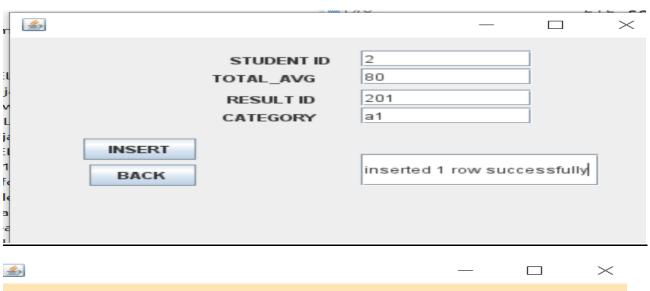


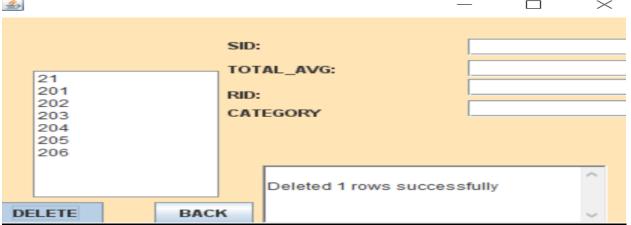
Examine_result:



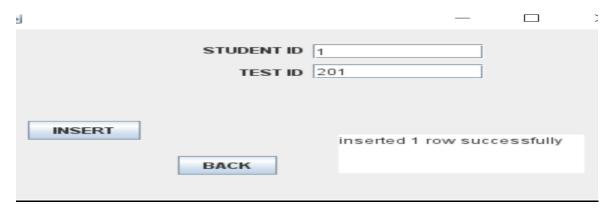


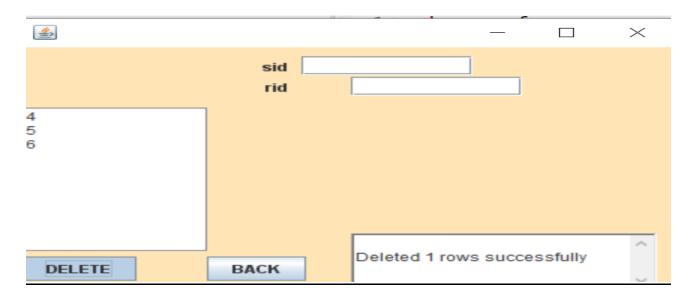
ResultGUI:



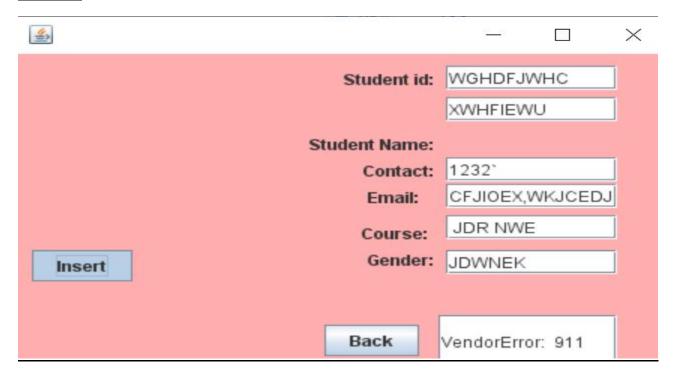


Releases GUI:





TESTING:



CONCLUSION:

Thus, a Java AWT based registration form is created which is connected to the Oracle 11g database. Therefore, all the entries in the form are directly updated on the register table created in the database.

References:

- https://docs.oracle.com/javase/7/docs/api/
- DATA SYTSEMS CONCEPT BY :HENRY F KORTH.
- https://javatpoint.com/dbms-tutorial