UNIVERSITY OF TURKISH AERONAUTICAL ASSOCIATION

ENGINEERING FACULTY

COMPUTER ENGINEERING DEPARTMENT

CENG 301 – DATABASE SYSTEMS PROJECT

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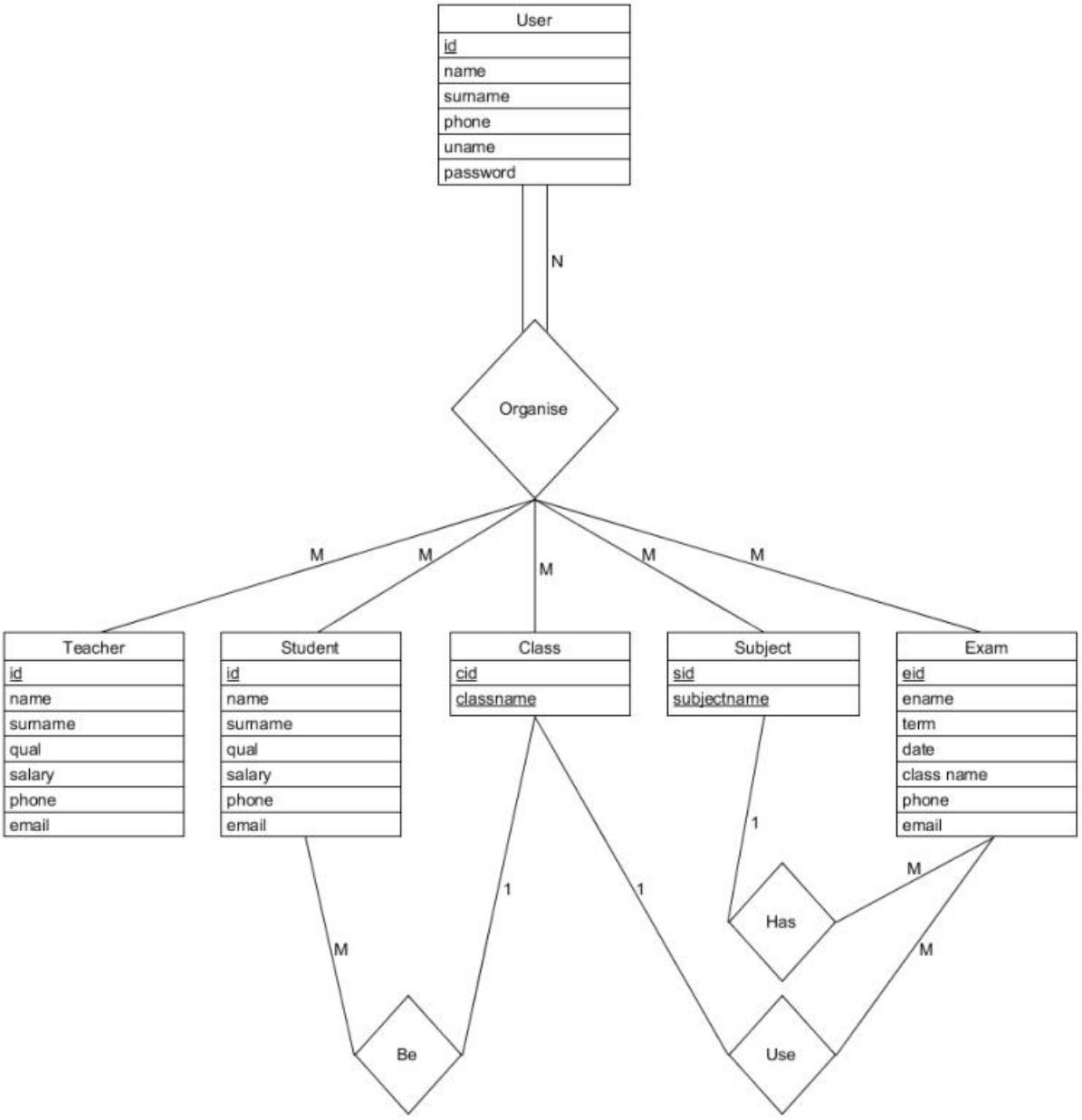
Table of Contents

PROBLEM DEFINITION (SCNEARIO)

The school principal wanted an application to be made in order to realize the school management. He/She specified the features that this application should have as follows:

- It should be a/some manager/s or user/s that can organize all of the school management.
- There should be a **class management interface** and this interface should contain the class's number, class name and floor information.
  - This interface should have the ability to save and delete the class.
- There should be a **subject management interface** and this interface should contain the subject's number, subject name information.
  - This interface should have the ability to create and delete the subject.
- There should be a **student management interface** and this interface should contain the student's school number, name, surname, date of birth, gender, address and class information.
  - This interface should have the ability to save, edit and delete the student.
  - Student should take class names from the class database.
- There should be a **exam management interface** and this interface should contain the exam's number, name, term, date, class and subject information.
  - This interface should have the ability to create and delete the exam.
  - Exam should take class names from the class database.
  - Exam should take subject names from the subject database.
- There should be **a teacher management** interface and this interface should contain the teacher's number, name, surname, qualification, salary, phone and e mail information.
  - This interface should have the ability to create, update and delete the teacher.
- There should be a **user creation interface** and this interface should contain the user's number, name, surname, phone, user name, password and user type information.
  - This interface should have the ability to create, update and delete the user.
- If user type is admin, admin/s should have the ability to organise all of the school management system.
- If user type is manager, manager/s should not have the ability to organise user creation user interface.

ER DIAGRAMS (UMLet)



MAPPING OF ER DIAGRAMS

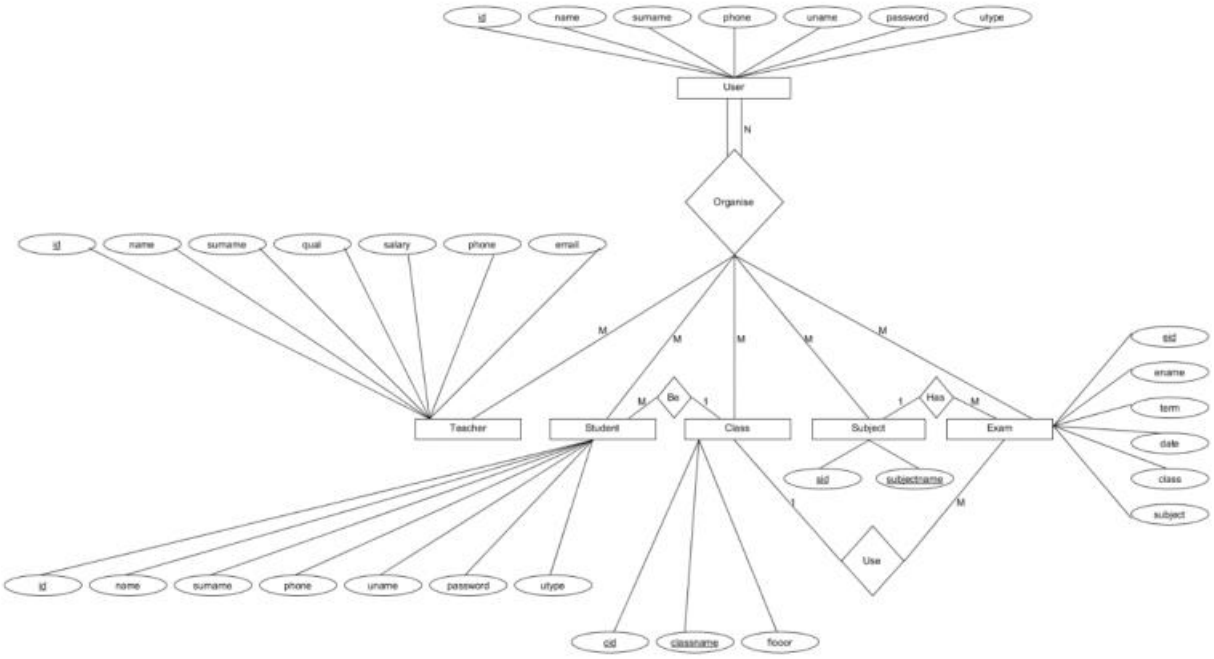


TABLE DESCRIPTIONS (SCHEMAS)

User

id	name	surname	phone	uname	password	utype

Teacher

id	name	surname	qual	salary	phone	email

Student

id	stname	pname	dob	gender	class

Class

cid	classname	floor

Subject

sid	subjectname

Exam

eid	ename	term	date	class	subject

USER INTERFACES,

DESCRIPTION OF

FUNCTIONALITIES OF THESE

INTERFACES

AND

SQL QUERY CODES THAT WAS

USED FOR THESE

FUNCTIONALITIES

1) Login Interface

1.1) Description of Functionalities

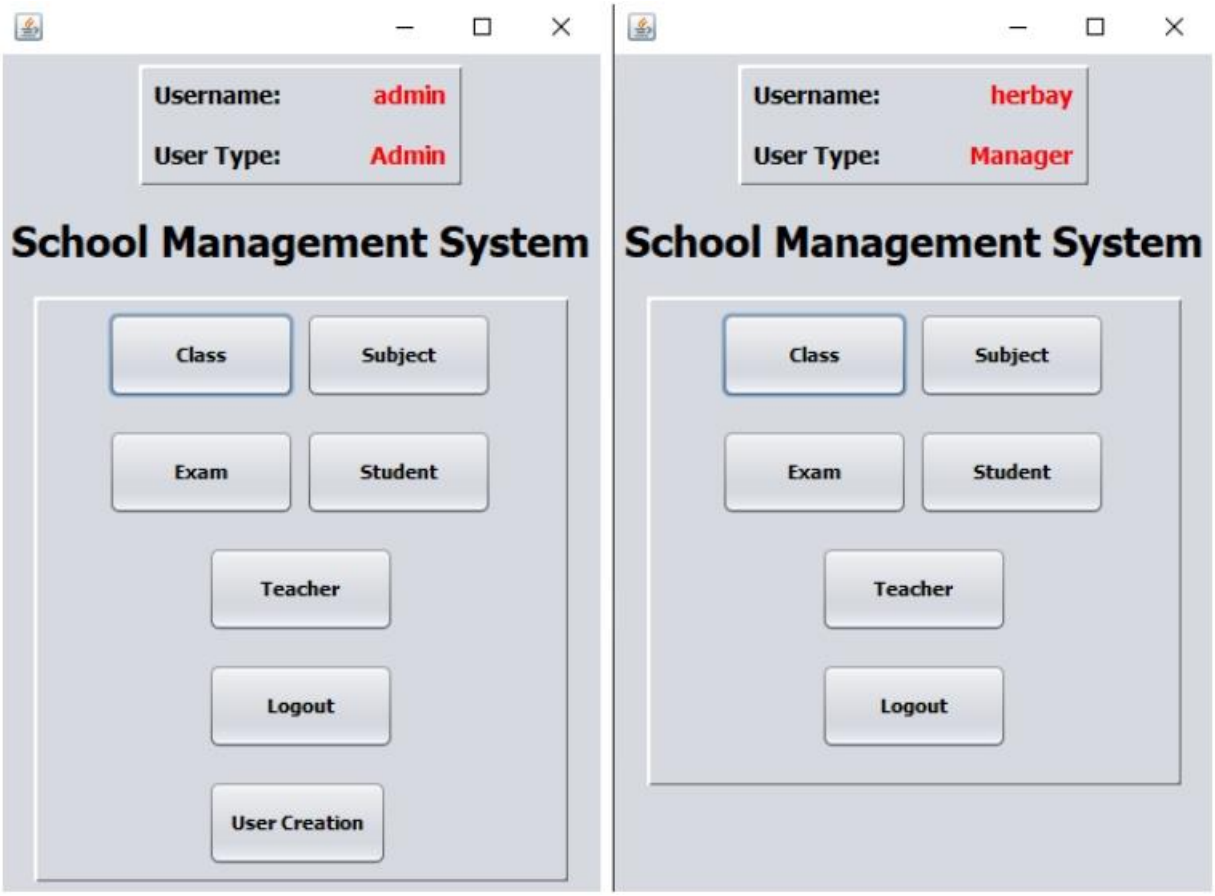
In login page, we have 3 fields that we should fill it. These are Username, Password and User Type. I used combo box for creating User Type field. We can choose Admin or Manager from that. When we press the login, if fields are filled incorrectly, a notification box pops up on the screen that contains this message: "Username or Password is Incorrect". If we filled correctly, we skip the main page. We are getting this login page informations from the “User database” in phpmyadmin. User should be in database for logining correctly.

1.2) SQL Query Codes

- **Checking the user informations in database whether exists or not exists. With these lines we are getting the contents of user table to checking user name, password and user.**

```
pst = con.prepareStatement("select * from user where uname = ? and password = ? and utype = ?");

pst.setString(1, username);

pst.setString(2, password);

pst.setString(3, utype);

rs = pst.executeQuery();
```

2) Main Page Interface



2.1) Description of Functionalities

In the top of main page, we have the user name and type to see who is login and what is the type of entered person. The buttons for the managing all of these categories. If we login as a admin we can see the “User Creation” button, but if we login as a manager we can not see the user creation button. This feature has been added to separate the features of admin and manager.

2.2) SQL Query Codes

- There is no SQL Query Codes for this page.

3) User Creation Interface

3.1) Description of Functionalities

In the user creation page, we have 5 buttons and 1 table. We use the buttons to create, update and delete the user. We use the table for showing the users, selecting from the table, updating informations and deleting the selected user. When we clicked the tuple that we want to organise, all of the informations are going the fields automatically for updating relaxly. Except for the password field because of the privacy and security. Create button is disable because we do not want to create an instance with same information. After we click the “Clear” button. All of the fields will be blank and we can create new user or users. When we create a new user, all fields will be blank to create a new user comfortably. Same thing for “Delete” operation. There are notifications after all the operations. Such as “User is created”, “User is Updated”, “User is deleted”. When we click the close button, we exit from this page to main page.

3.2) SQL Query Codes

- **For Creating User**

```
pst = con.prepareStatement("insert into user(name, surname, phone, uname, password,
utype)values(?, ?, ?, ?, ?, ?)");
pst.setString(1, name);
pst.setString(2, surname);
```

pst.setString(3, phone);

pst.setString(4, uname);

pst.setString(5, password);

pst.setString(6, utype);

pst.executeUpdate();

- **For Deleting User**

pst = con.prepareStatement("delete from user where id = ?");

pst.setString(1, id);

pst.executeUpdate();

- **For Updating User**

pst = con.prepareStatement("update user set name = ?, surname = ?, phone = ?, uname = ?, utype = ? where id = ?");

pst.setString(1, name);

pst.setString(2, surname);

pst.setString(3, phone);

pst.setString(4, uname);

pst.setString(5, utype);

pst.setString(6, id);

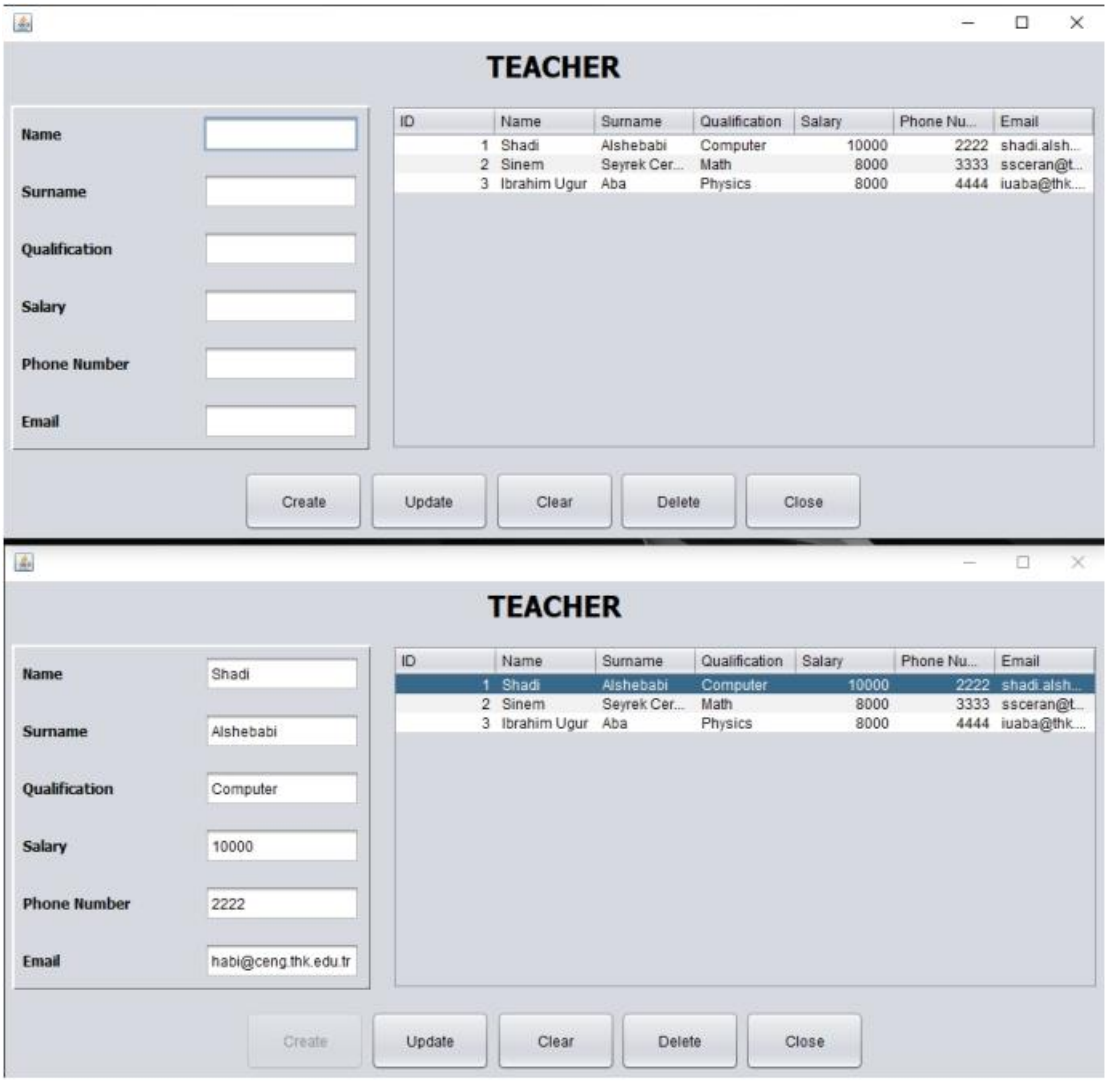
pst.executeUpdate();

- **For Taking The Objects from Our Database For Filling The Interface's Table Field.**

pst = con.prepareStatement("SELECT * FROM user");

rs = pst.executeQuery();

4) Teacher Interface



4.1) Description of Functionalities

In the teacher page, we have 5 buttons and 1 table. We use the buttons to create, update and delete the teacher. We use the table for showing the teachers, selecting from the table, updating informations and deleting the selected teacher. When we clicked the tuple that we want to organise, all of the informations are going the fields automatically for updating relaxly. Create button is disable because we do not want to create an instance with same information. After we click the “Clear” button. All of the fields will be blank and we can create new teacher or teachers. When we create a new teacher, all fields will be blank to create a new teacher comfortably. Same thing for “Delete” operation. There are notifications after all the operations. Such as “Teacher is created”, “Teacher is Updated”, “Teacher is deleted”. When we click the close button, we exit from this page to main page.

4.2) SQL Query Codes

- **For Creating Teacher**

```
pst = con.prepareStatement("insert into teacher(name, surname, qual, salary, phone, email)values(?, ?, ?, ?, ?, ?)");
pst.setString(1, tename);
pst.setString(2, tesname);
pst.setString(3, qual);
pst.setString(4, salary);
pst.setString(5, phone);
pst.setString(6, email);
pst.executeUpdate();
```

- **For Deleting Teacher**

```
pst = con.prepareStatement("delete from teacher where id = ?");
pst.setString(1, id);
pst.executeUpdate();
```

- **For Updating Teacher**

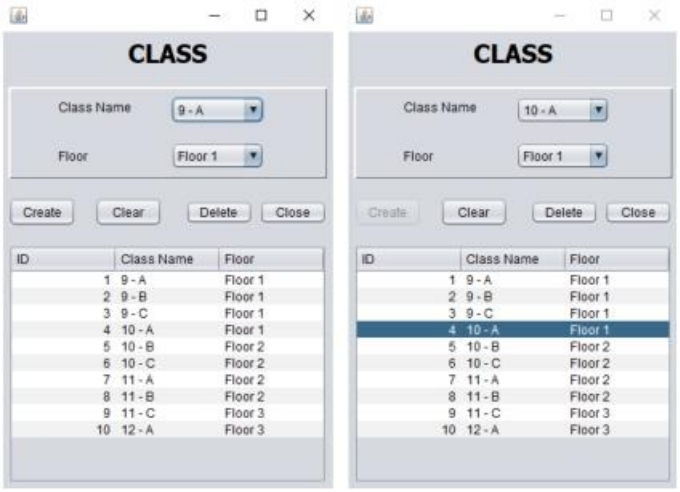
In addition, we used stored procedure for updating instance (update) in teacher SQL.

```
pst = con.prepareStatement("update user set name = ?, surname = ?, phone = ?, uname = ?, utype = ? where id = ?");
pst = con.prepareStatement("CALL updateTeacher(?,?,?,?,?,?,?);");
pst.setString(1, tename);
pst.setString(2, tesname);
pst.setString(3, qual);
pst.setString(4, salary);
pst.setString(5, phone);
pst.setString(6, email);
pst.setString(7, id);
```

- **For Taking The Objects from Our Database For Filling The Interface's Table Field.**

```
pst = con.prepareStatement("SELECT * FROM teacher");
rs = pst.executeQuery();
```

5) Class Interface



5.1) Description of Functionalities

In the class page, we have 4 buttons and 1 table. We use the buttons to create and delete the class. We use the table for showing the classes, selecting from the table and deleting the selected class. When we clicked the tuple, create button is disable because we do not want to create an instance with same informations. After we click the “Clear” button. All of the fields will be blank and we can create new class or classes. When we create a new class, all fields will be blank to create a new class comfortably. Same thing for “Delete” operation. There are notifications after all the operations. Such as “Class is created, “Class is deleted”. When we click the close button, we exit from this page to main page.

5.2) SQL Query Codes

- **For Creating Class**

```
pst = con.prepareStatement("insert into class(classname, floor)values(?, ?)");
pst.setString(1, clname);
pst.setString(2, floor);
pst.executeUpdate();
```

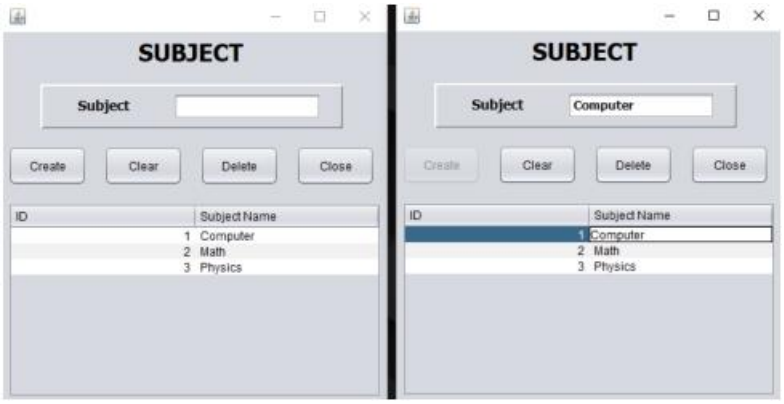
- **For Deleting Class**

```
pst = con.prepareStatement("delete from class where cid = ?");
pst.setString(1, id);
pst.executeUpdate();
```

- **For Taking The Objects from Our Database For Filling The Interface's Table Field.**

```
pst = con.prepareStatement("SELECT * FROM class");
rs = pst.executeQuery();
```

6) Subject Interface



6.1) Description of Functionalities

In the subject page, we have 4 buttons and 1 table. We use the buttons to create and delete the subject. We use the table for showing the subjects, selecting from the table and deleting the selected subject. When we clicked the tuple, create button is disable because we do not want to create an instance with same informations. After we click the "Clear" button. All of the fields will be blank and we can create new subject or subjects. When we create a new subject, all fields will be blank to create a new subject comfortably. Same thing for "Delete" operation. There are notifications after all the operations. Such as "Subject is created, "Subject is deleted". When we click the close button, we exit from this page to main page.

6.2) SQL Query Codes

- **For Creating Subject**

In addition, we used stored procedure for creating instance (inserting) in subject SQL.

```
pst = con.prepareStatement("CALL insertSubject(?);");
pst.setString(1, subject);
pst.executeUpdate();
```

- **For Deleting Subject**

In addition, we used stored procedure for deleting instance (delete) in subject SQL.

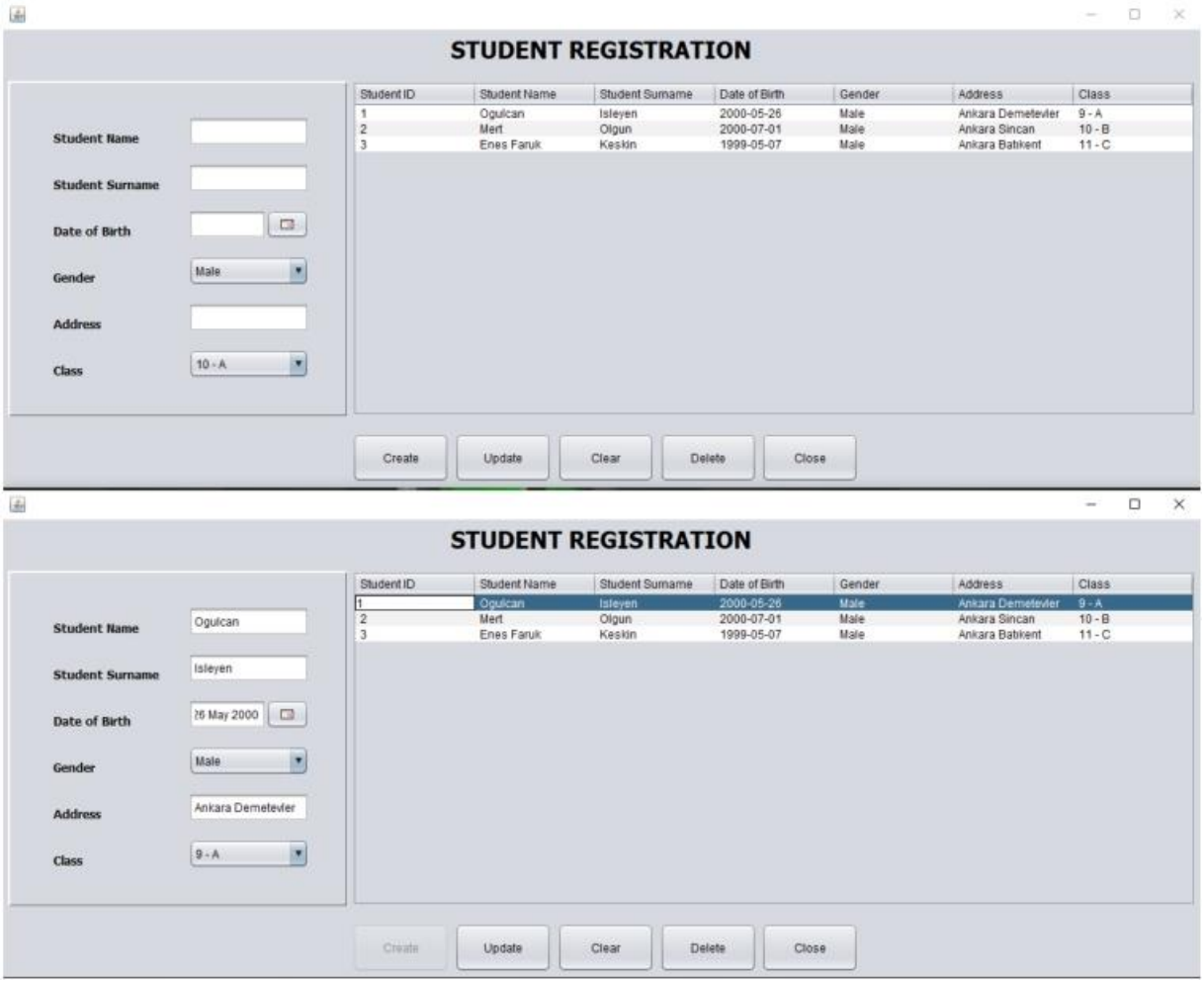
```
pst = con.prepareStatement("CALL deleteSubject(?);");
pst.setString(1, id);
pst.executeUpdate();
```

- **For Taking The Objects from Our Database For Filling The Interface's Table Field.**

In addition, we used stored procedure for getting instance (select) in subject SQL.

```
pst = con.prepareStatement("CALL `getSubject`();");
rs = pst.executeQuery();
```

7) Student Interface



7.1) Description of Functionalities

In the student registration page, we have 5 buttons and 1 table. We use the buttons to create, update and delete the teacher. We use the table for showing the students, selecting from the table, updating informations and deleting the selected student. When we clicked the tuple that we want to organise, all of the informations are going the fields automatically for updating relaxly. Create button is disable because we do not want to create an instance with same information. After we click the “Clear” button. All of the fields will be blank and we can create new student or students. When we create a new student, all fields will be blank to create a new student comfortably. Same thing for “Delete” operation. There are notifications after all the operations. Such as “Student is created”, “Student is Updated”, “Student is deleted”. When we click the close button, we exit from this page to main page. Additionally, we added the JCalender feature for this interface.

7.2) SQL Query Codes

- **Taking the class name values from primary key to use in Student interface and database.**

  Since the class name attribute is foreign key, we got the values of classes (such as 9 - A, 10 - B or 11 - C, etc.) from the "Class" database's classname attribute which is primary key. This relation between foreign and primary key has cascade policy for delete and update statements.

```
pst = con.prepareStatement("select Distinct classname from class");
rs = pst.executeQuery();
txtclass.removeAllItems();
// We are adding clasname to combobox.
txtclass.addItem(rs.getString("classname"));
```

- **For Creating Student**

```
pst = con.prepareStatement("insert into student(stname, pname, dob, gender, address, class)values(?, ?, ?, ?, ?, ?)");
pst.setString(1, stname);
pst.setString(2, pname);
pst.setString(3, date);
pst.setString(4, gender);
pst.setString(5, address);
pst.setString(6, classes);
pst.executeUpdate();
```

- **For Deleting Student**

```
pst = con.prepareStatement("delete from student where id = ?");
pst.setString(1, id);
pst.executeUpdate();
```

- **For Updating Student**

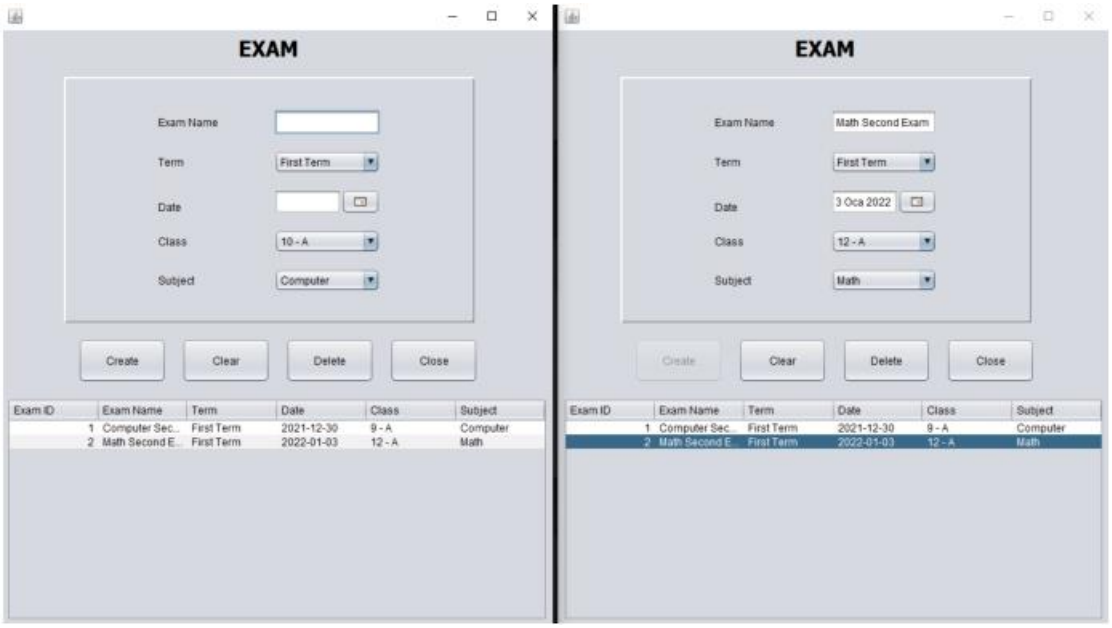
```
pst = con.prepareStatement("update student set stname = ?, pname = ?, dob = ?, gender = ?, address = ?, class = ? where id = ?");
pst.setString(1, stname);
pst.setString(2, pname);
pst.setString(3, date);
pst.setString(4, gender);
```

```
pst.setString(5, address);
pst.setString(6, classes);
pst.setString(7, id);
pst.executeUpdate();
```

- **For Taking The Objects from Our Database For Filling The Interface's Table Field.**

```
pst = con.prepareStatement("SELECT * FROM student");
rs = pst.executeQuery();
```

8) Exam Interface



8.1) Description of Functionalities

In the exam page, we have 4 buttons and 1 table. We use the buttons to create and delete the exam. We use the table for showing the exams, selecting from the table and deleting the selected exam. When we clicked the tuple, create button is disable because we do not want to create an instance with same informations. After we click the “Clear” button. All of the fields will be blank and we can create new exam or exams. When we create a new exam, all fields will be blank to create a new exam comfortably. Same thing for “Delete” operation. There are notifications after all the operations. Such as “Exam is created, “Exam is deleted”. When we click the close button, we exit from this page to main page. Additionally, we added the JCalender feature for this interface.

8.2) SQL Query Codes

- **Taking the class values from primary key to use in Exam interface and database.**

  Since the “class” attribute of this table is foreign key, we got the values of classes (such as 9 - A, 10 - B or 11 - C, etc.) from the "class" database’s classname attributes which is primary key. This relation between foreign and primary key has cascade policy for delete and update statements.

```
pst = con.prepareStatement("select Distinct classname from class");
rs = pst.executeQuery();
txtclass.removeAllItems();
// We are adding clasname to combobox.
```

txtclass.addItem(rs.getString("classname"));

- **Taking the subject values from primary key to use in Exam interface and database.**

  Since the “subject” attribute of this table is foreign key, we got the values of classes (such as Computer, Math or Physics, etc.) from the "subject" database’s subjectname attributes which is primary key. This relation between foreign and primary key has cascade policy for delete and update statements.

  pst = con.prepareStatement("select subjectname from subject");

  rs = pst.executeQuery();

  txtsubject.removeAllItems();

- **For Creating Exam**

  pst = con.prepareStatement("insert into exam(ename, term, date, class, subject)values(?, ?, ?, ?, ?)");

  pst.setString(1, examname);

  pst.setString(2, term);

  pst.setString(3, date);

  pst.setString(4, classs);

  pst.setString(5, subject);

  pst.executeUpdate();

- **For Deleting Exam**

  pst = con.prepareStatement("delete from exam where eid = ?");

  pst.setString(1, eid);

  pst.executeUpdate();

- **For Taking The Objects from Our Database For Filling The Interface's Table Field.**

  pst = con.prepareStatement("SELECT * FROM exam");

  rs = pst.executeQuery();

WHOLE PROJECT CODES WITH CLASS NAMES

LOGIN CLASS

```
import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.PreparedStatement;

import java.sql.ResultSet;

import java.sql.SQLException;

import java.util.logging.Level;

import java.util.logging.Logger;

import javax.swing.table.DefaultTableModel;

import javax.swing.JOptionPane;

/*

 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license

 * Click nbfs://nbhost/SystemFileSystem/Templates/GUIForms/JFrame.java to edit this template

 */

/**

*

 *

 */

public class login extends javax.swing.JFrame {

    /**

     * Creates new form login

     */
```

```
public login() {
    initComponents();
    Connect();
}
/**
 * This method is called from within the constructor to initialize the form.
 * WARNING: Do NOT modify this code. The content of this method is always
 * regenerated by the Form Editor.
 */
@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code">
private void initComponents() {
    jPasswordField1 = new javax.swing.JPasswordField();
    jPanel1 = new javax.swing.JPanel();
    jLabel1 = new javax.swing.JLabel();
    jLabel2 = new javax.swing.JLabel();
    jLabel3 = new javax.swing.JLabel();
    txtuname = new javax.swing.JTextField();
    txtutype = new javax.swing.JComboBox<>();
    txtpass = new javax.swing.JPasswordField();
    jButton1 = new javax.swing.JButton();
    jButton2 = new javax.swing.JButton();
    jLabel4 = new javax.swing.JLabel();
    jPasswordField1.setText("jPasswordField1");
```

```
 setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

        jPanel1.setBorder(new
javax.swing.border.SoftBevelBorder(javax.swing.border.BevelBorder.RAISED));

        jLabel1.setText("Username");

        jLabel2.setText("Password");

        jLabel3.setText("User Type");

        txtutype.setModel(new javax.swing.DefaultComboBoxModel<>(new String[] {
"Admin", "Manager" }));

        javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);

        jPanel1.setLayout(jPanel1Layout);

        jPanel1Layout.setHorizontalGroup(
jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

            .addGroup(jPanel1Layout.createSequentialGroup()

                .addGap(70, 70, 70)
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADI
NG)

                    .addComponent(jLabel1)

                    .addComponent(jLabel2)

                    .addComponent(jLabel3))

                .addGap(56, 56, 56)
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADI
NG, false)

                    .addComponent(txtuname)

                    .addComponent(txtpass)

                    .addComponent(txtutype, 0, 100, Short.MAX_VALUE))

                .addContainerGap(70, Short.MAX_VALUE))
```

```
        );

        jPanel1Layout.setVerticalGroup(
jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

            .addGroup(jPanel1Layout.createSequentialGroup()

                .addGap(53, 53, 53)
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELI
NE)

                    .addComponent(jLabel1)

                    .addComponent(txtuname, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))

                .addGap(18, 18, 18)
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELI
NE)

                    .addComponent(jLabel2)

                    .addComponent(txtpass, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))

                .addGap(18, 18, 18)
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELI
NE)

                    .addComponent(jLabel3)

                    .addComponent(txtutype, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))

                .addContainerGap(59, Short.MAX_VALUE))

        );

        jButton1.setText("Login");
```

```
        jButton1.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton1ActionPerformed(evt);
            }
        });
        jButton2.setText("Exit");
        jButton2.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton2ActionPerformed(evt);
            }
        });
        jLabel4.setFont(new java.awt.Font("Tahoma", 1, 24)); // NOI18N
        jLabel4.setText("LOGIN");
        javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
        getContentPane().setLayout(layout);
        layout.setHorizontalGroup(
layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addGroup(layout.createSequentialGroup()
                        .addGap(57, 57, 57)
.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING,
false)
                            .addGroup(layout.createSequentialGroup()
                                .addComponent(jButton1,
javax.swing.GroupLayout.PREFERRED_SIZE, 100,
```

```
javax.swing.GroupLayout.PREFERRED_SIZE)
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

                    .addComponent(jButton2,
javax.swing.GroupLayout.PREFERRED_SIZE, 100,
javax.swing.GroupLayout.PREFERRED_SIZE))

                .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)))

            .addGroup(layout.createSequentialGroup()

                .addGap(196, 196, 196)

                .addComponent(jLabel4)))

        .addContainerGap(71, Short.MAX_VALUE))

    );

    layout.setVerticalGroup(
layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()

            .addGap(25, 25, 25)

            .addComponent(jLabel4)

            .addGap(18, 18, 18)

            .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)

            .addGap(18, 18, 18)
.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

                .addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 50,
javax.swing.GroupLayout.PREFERRED_SIZE)
```

```
                .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 50,
javax.swing.GroupLayout.PREFERRED_SIZE))
            .addContainerGap(42, Short.MAX_VALUE))
        );
        pack();
        setLocationRelativeTo(null);
    }// </editor-fold>
    Connection con;
    PreparedStatement pst;
    ResultSet rs;
    DefaultTableModel d;
    // Inside this method established the connection between MySQL Server and NetBeans.
    // In addition, this function used for connecting to login page.
    public void Connect() {
        try {
            Class.forName("com.mysql.jdbc.Driver"); // For drivers
            con = DriverManager.getConnection("jdbc:mysql://localhost/schoolmanagement",
"root", ""); // Connection object and entering the path of our database
        } catch (ClassNotFoundException ex) {
            Logger.getLogger(user.class.getName()).log(Level.SEVERE, null, ex);
        } catch (SQLException ex) {
            Logger.getLogger(user.class.getName()).log(Level.SEVERE, null, ex);
        }
    }
    // This function used for using 'Login' button.
```

```
    private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
        String username = txtuname.getText();
        String password = txtpass.getText();
        String utype = txtutype.getSelectedItem().toString();
        // With these lines we are getting the contents of user table and using for the checking id, user name and password.
        try {
            pst = con.prepareStatement("select * from user where uname = ? and password = ? and utype = ?");
            pst.setString(1, username);
            pst.setString(2, password);
            pst.setString(3, utype);
            rs = pst.executeQuery();
            // If the user name and password are correct open the main page.
            if(rs.next()) {
                // We are checking whether this id contained on the database or not.
                int id = rs.getInt("id");
                this.setVisible(false);
                new Main(id, username, utype).setVisible(true);
            }
            // If the username or password is incorrect show this message on the screen and be empty to blanks.
            else {
                JOptionPane.showMessageDialog(this, "Username or Password is Incorrect.");
```

```
                txtuname.setText("");
                txtpass.setText("");
                txtutype.setSelectedIndex(-1);
                txtuname.requestFocus();
            }
        } catch (SQLException ex) {
            Logger.getLogger(login.class.getName()).log(Level.SEVERE, null, ex);
        }
    }
    // This function used for exiting the program.
    private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
        System.exit(0);
    }
    /**
     * @param args the command line arguments
     */
    public static void main(String args[]) {
        /* Set the Nimbus look and feel */
        //<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
        /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and
feel.
         * For details see
http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
         */
```

```
        try {
            for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
                if ("Nimbus".equals(info.getName())) {
                    javax.swing.UIManager.setLookAndFeel(info.getClassName());
                    break;
                }
            }
        } catch (ClassNotFoundException ex) {
java.util.logging.Logger.getLogger(login.class.getName()).log(java.util.logging.Level.SEVE
RE, null, ex);
        } catch (InstantiationException ex) {
java.util.logging.Logger.getLogger(login.class.getName()).log(java.util.logging.Level.SEVE
RE, null, ex);
        } catch (IllegalAccessException ex) {
java.util.logging.Logger.getLogger(login.class.getName()).log(java.util.logging.Level.SEVE
RE, null, ex);
        } catch (javax.swing.UnsupportedLookAndFeelException ex) {
java.util.logging.Logger.getLogger(login.class.getName()).log(java.util.logging.Level.SEVE
RE, null, ex);
        }
        //</editor-fold>
        /* Create and display the form */
        java.awt.EventQueue.invokeLater(new Runnable() {
            public void run() {
                new login().setVisible(true);
            }
```

```
        });
    }
    // Variables declaration - do not modify
    private javax.swing.JButton jButton1;
    private javax.swing.JButton jButton2;
    private javax.swing.JLabel jLabel1;
    private javax.swing.JLabel jLabel2;
    private javax.swing.JLabel jLabel3;
    private javax.swing.JLabel jLabel4;
    private javax.swing.JPanel jPanel1;
    private javax.swing.JPasswordField jPasswordField1;
    private javax.swing.JPasswordField txtpass;
    private javax.swing.JTextField txtuname;
    private javax.swing.JComboBox<String> txtutype;
    // End of variables declaration
}
```

MAIN CLASS

```
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/GUIForms/JFrame.java to edit this template
 */
/**
*
 * */
public class Main extends javax.swing.JFrame {
    /**
     * Creates new form Main
     */
    public Main() {
        initComponents();
    }
    int iid;
    String uname;
    String usertype;
    public Main(int id, String username, String utype) {
        initComponents();
        this.uname = username;
        jLabel1.setText(uname);
```

```
        this.usertype = utype;
        jLabel2.setText(usertype);
        this.iid = id;
        if(usertype.equals("Manager")) {
            jButton5.setVisible(false);
        }
    }
    /**
     * This method is called from within the constructor to initialize the form.
     * WARNING: Do NOT modify this code. The content of this method is always
     * regenerated by the Form Editor.
     */
    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-
BEGIN:initComponents
    private void initComponents() {
        jPanel1 = new javax.swing.JPanel();
        jLabel3 = new javax.swing.JLabel();
        jLabel4 = new javax.swing.JLabel();
        jLabel1 = new javax.swing.JLabel();
        jLabel2 = new javax.swing.JLabel();
        jLabel5 = new javax.swing.JLabel();
        jPanel2 = new javax.swing.JPanel();
        jButton1 = new javax.swing.JButton();
        jButton2 = new javax.swing.JButton();
```

```
        jButton3 = new javax.swing.JButton();
        jButton4 = new javax.swing.JButton();
        jButton5 = new javax.swing.JButton();
        jButton6 = new javax.swing.JButton();
        jButton7 = new javax.swing.JButton();
setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
        jPanel1.setBorder(new
javax.swing.border.SoftBevelBorder(javax.swing.border.BevelBorder.RAISED));
        jLabel3.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
        jLabel3.setText("Username:");
        jLabel4.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
        jLabel4.setText("User Type:");
        jLabel1.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
        jLabel1.setForeground(new java.awt.Color(255, 0, 0));
        jLabel1.setText("jLabel1");
        jLabel2.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
        jLabel2.setForeground(new java.awt.Color(255, 0, 0));
        jLabel2.setText("jLabel2");
        javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
        jPanel1.setLayout(jPanel1Layout);
        jPanel1Layout.setHorizontalGroup(
jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel1Layout.createSequentialGroup()
                .addContainerGap()
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADI
NG)
```

```
                .addGroup(jPanel1Layout.createSequentialGroup()
                    .addComponent(jLabel4)
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 52,
Short.MAX_VALUE)
                    .addComponent(jLabel2))
                .addGroup(jPanel1Layout.createSequentialGroup()
                    .addComponent(jLabel3)
                    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                    .addComponent(jLabel1)))
            .addContainerGap())
        );
        jPanel1Layout.setVerticalGroup(
jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel1Layout.createSequentialGroup()
                .addContainerGap()
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELI
NE)
                    .addComponent(jLabel3)
                    .addComponent(jLabel1))
                .addGap(18, 18, 18)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELI
NE)
                    .addComponent(jLabel4)
                    .addComponent(jLabel2))
```

```
            .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
        );
        jLabel5.setFont(new java.awt.Font("Tahoma", 1, 24)); // NOI18N
        jLabel5.setText("School Management System");
        jPanel2.setBorder(new
javax.swing.border.SoftBevelBorder(javax.swing.border.BevelBorder.RAISED));
        jButton1.setFont(new java.awt.Font("Tahoma", 1, 11)); // NOI18N
        jButton1.setText("Class");
        jButton1.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton1ActionPerformed(evt);
            }
        });
        jButton2.setFont(new java.awt.Font("Tahoma", 1, 11)); // NOI18N
        jButton2.setText("Exam");
        jButton2.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton2ActionPerformed(evt);
            }
        });
        jButton3.setFont(new java.awt.Font("Tahoma", 1, 11)); // NOI18N
        jButton3.setText("Student");
        jButton3.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
```

```
        jButton3ActionPerformed(evt);
    }
});
jButton4.setFont(new java.awt.Font("Tahoma", 1, 11)); // NOI18N
jButton4.setText("Subject");
jButton4.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton4ActionPerformed(evt);
    }
});
jButton5.setFont(new java.awt.Font("Tahoma", 1, 11)); // NOI18N
jButton5.setText("User Creation");
jButton5.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton5ActionPerformed(evt);
    }
});
jButton6.setFont(new java.awt.Font("Tahoma", 1, 11)); // NOI18N
jButton6.setText("Logout");
jButton6.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton6ActionPerformed(evt);
    }
});
```

```
        jButton7.setFont(new java.awt.Font("Tahoma", 1, 11)); // NOI18N
        jButton7.setText("Teacher");
        jButton7.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton7ActionPerformed(evt);
            }
        });
        javax.swing.GroupLayout jPanel2Layout = new javax.swing.GroupLayout(jPanel2);
        jPanel2.setLayout(jPanel2Layout);
        jPanel2Layout.setHorizontalGroup(
            jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel2Layout.createSequentialGroup()
                .addGap(40, 40, 40)
.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADI
NG, false)
                    .addComponent(jButton1, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                    .addComponent(jButton2, javax.swing.GroupLayout.Alignment.TRAILING,
javax.swing.GroupLayout.DEFAULT_SIZE, 109, Short.MAX_VALUE))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADI
NG, false)
                    .addComponent(jButton3, javax.swing.GroupLayout.DEFAULT_SIZE, 109,
Short.MAX_VALUE)
```

```
                .addComponent(jButton4, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))

            .addContainerGap(41, Short.MAX_VALUE))

        .addGroup(jPanel2Layout.createSequentialGroup()

            .addGap(98, 98, 98)
.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADI
NG)

                .addComponent(jButton5)

                .addComponent(jButton6, javax.swing.GroupLayout.PREFERRED_SIZE, 109,
javax.swing.GroupLayout.PREFERRED_SIZE)

                .addComponent(jButton7, javax.swing.GroupLayout.PREFERRED_SIZE, 109,
javax.swing.GroupLayout.PREFERRED_SIZE))

            .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))

    );

    jPanel2Layout.setVerticalGroup(

        jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

        .addGroup(jPanel2Layout.createSequentialGroup()

            .addContainerGap()
.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELI
NE)

                .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 50,
javax.swing.GroupLayout.PREFERRED_SIZE)

                .addComponent(jButton4, javax.swing.GroupLayout.PREFERRED_SIZE, 50,
javax.swing.GroupLayout.PREFERRED_SIZE))

            .addGap(18, 18, 18)
.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELI
NE)
```

```
                .addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 50,
javax.swing.GroupLayout.PREFERRED_SIZE)

                .addComponent(jButton3, javax.swing.GroupLayout.PREFERRED_SIZE, 50,
javax.swing.GroupLayout.PREFERRED_SIZE))

            .addGap(18, 18, 18)

            .addComponent(jButton7, javax.swing.GroupLayout.PREFERRED_SIZE, 50,
javax.swing.GroupLayout.PREFERRED_SIZE)

            .addGap(18, 18, 18)

            .addComponent(jButton6, javax.swing.GroupLayout.PREFERRED_SIZE, 50,
javax.swing.GroupLayout.PREFERRED_SIZE)

            .addGap(18, 18, 18)

            .addComponent(jButton5, javax.swing.GroupLayout.PREFERRED_SIZE, 50,
javax.swing.GroupLayout.PREFERRED_SIZE)

            .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))

        );

        javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());

        getContentPane().setLayout(layout);

        layout.setHorizontalGroup(

            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

            .addGroup(layout.createSequentialGroup()

                .addContainerGap()
.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.CENTER)

                .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)

                .addComponent(jLabel5)
```

```
                .addComponent(jPanel2, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
            .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
        );
        layout.setVerticalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addContainerGap()
                .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(18, 18, 18)
                .addComponent(jLabel5)
                .addGap(18, 18, 18)
                .addComponent(jPanel2, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
        );
        pack();
        setLocationRelativeTo(null);
    }// </editor-fold>//GEN-END:initComponents
    // We want to make a link between 'main' and 'classes' classes.
    // These lines for used by creating link from the 'main' to 'classes'.
```

```
    private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_jButton1ActionPerformed
        // TODO add your handling code here:
        classes c = new classes();

        // When we click the 'Class' button there will be a new object and new page will be visible.
        c.setVisible(true);
    }//GEN-LAST:event_jButton1ActionPerformed
    // We want to make a link between 'main' and 'subject' classes.
    // These lines for used by creating link from the main to subject.
    private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_jButton4ActionPerformed
        // TODO add your handling code here:
        subject s = new subject();
        // When we click the 'Subject' button there will be a new object and new page will be visible.
        s.setVisible(true);
    }//GEN-LAST:event_jButton4ActionPerformed
    // This function is used by creating link between 'main' and 'exam' classes.
    private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_jButton2ActionPerformed
        // TODO add your handling code here:
        // When we click the 'Exam' button there will be a new object and new page will be visible.
        Exam e = new Exam();
```

```
        e.setVisible(true);
    }//GEN-LAST:event_jButton2ActionPerformed
    // We want to make a link between 'main' and 'student' classes.
    // These lines for used by creating link from the 'main' to 'student'.
    private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_jButton3ActionPerformed
        // TODO add your handling code here:
        student s = new student();
        // When we click the 'Student' button there will be a new object and new page will be visible.
        s.setVisible(true);
    }//GEN-LAST:event_jButton3ActionPerformed
    // We want to make a link between 'main' and 'user' classes.
    // These lines for used by creating link from the 'main' to 'user'.
    private void jButton5ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_jButton5ActionPerformed
        // TODO add your handling code here:
        user u = new user();
        // When we click the 'User Creation' button there will be a new object and new page will be visible.
        u.setVisible(true);
    }//GEN-LAST:event_jButton5ActionPerformed
    private void jButton6ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_jButton6ActionPerformed
        // TODO add your handling code here:
        login l = new login ();
```

```
        this.setVisible(false);
        l.setVisible(true);
    }//GEN-LAST:event_jButton6ActionPerformed
    // We want to make a link between 'main' and 'teacher' classes.
    // These lines for used by creating link from the 'main' to 'teacher'.
    private void jButton7ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_jButton7ActionPerformed
        // TODO add your handling code here:
        teacher t = new teacher();
        // When we click the 'User Creation' button there will be a new object and new page will be visible.
        t.setVisible(true); }//GEN-
    LAST:event_jButton7ActionPerformed /**
     * @param args the command line arguments
     */
    public static void main(String args[]) {
        /* Set the Nimbus look and feel */
        //<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
        /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
         * For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
         */
        try {
```

```
        for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
            if ("Nimbus".equals(info.getName())) {
                javax.swing.UIManager.setLookAndFeel(info.getClassName());
                break;
            }
        }
    } catch (ClassNotFoundException ex) {
java.util.logging.Logger.getLogger(Main.class.getName()).log(java.util.logging.Level.SEVE
RE, null, ex);
    } catch (InstantiationException ex) {
java.util.logging.Logger.getLogger(Main.class.getName()).log(java.util.logging.Level.SEVE
RE, null, ex);
    } catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(Main.class.getName()).log(java.util.logging.Level.SEVE
RE, null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {
java.util.logging.Logger.getLogger(Main.class.getName()).log(java.util.logging.Level.SEVE
RE, null, ex);
    }
    //</editor-fold>
    /* Create and display the form */
    java.awt.EventQueue.invokeLater(new Runnable() {
        public void run() {
            new Main().setVisible(true);
        }
```

```
        });
    }
    // Variables declaration - do not modify//GEN-BEGIN:variables
    private javax.swing.JButton jButton1;
    private javax.swing.JButton jButton2;
    private javax.swing.JButton jButton3;
    private javax.swing.JButton jButton4;
    private javax.swing.JButton jButton5;
    private javax.swing.JButton jButton6;
    private javax.swing.JButton jButton7;
    private javax.swing.JLabel jLabel1;
    private javax.swing.JLabel jLabel2;
    private javax.swing.JLabel jLabel3;
    private javax.swing.JLabel jLabel4;
    private javax.swing.JLabel jLabel5;
    private javax.swing.JPanel jPanel1;
    private javax.swing.JPanel jPanel2;
    // End of variables declaration//GEN-END:variables
}
```

USER CLASS

```
import java.sql.Connection;

import java.sql.PreparedStatement;

import java.util.logging.Level;

import java.util.logging.Logger;

import java.sql.DriverManager;

import java.sql.SQLException;

import javax.swing.JOptionPane;

import java.sql.ResultSet;

import java.sql.ResultSetMetaData;

import java.util.Vector;

import javax.swing.table.DefaultTableModel;

/*

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 * Click nbfs://nbhost/SystemFileSystem/Templates/GUIForms/JFrame.java to edit this template

 */

/**

*

 *

 */

public class user extends javax.swing.JFrame {


    /**
```

```
     * Creates new form user
     */
    public user() {
        initComponents();
        Connect(); // When we run the code, connection will be run.
        User_Load();
    }
    Connection con;
    PreparedStatement pst;
    ResultSet rs;
    DefaultTableModel d;
    // Inside this method established the connection between MySQL Server and NetBeans.
    // In addition, this function used for connecting to User page.
    public void Connect() {
        try {
            Class.forName("com.mysql.jdbc.Driver"); // For drivers
            con = DriverManager.getConnection("jdbc:mysql://localhost/schoolmanagement",
"root", ""); // Connection object and entering the path of our database.
        } catch (ClassNotFoundException ex) {
            Logger.getLogger(user.class.getName()).log(Level.SEVERE, null, ex);
        } catch (SQLException ex) {
            Logger.getLogger(user.class.getName()).log(Level.SEVERE, null, ex);
        }
    }
    // This function used for loading the instance to our program's table from the database.
```

```
// This function is used for getting the instance from the database.
public void User_Load() {
    int c;
    try {
        pst = con.prepareStatement("SELECT * FROM user");
        rs = pst.executeQuery();
        ResultSetMetaData rsd = rs.getMetaData();
        c = rsd.getColumnCount();
        d = (DefaultTableModel)jTable1.getModel();
        d.setRowCount(0);
        while(rs.next()) {
            Vector v2 = new Vector();
            for(int i = 1; i <= c; i++) {
                v2.add(rs.getString("id"));
                v2.add(rs.getString("name"));
                v2.add(rs.getString("surname"));
                v2.add(rs.getString("phone"));
                v2.add(rs.getString("uname"));
                v2.add(rs.getString("utype"));
            }
            d.addRow(v2);
        }
    } catch (SQLException ex) {
        Logger.getLogger(user.class.getName()).log(Level.SEVERE, null, ex);
```

```
        }
    }
    /**
     * This method is called from within the constructor to initialize the form.
     * WARNING: Do NOT modify this code. The content of this method is always
    * regenerated by the Form Editor.
    */
    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-
BEGIN:initComponents
    private void initComponents() {
        jPanel1 = new javax.swing.JPanel();
        jLabel1 = new javax.swing.JLabel();
        jLabel2 = new javax.swing.JLabel();
        jLabel3 = new javax.swing.JLabel();
        jLabel4 = new javax.swing.JLabel();
        jLabel5 = new javax.swing.JLabel();
        jLabel6 = new javax.swing.JLabel();
        txtname = new javax.swing.JTextField();
        txtsname = new javax.swing.JTextField();
        txtphone = new javax.swing.JTextField();
        txtuname = new javax.swing.JTextField();
        txtpass = new javax.swing.JPasswordField();
        txtutype = new javax.swing.JComboBox<>();
        jScrollPane1 = new javax.swing.JScrollPane();
```

```
        jTable1 = new javax.swing.JTable();
        jButton1 = new javax.swing.JButton();
        jButton2 = new javax.swing.JButton();
        jButton3 = new javax.swing.JButton();
        jButton5 = new javax.swing.JButton();
        jLabel7 = new javax.swing.JLabel();
        jButton4 = new javax.swing.JButton();
        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
        jPanel1.setBorder(new
javax.swing.border.SoftBevelBorder(javax.swing.border.BevelBorder.RAISED));
        jLabel1.setText("Name");
        jLabel2.setText("Surname");
        jLabel3.setText("Phone");
        jLabel4.setText("Username");
        jLabel5.setText("Password");
        jLabel6.setText("User Type");
        txtutype.setModel(new javax.swing.DefaultComboBoxModel<>(new String[] {
"Admin", "Manager" }));
        javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
        jPanel1.setLayout(jPanel1Layout);
        jPanel1Layout.setHorizontalGroup(
            jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel1Layout.createSequentialGroup()
                .addGap(129, 129, 129)
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADI
NG, false)
```

```
                .addComponent(jLabel2, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

                .addComponent(jLabel1, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

                .addComponent(jLabel3, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

                .addComponent(jLabel5, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

                .addComponent(jLabel4, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

                .addComponent(jLabel6, javax.swing.GroupLayout.DEFAULT_SIZE, 60,
Short.MAX_VALUE))

            .addGap(39, 39, 39)
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADI
NG, false)

                .addComponent(txtname)

                .addComponent(txtsname)

                .addComponent(txtphone)

                .addComponent(txtuname)

                .addComponent(txtpass)

                .addComponent(txtutype, 0, 130, Short.MAX_VALUE))

            .addContainerGap(146, Short.MAX_VALUE))

        );

        jPanel1Layout.setVerticalGroup(

            jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

            .addGroup(jPanel1Layout.createSequentialGroup()
```

```
            .addGap(55, 55, 55)
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel1)
                .addComponent(txtname, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGap(18, 18, 18)
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel2)
                .addComponent(txtsname, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGap(18, 18, 18)
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel3)
                .addComponent(txtphone, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGap(18, 18, 18)
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel4)
                .addComponent(txtuname, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGap(18, 18, 18)
```

```
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel5)
                .addComponent(txtpass, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGap(18, 18, 18)
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel6)
                .addComponent(txtutype, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
            .addContainerGap(57, Short.MAX_VALUE))
        );
        jTable1.setModel(new javax.swing.table.DefaultTableModel(
            new Object [][] {
            },
            new String [] {
                "ID", "Name", "Surname", "Phone", "Username", "User Type"
            }
        ));
        jTable1.addMouseListener(new java.awt.event.MouseAdapter() {
            public void mouseClicked(java.awt.event.MouseEvent evt) {
                jTable1MouseClicked(evt);
            }
```

```
});
jScrollPane1.setViewportView(jTable1);
jButton1.setText("Create");
jButton1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton1ActionPerformed(evt);
    }
});
jButton2.setText("Update");
jButton2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton2ActionPerformed(evt);
    }
});
jButton3.setText("Delete");
jButton3.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton3ActionPerformed(evt);
    }
});
jButton5.setText("Close");
jButton5.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton5ActionPerformed(evt);
```

```
        }
    });
    jLabel7.setFont(new java.awt.Font("Tahoma", 1, 24)); // NOI18N
    jLabel7.setText("USER CREATION");
    jButton4.setText("Clear");
    jButton4.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            jButton4ActionPerformed(evt);
        }
    });
    javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
    getContentPane().setLayout(layout);
    layout.setHorizontalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(layout.createSequentialGroup()
                    .addContainerGap()
                    .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE,
100, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addGap(18, 18, 18)
                    .addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE,
100, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addGap(18, 18, 18)
```

```
                .addComponent(jButton4, javax.swing.GroupLayout.PREFERRED_SIZE,
100, javax.swing.GroupLayout.PREFERRED_SIZE)

                .addGap(18, 18, 18)

                .addComponent(jButton3, javax.swing.GroupLayout.PREFERRED_SIZE,
100, javax.swing.GroupLayout.PREFERRED_SIZE)

                .addGap(18, 18, 18)

                .addComponent(jButton5, javax.swing.GroupLayout.PREFERRED_SIZE,
100, javax.swing.GroupLayout.PREFERRED_SIZE))

            .addGroup(layout.createSequentialGroup()

                .addGap(40, 40, 40)

                .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)))

        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))

    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()

        .addGap(0, 0, Short.MAX_VALUE)

        .addComponent(jLabel7)

        .addGap(204, 204, 204))

    .addGroup(layout.createSequentialGroup()

        .addContainerGap()

        .addComponent(jScrollPane1)

        .addContainerGap())

);

layout.setVerticalGroup(
```

```
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()
            .addContainerGap()
            .addComponent(jLabel7)
            .addGap(18, 18, 18)
            .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 35,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 35,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jButton3, javax.swing.GroupLayout.PREFERRED_SIZE, 35,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jButton5, javax.swing.GroupLayout.PREFERRED_SIZE, 35,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jButton4, javax.swing.GroupLayout.PREFERRED_SIZE, 35,
javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGap(18, 18, 18)
            .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE, 221,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addContainerGap(23, Short.MAX_VALUE))
    );
    pack();
    setLocationRelativeTo(null);
```

```
    }// </editor-fold>//GEN-END:initComponents
// This function is used for deleting the selected instance or row.
    private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-
FIRST:event_jButton3ActionPerformed
        // TODO add your handling code here:
        try {
            d = (DefaultTableModel)jTable1.getModel();
            int selectIndex = jTable1.getSelectedRow();
            // This variable used for knowing which instance or row selected.
            String id = d.getValueAt(selectIndex, 0).toString();
            // With these lines we are able to delete instance from the table according to its id.
            pst = con.prepareStatement("delete from user where id = ?");
            pst.setString(1, id);
            pst.executeUpdate();
            JOptionPane.showMessageDialog(this, "User is Deleted");
            jButton1.setEnabled(true);
            // These lines used for clearing the blanks.
            txtname.setText("");
            txtsname.setText("");
            txtphone.setText("");
            txtuname.setText("");
            txtpass.setText("");
            // These line used for turning empty to combobox.
            txtutype.setSelectedIndex(-1);
            txtname.requestFocus();
```

```
            User_Load();
        } catch (SQLException ex) {
            Logger.getLogger(user.class.getName()).log(Level.SEVERE, null, ex);
        }
    }//GEN-LAST:event_jButton3ActionPerformed
// This function used for clicking the 'Create' button and creating an instance.
    private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_jButton1ActionPerformed
        try {
            // TODO add your handling code here:
            // These lines used for getting the variables from the blanks.
            String name = txtname.getText();
            String surname = txtsname.getText();
            String phone = txtphone.getText();
            String uname = txtuname.getText();
            String password = txtpass.getText();
            String utype = txtutype.getSelectedItem().toString();
            // This line used for adding the created instance into the MySQL
            pst = con.prepareStatement("insert into user(name, surname, phone, uname, password, utype)values(?, ?, ?, ?, ?, ?)");
            pst.setString(1, name);
            pst.setString(2, surname);
            pst.setString(3, phone);
            pst.setString(4, uname);
            pst.setString(5, password);
```

```
            pst.setString(6, utype);
            pst.executeUpdate();
            JOptionPane.showMessageDialog(this, "User is Created");
            // These lines used for clearing the blanks, after created the instance
            txtname.setText("");
            txtsname.setText("");
            txtphone.setText("");
            txtuname.setText("");
            txtpass.setText("");
            txtutype.setSelectedIndex(-1);
            txtname.requestFocus();
            User_Load();
        } catch (SQLException ex) {
            Logger.getLogger(user.class.getName()).log(Level.SEVERE, null, ex);
        }
    }//GEN-LAST:event_jButton1ActionPerformed
// This function used for showing the selected instance on the blanks.
// When the instance shown in the blanks, password area will be blank to privacy.
// For this reason there is no line for the setting the password.
    private void jTable1MouseClicked(java.awt.event.MouseEvent evt) {//GEN-
FIRST:event_jTable1MouseClicked
        // TODO add your handling code here:
        d = (DefaultTableModel)jTable1.getModel();
        int selectIndex = jTable1.getSelectedRow();
        String id = d.getValueAt(selectIndex, 0).toString();
```

```
        txtname.setText(d.getValueAt(selectIndex, 1).toString());
        txtsname.setText(d.getValueAt(selectIndex, 2).toString());
        txtphone.setText(d.getValueAt(selectIndex, 3).toString());
        txtuname.setText(d.getValueAt(selectIndex, 4).toString());
        txtutype.setSelectedItem(d.getValueAt(selectIndex, 5).toString());
        // This line used for disabling to create button when the selected instance is shown by the blanks.
        jButton1.setEnabled(false);
    }//GEN-LAST:event_jTable1MouseClicked
// This function used for the updating the instance's values.
    private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_jButton2ActionPerformed
        // TODO add your handling code here:
        try {
            d = (DefaultTableModel)jTable1.getModel();
            int selectIndex = jTable1.getSelectedRow();
            // When the user select the instance, its id will be stored in the 'selectIndex' and assign to 'id' variable.
            String id = d.getValueAt(selectIndex, 0).toString();
            String name = txtname.getText();
            String surname = txtsname.getText();
            String phone = txtphone.getText();
            String uname = txtuname.getText();
            String password = txtpass.getText();
            String utype = txtutype.getSelectedItem().toString();
```

```
            // With these lines, we can available to change all of the attributes without password.
            pst = con.prepareStatement("update user set name = ?, surname = ?, phone = ?, uname = ?, utype = ? where id = ?");
            pst.setString(1, name);
            pst.setString(2, surname);
            pst.setString(3, phone);
            pst.setString(4, uname);
            pst.setString(5, utype);
            pst.setString(6, id);
            pst.executeUpdate();
            JOptionPane.showMessageDialog(this, "User is Updated");
            // This line used for the enable to 'Create' button after updating the selected instance.
            jButton1.setEnabled(true);
            // With these lines after updating the instance, blanks will be empty.
            txtname.setText("");
            txtsname.setText("");
            txtphone.setText("");
            txtuname.setText("");
            txtpass.setText("");
            // These line used for turning empty to combobox.
            txtutype.setSelectedIndex(-1);
            txtname.requestFocus();
            User_Load();
        } catch (SQLException ex) {
            Logger.getLogger(user.class.getName()).log(Level.SEVERE, null, ex);
```

```
        }
    }//GEN-LAST:event_jButton2ActionPerformed
// This function used for the clearing blanks and also for using 'Clear' button.
    private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_jButton4ActionPerformed
        // TODO add your handling code here:
        jButton1.setEnabled(true);
        // These lines used for turning empty to blanks.
        txtname.setText("");
        txtsname.setText("");
        txtphone.setText("");
        txtuname.setText("");
        txtpass.setText("");

        // These line used for turning empty to combobox.
        txtutype.setSelectedIndex(-1);
        txtname.requestFocus();
        User_Load();
    }//GEN-LAST:event_jButton4ActionPerformed
// This function used for closing the our page.
    private void jButton5ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_jButton5ActionPerformed
        // TODO add your handling code here:
        this.setVisible(false);
    }//GEN-LAST:event_jButton5ActionPerformed
```

```
    /**
     * @param args the command line arguments
     */
    public static void main(String args[]) {
        /* Set the Nimbus look and feel */
        //<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
        /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
         * For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
         */
        try {
            for (javax.swing.UIManager.LookAndFeelInfo info : javax.swing.UIManager.getInstalledLookAndFeels()) {
                if ("Nimbus".equals(info.getName())) {
                    javax.swing.UIManager.setLookAndFeel(info.getClassName());
                    break;
                }
            }
        } catch (ClassNotFoundException ex) {
java.util.logging.Logger.getLogger(user.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
        } catch (InstantiationException ex) {
java.util.logging.Logger.getLogger(user.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
```

```
        } catch (IllegalAccessException ex) {
java.util.logging.Logger.getLogger(user.class.getName()).log(java.util.logging.Level.SEVER
E, null, ex);
        } catch (javax.swing.UnsupportedLookAndFeelException ex) {
java.util.logging.Logger.getLogger(user.class.getName()).log(java.util.logging.Level.SEVER
E, null, ex);
        }
        //</editor-fold>
        /* Create and display the form */
        java.awt.EventQueue.invokeLater(new Runnable() {
            public void run() {
                new user().setVisible(true);
            }
        });
    }
    // Variables declaration - do not modify//GEN-BEGIN:variables
    private javax.swing.JButton jButton1;
    private javax.swing.JButton jButton2;
    private javax.swing.JButton jButton3;
    private javax.swing.JButton jButton4;
    private javax.swing.JButton jButton5;
    private javax.swing.JLabel jLabel1;
    private javax.swing.JLabel jLabel2;
    private javax.swing.JLabel jLabel3;
    private javax.swing.JLabel jLabel4;
    private javax.swing.JLabel jLabel5;
```

```
    private javax.swing.JLabel jLabel6;
    private javax.swing.JLabel jLabel7;
    private javax.swing.JPanel jPanel1;
    private javax.swing.JScrollPane jScrollPane1;
    private javax.swing.JTable jTable1;
    private javax.swing.JTextField txtname;
    private javax.swing.JPasswordField txtpass;
    private javax.swing.JTextField txtphone;
    private javax.swing.JTextField txtsname;
    private javax.swing.JTextField txtuname;
    private javax.swing.JComboBox<String> txtutype;
    // End of variables declaration//GEN-END:variables
}
```

TEACHER CLASS

```
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.sql.ResultSetMetaData;
import java.sql.SQLException;
import java.text.SimpleDateFormat;
import java.util.Vector;
import java.util.logging.Level;
import java.util.logging.Logger;
import javax.swing.JOptionPane;
import javax.swing.table.DefaultTableModel;
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/GUIForms/JFrame.java to edit this template
 */
/**
*
 *
 */
public class teacher extends javax.swing.JFrame {
    /**
```

```
     * Creates new form teacher
     */
    public teacher() {
        initComponents();
        Connect();
        Teacher_Load();
    }
    Connection con;
    PreparedStatement pst;
    ResultSet rs;
    DefaultTableModel d;
    // Inside this method established the connection between MySQL Server and NetBeans.
    // In addition, this function used for connecting to Teacher page.
    public void Connect() {
        try {
            Class.forName("com.mysql.jdbc.Driver"); // For drivers
            con = DriverManager.getConnection("jdbc:mysql://localhost/schoolmanagement",
"root", ""); // Connection object and entering the path of our database.
        } catch (ClassNotFoundException ex) {
            Logger.getLogger(user.class.getName()).log(Level.SEVERE, null, ex);
        } catch (SQLException ex) {
            Logger.getLogger(user.class.getName()).log(Level.SEVERE, null, ex);
        }
    }
    // This function used for loading the instance to our program's table from the database.
```

```
// This function is used for getting the instance from the database.
public void Teacher_Load() {
    int c;
    try {
        pst = con.prepareStatement("SELECT * FROM teacher");
        rs = pst.executeQuery();
        ResultSetMetaData rsd = rs.getMetaData();
        c = rsd.getColumnCount();
        d = (DefaultTableModel)jTable1.getModel();
        d.setRowCount(0);
        while(rs.next()) {
            Vector v2 = new Vector();
            for(int i = 1; i <= c; i++) {
                v2.add(rs.getString("id"));
                v2.add(rs.getString("name"));
                v2.add(rs.getString("surname"));
                v2.add(rs.getString("qual"));
                v2.add(rs.getString("salary"));
                v2.add(rs.getString("phone"));
                v2.add(rs.getString("email"));
            }
            d.addRow(v2);
        }
    } catch (SQLException ex) {
```

```
            Logger.getLogger(user.class.getName()).log(Level.SEVERE, null, ex);
        }
      }
    /**
     * This method is called from within the constructor to initialize the form.
     * WARNING: Do NOT modify this code. The content of this method is always
    * regenerated by the Form Editor.
    */
    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-
BEGIN:initComponents
    private void initComponents() {
        jLabel1 = new javax.swing.JLabel();
        jPanel1 = new javax.swing.JPanel();
        jLabel2 = new javax.swing.JLabel();
        jLabel3 = new javax.swing.JLabel();
        jLabel5 = new javax.swing.JLabel();
        jLabel6 = new javax.swing.JLabel();
        txtname = new javax.swing.JTextField();
        txtsuname = new javax.swing.JTextField();
        txtqual = new javax.swing.JTextField();
        txtsal = new javax.swing.JTextField();
        txtphone = new javax.swing.JTextField();
        txtemail = new javax.swing.JTextField();
        jLabel8 = new javax.swing.JLabel();
```

```
        jLabel4 = new javax.swing.JLabel();
        jScrollPane1 = new javax.swing.JScrollPane();
        jTable1 = new javax.swing.JTable();
        jButton1 = new javax.swing.JButton();
        jButton2 = new javax.swing.JButton();
        jButton3 = new javax.swing.JButton();
        jButton4 = new javax.swing.JButton();
        jButton5 = new javax.swing.JButton();
        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
        jLabel1.setFont(new java.awt.Font("Tahoma", 1, 24)); // NOI18N
        jLabel1.setText("TEACHER");
        jPanel1.setBorder(new
javax.swing.border.SoftBevelBorder(javax.swing.border.BevelBorder.RAISED));
        jLabel2.setFont(new java.awt.Font("Tahoma", 1, 12)); // NOI18N
        jLabel2.setText("Name");
        jLabel3.setFont(new java.awt.Font("Tahoma", 1, 12)); // NOI18N
        jLabel3.setText("Qualification");
        jLabel5.setFont(new java.awt.Font("Tahoma", 1, 12)); // NOI18N
        jLabel5.setText("Phone Number");
        jLabel6.setFont(new java.awt.Font("Tahoma", 1, 12)); // NOI18N
        jLabel6.setText("Email");
        jLabel8.setFont(new java.awt.Font("Tahoma", 1, 12)); // NOI18N
        jLabel8.setText("Surname");
        jLabel4.setFont(new java.awt.Font("Tahoma", 1, 12)); // NOI18N
        jLabel4.setText("Salary");
```

```
        javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
        jPanel1.setLayout(jPanel1Layout);
        jPanel1Layout.setHorizontalGroup(
            jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel1Layout.createSequentialGroup()
                .addContainerGap()
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADI
NG)
                    .addComponent(jLabel2)
                    .addComponent(jLabel3)
                    .addComponent(jLabel5)
                    .addComponent(jLabel6)
                    .addComponent(jLabel8)
                    .addComponent(jLabel4))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 62,
Short.MAX_VALUE)
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADI
NG)
                    .addComponent(txtphone, javax.swing.GroupLayout.PREFERRED_SIZE, 130,
javax.swing.GroupLayout.PREFERRED_SIZE)
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADI
NG, false)
                    .addComponent(txtname)
                    .addComponent(txtsuname)
                    .addComponent(txtqual)
                    .addComponent(txtsal, javax.swing.GroupLayout.PREFERRED_SIZE, 130,
javax.swing.GroupLayout.PREFERRED_SIZE))
```

```
                .addComponent(txtemail, javax.swing.GroupLayout.PREFERRED_SIZE, 130,
javax.swing.GroupLayout.PREFERRED_SIZE))
            .addContainerGap())
        );
        jPanel1Layout.setVerticalGroup(
            jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel1Layout.createSequentialGroup()
                .addContainerGap()
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELI
NE)
                .addComponent(txtname, javax.swing.GroupLayout.PREFERRED_SIZE, 30,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jLabel2))
            .addGap(18, 18, 18)
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELI
NE)
                .addComponent(txtsuname, javax.swing.GroupLayout.PREFERRED_SIZE, 30,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jLabel8))
            .addGap(18, 18, 18)
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELI
NE)
                .addComponent(txtqual, javax.swing.GroupLayout.PREFERRED_SIZE, 30,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jLabel3))
            .addGap(18, 18, 18)
```

```
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(txtsal, javax.swing.GroupLayout.PREFERRED_SIZE, 30, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jLabel4))
            .addGap(18, 18, 18)
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(txtphone, javax.swing.GroupLayout.PREFERRED_SIZE, 30, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jLabel5))
            .addGap(18, 18, 18)
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(txtemail, javax.swing.GroupLayout.PREFERRED_SIZE, 30, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jLabel6))
            .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
        );
        jTable1.setModel(new javax.swing.table.DefaultTableModel(
            new Object [][] {
            },
            new String [] {
                "ID", "Name", "Surname", "Qualification", "Salary", "Phone Number", "Email"
            }
```

```
        ) {
            Class[] types = new Class [] {
                java.lang.Integer.class, java.lang.String.class, java.lang.String.class,
java.lang.String.class, java.lang.Integer.class, java.lang.Integer.class, java.lang.String.class
            };
            public Class getColumnClass(int columnIndex) {
                return types [columnIndex];
            }
        });
        jTable1.addMouseListener(new java.awt.event.MouseAdapter() {
            public void mouseClicked(java.awt.event.MouseEvent evt) {
                jTable1MouseClicked(evt);
            }
        });
        jScrollPane1.setViewportView(jTable1);
        jButton1.setText("Create");
        jButton1.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton1ActionPerformed(evt);
            }
        });
        jButton2.setText("Update");
        jButton2.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton2ActionPerformed(evt);
```

```
    }
});
jButton3.setText("Delete");
jButton3.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton3ActionPerformed(evt);
    }
});
jButton4.setText("Close");
jButton4.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton4ActionPerformed(evt);
    }
});
jButton5.setText("Clear");
jButton5.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton5ActionPerformed(evt);
    }
});
javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
        .addGroup(layout.createSequentialGroup()
            .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.CENTER)
                .addComponent(jLabel1)
                .addGroup(layout.createSequentialGroup()
                    .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addGap(18, 18, 18)
                    .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE,
591, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGroup(layout.createSequentialGroup()
                    .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE,
100, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addGap(5, 5, 5)
                    .addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE,
100, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addGap(5, 5, 5)
                    .addComponent(jButton5, javax.swing.GroupLayout.PREFERRED_SIZE,
100, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addGap(4, 4, 4)
                    .addComponent(jButton3, javax.swing.GroupLayout.PREFERRED_SIZE,
100, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addGap(4, 4, 4)
                    .addComponent(jButton4, javax.swing.GroupLayout.PREFERRED_SIZE,
100, javax.swing.GroupLayout.PREFERRED_SIZE)))
```

```
            .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
        );
        layout.setVerticalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addContainerGap()
                .addComponent(jLabel1)
                .addGap(18, 18, 18)
.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING,
false)
                    .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE, 0,
Short.MAX_VALUE)
                    .addComponent(jPanel1, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
                .addGap(18, 18, 18)
.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 50,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 50,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jButton3, javax.swing.GroupLayout.PREFERRED_SIZE, 50,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jButton4, javax.swing.GroupLayout.PREFERRED_SIZE, 50,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jButton5, javax.swing.GroupLayout.PREFERRED_SIZE, 50,
javax.swing.GroupLayout.PREFERRED_SIZE))
```

```
            .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))

        );

        pack();

        setLocationRelativeTo(null);

    }// </editor-fold>//GEN-END:initComponents

    private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-
FIRST:event_jButton1ActionPerformed

        // TODO add your handling code here:

        String tename = txtname.getText();

        String tesname = txtsuname.getText();

        String qual = txtqual.getText();

        String salary = txtsal.getText();

        String phone = txtphone.getText();

        String email = txtemail.getText();

        // This line used for adding the created instance into the MySQL

        try {

            pst = con.prepareStatement("insert into teacher(name, surname, qual, salary, phone,
email)values(?, ?, ?, ?, ?, ?)");

            pst.setString(1, tename);

            pst.setString(2, tesname);

            pst.setString(3, qual);

            pst.setString(4, salary);

            pst.setString(5, phone);

            pst.setString(6, email);
```

```
            pst.executeUpdate();
            JOptionPane.showMessageDialog(this, "Teacher is Created");
            // These lines used for clearing the blanks, after created the instance
            // These lines used for turning empty to blanks.
            txtname.setText("");
            txtsuname.setText("");
            txtqual.setText("");
            txtsal.setText("");
            txtphone.setText("");
            txtemail.setText("");
            txtname.requestFocus();
            Teacher_Load();
        } catch (SQLException ex) {
            Logger.getLogger(Exam.class.getName()).log(Level.SEVERE, null, ex);
        }
    }//GEN-LAST:event_jButton1ActionPerformed
    // This function used for showing the selected instance on the blanks.
    private void jTable1MouseClicked(java.awt.event.MouseEvent evt) {//GEN-
FIRST:event_jTable1MouseClicked
        // TODO add your handling code here:
        d = (DefaultTableModel)jTable1.getModel();
        int selectIndex = jTable1.getSelectedRow();
        String id = d.getValueAt(selectIndex, 0).toString();
        txtname.setText(d.getValueAt(selectIndex, 1).toString());
        txtsuname.setText(d.getValueAt(selectIndex, 2).toString());
```

```
        txtqual.setText(d.getValueAt(selectIndex, 3).toString());
        txtsal.setText(d.getValueAt(selectIndex, 4).toString());
        txtphone.setText(d.getValueAt(selectIndex, 5).toString());
        txtemail.setText(d.getValueAt(selectIndex, 6).toString());
        // This line used for disabling to create button when the selected instance is shown by the blanks.
        jButton1.setEnabled(false);
    }//GEN-LAST:event_jTable1MouseClicked
    // This function used for the clearing blanks and also for using 'Clear' button.
    private void jButton5ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_jButton5ActionPerformed
        // TODO add your handling code here:
        jButton1.setEnabled(true);
        txtname.setText("");
        txtsuname.setText("");
        txtqual.setText("");
        txtsal.setText("");
        txtphone.setText("");
        txtemail.setText("");
        txtname.requestFocus();
        Teacher_Load();
    }//GEN-LAST:event_jButton5ActionPerformed
    // This function is used for closing the current page.
    private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_jButton4ActionPerformed
```

```
        // TODO add your handling code here:
        this.setVisible(false);
    }//GEN-LAST:event_jButton4ActionPerformed

    private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-
FIRST:event_jButton3ActionPerformed
        // TODO add your handling code here:
        try {
            d = (DefaultTableModel)jTable1.getModel();
            int selectIndex = jTable1.getSelectedRow();
            // This variable used for knowing which instance or row selected.
            String id = d.getValueAt(selectIndex, 0).toString();
            // With these lines we are able to delete instance from the table according to its id.
            pst = con.prepareStatement("delete from teacher where id = ?");
            pst.setString(1, id);
            pst.executeUpdate();
            JOptionPane.showMessageDialog(this, "Teacher is Deleted");
            jButton1.setEnabled(true);
            // These lines used for clearing the blanks.
            txtname.setText("");
            txtsuname.setText("");
            txtqual.setText("");
            txtsal.setText("");
            txtphone.setText("");
            txtemail.setText("");
            txtname.requestFocus();
```

```
            Teacher_Load();
        } catch (SQLException ex) {
            Logger.getLogger(user.class.getName()).log(Level.SEVERE, null, ex);
        }
    }//GEN-LAST:event_jButton3ActionPerformed
    // This function used for the updating the instance's values.
    private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_jButton2ActionPerformed
        // TODO add your handling code here:
        try {
            d = (DefaultTableModel)jTable1.getModel();
            int selectIndex = jTable1.getSelectedRow();

            // When the user select the instance, its id will be stored in the 'selectIndex' and assign to 'id' variable.
            String id = d.getValueAt(selectIndex, 0).toString();
            String tename = txtname.getText();
            String tesname = txtsuname.getText();
            String qual = txtqual.getText();
            String salary = txtsal.getText();
            String phone = txtphone.getText();
            String email = txtemail.getText();
            // With these lines, we can available to change all of the attributes without password.
            // pst = con.prepareStatement("update teacher set name = ?, surname = ?, qual = ?, salary = ?, phone = ?, email = ? where id = ?");
```

```
    pst = con.prepareStatement("CALL updateTeacher(?,?,?,?,?,?,?);");
    pst.setString(1, tename);
    pst.setString(2, tesname);
    pst.setString(3, qual);
    pst.setString(4, salary);
    pst.setString(5, phone);
    pst.setString(6, email);
    pst.setString(7, id);
    pst.executeUpdate();
    JOptionPane.showMessageDialog(this, "User is Updated");
    // This line used for the enable to 'Create' button after updating the selected instance.
    jButton1.setEnabled(true);
    // With these lines after updating the instance, blanks will be empty.
    txtname.setText("");
    txtsuname.setText("");
    txtqual.setText("");
    txtsal.setText("");
    txtphone.setText("");
    txtemail.setText("");
    txtname.requestFocus();
    Teacher_Load();
} catch (SQLException ex) {
    Logger.getLogger(user.class.getName()).log(Level.SEVERE, null, ex);
}
```

```
    }//GEN-LAST:event_jButton2ActionPerformed

    /**
     * @param args the command line arguments
     */
    public static void main(String args[]) {
        /* Set the Nimbus look and feel */
        //<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
        /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
         * For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
         */
        try {
            for (javax.swing.UIManager.LookAndFeelInfo info : javax.swing.UIManager.getInstalledLookAndFeels()) {
                if ("Nimbus".equals(info.getName())) {
                    javax.swing.UIManager.setLookAndFeel(info.getClassName());
                    break;
                }
            }
        } catch (ClassNotFoundException ex) {
java.util.logging.Logger.getLogger(teacher.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
        } catch (InstantiationException ex) {
java.util.logging.Logger.getLogger(teacher.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
```

```
        } catch (IllegalAccessException ex) {
java.util.logging.Logger.getLogger(teacher.class.getName()).log(java.util.logging.Level.SEV
ERE, null, ex);
        } catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(teacher.class.getName()).log(java.util.logging.Level.SEV
ERE, null, ex);
        }
        //</editor-fold>
        /* Create and display the form */
        java.awt.EventQueue.invokeLater(new Runnable() {
            public void run() {
                new teacher().setVisible(true);
            }
        });
    }
    // Variables declaration - do not modify//GEN-BEGIN:variables
    private javax.swing.JButton jButton1;
    private javax.swing.JButton jButton2;
    private javax.swing.JButton jButton3;
    private javax.swing.JButton jButton4;
    private javax.swing.JButton jButton5;
    private javax.swing.JLabel jLabel1;
    private javax.swing.JLabel jLabel2;
    private javax.swing.JLabel jLabel3;
    private javax.swing.JLabel jLabel4;
```

```
    private javax.swing.JLabel jLabel5;
    private javax.swing.JLabel jLabel6;
    private javax.swing.JLabel jLabel8;
    private javax.swing.JPanel jPanel1;
    private javax.swing.JScrollPane jScrollPane1;
    private javax.swing.JTable jTable1;
    private javax.swing.JTextField txtemail;
    private javax.swing.JTextField txtname;
    private javax.swing.JTextField txtphone;
    private javax.swing.JTextField txtqual;
    private javax.swing.JTextField txtsal;
    private javax.swing.JTextField txtsuname;
    // End of variables declaration//GEN-END:variables
}
```

CLASSES CLASS

```
import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.PreparedStatement;

import java.sql.ResultSet;

import java.sql.ResultSetMetaData;

import java.sql.SQLException;

import java.util.Vector;

import java.util.logging.Level;

import java.util.logging.Logger;

import javax.swing.JOptionPane;

import javax.swing.table.DefaultTableModel;

/*

 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license

 * Click nbfs://nbhost/SystemFileSystem/Templates/GUIForms/JFrame.java to edit this template

 */

/**

*

 *

 */

public class classes extends javax.swing.JFrame {

    /**

     * Creates new form classes
```

```
     */
    public classes() {
        initComponents();
        Connect();
        Class_Load();
    }
    Connection con;
    PreparedStatement pst;
    ResultSet rs;
    DefaultTableModel d;
    // Inside this method established the connection between MySQL Server and NetBeans.
    // In addition, this function used for connecting to 'Class' page.
    public void Connect() {
        try {
            Class.forName("com.mysql.jdbc.Driver"); // For drivers
            con = DriverManager.getConnection("jdbc:mysql://localhost/schoolmanagement",
"root", ""); // Connection object and entering the path of our database
        } catch (ClassNotFoundException ex) {
            Logger.getLogger(user.class.getName()).log(Level.SEVERE, null, ex);
        } catch (SQLException ex) {
            Logger.getLogger(user.class.getName()).log(Level.SEVERE, null, ex);
        }
    }
    // This function used for loading the instance to our program's table from the database.
    // This function is used for getting the instance from the database.
```

```
public void Class_Load() {
    int c;
    try {
        pst = con.prepareStatement("SELECT * FROM class");
        rs = pst.executeQuery();
        ResultSetMetaData rsd = rs.getMetaData();
        c = rsd.getColumnCount();
        d = (DefaultTableModel)jTable1.getModel();
        d.setRowCount(0);
        while(rs.next()) {
            Vector v2 = new Vector();
            for(int i = 1; i <= c; i++) {
                v2.add(rs.getString("cid"));
                v2.add(rs.getString("classname"));
                v2.add(rs.getString("floor"));
            }
            d.addRow(v2);
        }
    } catch (SQLException ex) {
        Logger.getLogger(user.class.getName()).log(Level.SEVERE, null, ex);
    }
  }
/**
 * This method is called from within the constructor to initialize the form.
```

```
     * WARNING: Do NOT modify this code. The content of this method is always
    * regenerated by the Form Editor.
    */
    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-
BEGIN:initComponents
    private void initComponents() {
        jLabel1 = new javax.swing.JLabel();
        jPanel1 = new javax.swing.JPanel();
        jLabel2 = new javax.swing.JLabel();
        jLabel3 = new javax.swing.JLabel();
        txtclassname = new javax.swing.JComboBox<>();
        txtfloor = new javax.swing.JComboBox<>();
        jButton1 = new javax.swing.JButton();
        jButton2 = new javax.swing.JButton();
        jButton3 = new javax.swing.JButton();
        jScrollPane1 = new javax.swing.JScrollPane();
        jTable1 = new javax.swing.JTable();
        jButton4 = new javax.swing.JButton();
        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
        jLabel1.setFont(new java.awt.Font("Tahoma", 1, 24)); // NOI18N
        jLabel1.setText("CLASS");
        jPanel1.setBorder(new
javax.swing.border.SoftBevelBorder(javax.swing.border.BevelBorder.RAISED));
        jLabel2.setText("Class Name");
```

```
jLabel3.setText("Floor");

txtclassname.setModel(new javax.swing.DefaultComboBoxModel<>(new String[] { "9 - A", "9 - B", "9 - C", "10 - A", "10 - B", "10 - C", "11 - A", "11 - B", "11 - C", "12 - A", "12 - B", "12 - C" }));

txtfloor.setModel(new javax.swing.DefaultComboBoxModel<>(new String[] { "Floor 1", "Floor 2", "Floor 3" }));

javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);

jPanel1.setLayout(jPanel1Layout);

jPanel1Layout.setHorizontalGroup(

    jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING, jPanel1Layout.createSequentialGroup()

        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)

            .addComponent(jLabel2, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

            .addComponent(jLabel3, javax.swing.GroupLayout.PREFERRED_SIZE, 55, javax.swing.GroupLayout.PREFERRED_SIZE))

        .addGap(38, 38, 38)
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)

            .addComponent(txtclassname, 0, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

            .addComponent(txtfloor, javax.swing.GroupLayout.PREFERRED_SIZE, 90, javax.swing.GroupLayout.PREFERRED_SIZE))

        .addGap(57, 57, 57))
```

```
        );
        jPanel1Layout.setVerticalGroup(
            jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel1Layout.createSequentialGroup()
                .addContainerGap()

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADI
NG, false)
                    .addComponent(txtclassname)
                    .addComponent(jLabel2, javax.swing.GroupLayout.PREFERRED_SIZE, 20,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGap(18, 18, 18)
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELI
NE)
                    .addComponent(jLabel3, javax.swing.GroupLayout.PREFERRED_SIZE, 20,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(txtfloor, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
        );
        jButton1.setText("Create");
        jButton1.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton1ActionPerformed(evt);
            }
```

```
});
jButton2.setText("Delete");
jButton2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton2ActionPerformed(evt);
    }
});
jButton3.setText("Close");
jButton3.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton3ActionPerformed(evt);
    }
});
jTable1.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {
    },
    new String [] {
        "ID", "Class Name", "Floor"
    }
) {
    Class[] types = new Class [] {
        java.lang.Integer.class, java.lang.Object.class, java.lang.String.class
    };
    public Class getColumnClass(int columnIndex) {
```

```
            return types [columnIndex];
        }
    });
    jTable1.addMouseListener(new java.awt.event.MouseAdapter() {
        public void mouseClicked(java.awt.event.MouseEvent evt) {
            jTable1MouseClicked(evt);
        }
    });
    jScrollPane1.setViewportView(jTable1);
    jButton4.setText("Clear");
    jButton4.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            jButton4ActionPerformed(evt);
        }
    });
    javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
    getContentPane().setLayout(layout);
    layout.setHorizontalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.CENTER)
                .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE, 0,
Short.MAX_VALUE)
```

```
                .addComponent(jLabel1)
                .addGroup(layout.createSequentialGroup()
                    .addComponent(jButton1)
                    .addGap(18, 18, 18)
                    .addComponent(jButton4, javax.swing.GroupLayout.PREFERRED_SIZE, 65, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addGap(22, 22, 22)
                    .addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 65, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                    .addComponent(jButton3, javax.swing.GroupLayout.PREFERRED_SIZE, 65, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addComponent(jPanel1, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
            .addContainerGap())
        );
        layout.setVerticalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addContainerGap()
                .addComponent(jLabel1)
                .addGap(18, 18, 18)
                .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(18, 18, 18)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
```

```
                .addComponent(jButton1)
                .addComponent(jButton4)
                .addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 23, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jButton3, javax.swing.GroupLayout.PREFERRED_SIZE, 23, javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGap(18, 18, 18)
            .addComponent(jScrollPane1, javax.swing.GroupLayout.DEFAULT_SIZE, 229, Short.MAX_VALUE)
            .addContainerGap())
        );
        pack();
        setLocationRelativeTo(null);
    }// </editor-fold>//GEN-END:initComponents
    // This function used for clicking the 'Create' button and creating an instance.
    private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_jButton1ActionPerformed
        // TODO add your handling code here:
        try {
            String clname = txtclassname.getSelectedItem().toString();
            String floor = txtfloor.getSelectedItem().toString();
            // This line used for adding the created instance into the MySQL
            pst = con.prepareStatement("insert into class(classname, floor)values(?, ?)");
            pst.setString(1, clname);
            pst.setString(2, floor);
            pst.executeUpdate();
```

```
            JOptionPane.showMessageDialog(this, "Class is Created");
            // These lines used for turning empty to combobox.
            txtclassname.setSelectedIndex(-1);
            txtfloor.setSelectedIndex(-1);
            Class_Load();
            txtclassname.requestFocus();
        } catch (SQLException ex) {
            Logger.getLogger(user.class.getName()).log(Level.SEVERE, null, ex);
        }
    }//GEN-LAST:event_jButton1ActionPerformed
    // This function used for showing the selected instance on the blanks.
    private void jTable1MouseClicked(java.awt.event.MouseEvent evt) {//GEN-
FIRST:event_jTable1MouseClicked
        // TODO add your handling code here:
        d = (DefaultTableModel)jTable1.getModel();
        int selectIndex = jTable1.getSelectedRow();
        String id = d.getValueAt(selectIndex, 0).toString();
        txtclassname.setSelectedItem(d.getValueAt(selectIndex, 1).toString());
        txtfloor.setSelectedItem(d.getValueAt(selectIndex, 2).toString());
    // This line used for disabling to create button when the selected instance is shown by the
blanks.
        jButton1.setEnabled(false);
    }//GEN-LAST:event_jTable1MouseClicked
// This function used for the clearing blanks and also for using 'Clear' button.
```

```
    private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_jButton4ActionPerformed
        // TODO add your handling code here:
        // These lines used for turning empty to combobox.
        txtclassname.setSelectedIndex(-1);
        txtfloor.setSelectedIndex(-1);
        // This line used for enabling to create button.
        jButton1.setEnabled(true);
    }//GEN-LAST:event_jButton4ActionPerformed
// This function is used for deleting the selected instance or row.
    private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_jButton2ActionPerformed
        // TODO add your handling code here:
        try {
            d = (DefaultTableModel)jTable1.getModel();
            int selectIndex = jTable1.getSelectedRow();
            // This variable used for knowing which instance or row selected.
            String id = d.getValueAt(selectIndex, 0).toString();
            // With these lines we are able to delete instance from the table according to its id.
            pst = con.prepareStatement("delete from class where cid = ?");
            pst.setString(1, id);
            pst.executeUpdate();
            JOptionPane.showMessageDialog(this, "Class is Deleted");
            Class_Load();
            // This line used for enabling to create button.
```

```
            jButton1.setEnabled(true);
            // These lines used for turning empty to combobox.
            txtclassname.setSelectedIndex(-1);
            txtfloor.setSelectedIndex(-1);
        } catch (SQLException ex) {
            Logger.getLogger(user.class.getName()).log(Level.SEVERE, null, ex);
        } }//GEN-
    LAST:event_jButton2ActionPerformed // This
    function used for closing the page.
    private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-
FIRST:event_jButton3ActionPerformed
        // TODO add your handling code here:
        this.setVisible(false); }//GEN-
    LAST:event_jButton3ActionPerformed /**
     * @param args the command line arguments
     */
    public static void main(String args[]) {
        /* Set the Nimbus look and feel */
        //<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
        /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and
feel.
         * For details see
http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
         */
```

```
        try {
            for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
                if ("Nimbus".equals(info.getName())) {
                    javax.swing.UIManager.setLookAndFeel(info.getClassName());
                    break;
                }
            }
        } catch (ClassNotFoundException ex) {
java.util.logging.Logger.getLogger(classes.class.getName()).log(java.util.logging.Level.SEV
ERE, null, ex);
        } catch (InstantiationException ex) {
java.util.logging.Logger.getLogger(classes.class.getName()).log(java.util.logging.Level.SEV
ERE, null, ex);
        } catch (IllegalAccessException ex) {
java.util.logging.Logger.getLogger(classes.class.getName()).log(java.util.logging.Level.SEV
ERE, null, ex);
        } catch (javax.swing.UnsupportedLookAndFeelException ex) {
java.util.logging.Logger.getLogger(classes.class.getName()).log(java.util.logging.Level.SEV
ERE, null, ex);
        }
        //</editor-fold>
        /* Create and display the form */
        java.awt.EventQueue.invokeLater(new Runnable() {
            public void run() {
                new classes().setVisible(true);
```

```
            }
        });
    }
    // Variables declaration - do not modify//GEN-BEGIN:variables
    private javax.swing.JButton jButton1;
    private javax.swing.JButton jButton2;
    private javax.swing.JButton jButton3;
    private javax.swing.JButton jButton4;
    private javax.swing.JLabel jLabel1;
    private javax.swing.JLabel jLabel2;
    private javax.swing.JLabel jLabel3;
    private javax.swing.JPanel jPanel1;
    private javax.swing.JScrollPane jScrollPane1;
    private javax.swing.JTable jTable1;
    private javax.swing.JComboBox<String> txtclassname;
    private javax.swing.JComboBox<String> txtfloor;
    // End of variables declaration//GEN-END:variables
}
```

SUBJECT CLASS

```
import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.PreparedStatement;

import java.sql.ResultSet;

import java.sql.ResultSetMetaData;

import java.sql.SQLException;

import java.util.Vector;

import java.util.logging.Level;

import java.util.logging.Logger;

import javax.swing.JOptionPane;

import javax.swing.table.DefaultTableModel;

/*

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 */

/**

*

 *

 */

public class subject extends javax.swing.JFrame {

    /**

     * Creates new form subject
```

```
     */
    public subject() {
        initComponents();
        Connect();
        Subject_Load();
    }
    Connection con;
    PreparedStatement pst;
    ResultSet rs;
    DefaultTableModel d;
    // Inside this method established the connection between MySQL Server and NetBeans.
    // In addition, this function used for connecting to 'Subject' page.
    public void Connect() {
        try {
            Class.forName("com.mysql.jdbc.Driver"); // For drivers
            con = DriverManager.getConnection("jdbc:mysql://localhost/schoolmanagement",
"root", ""); // Connection object and entering the path of our database
        } catch (ClassNotFoundException ex) {
            Logger.getLogger(user.class.getName()).log(Level.SEVERE, null, ex);
        } catch (SQLException ex) {
            Logger.getLogger(user.class.getName()).log(Level.SEVERE, null, ex);
        }
    }
    // This function used for loading the instance to our program's table from the database.
    // This function is used for getting the instance from the database.
```

```
  public void Subject_Load() {
    int c;
    try {
        pst = con.prepareStatement("CALL `getSubject`();");
        rs = pst.executeQuery();
        ResultSetMetaData rsd = rs.getMetaData();
        c = rsd.getColumnCount();
        d = (DefaultTableModel)jTable1.getModel();
        d.setRowCount(0);
        while(rs.next()) {
            Vector v2 = new Vector();
            for(int i = 1; i <= c; i++) {
                v2.add(rs.getString("sid"));
                v2.add(rs.getString("subjectname"));
            }
            d.addRow(v2);
        }
    } catch (SQLException ex) {
        Logger.getLogger(user.class.getName()).log(Level.SEVERE, null, ex);
    }
  }
/**
 * This method is called from within the constructor to initialize the form.
 * WARNING: Do NOT modify this code. The content of this method is always
```

```
    * regenerated by the Form Editor.
    */
    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-
BEGIN:initComponents
    private void initComponents() {
        jLabel1 = new javax.swing.JLabel();
        jPanel1 = new javax.swing.JPanel();
        jLabel2 = new javax.swing.JLabel();
        txtsubject = new javax.swing.JTextField();
        jButton1 = new javax.swing.JButton();
        jButton2 = new javax.swing.JButton();
        jButton3 = new javax.swing.JButton();
        jButton4 = new javax.swing.JButton();
        jScrollPane1 = new javax.swing.JScrollPane();
        jTable1 = new javax.swing.JTable();
        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
        jLabel1.setFont(new java.awt.Font("Tahoma", 1, 24)); // NOI18N
        jLabel1.setText("SUBJECT");
        jPanel1.setBorder(new
javax.swing.border.SoftBevelBorder(javax.swing.border.BevelBorder.RAISED));
        jLabel2.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
        jLabel2.setText("Subject");
        txtsubject.setFont(new java.awt.Font("Tahoma", 1, 12)); // NOI18N
        javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
```

```
        jPanel1.setLayout(jPanel1Layout);
        jPanel1Layout.setHorizontalGroup(
            jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel1Layout.createSequentialGroup()
                .addGap(35, 35, 35)
                .addComponent(jLabel2)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 45, Short.MAX_VALUE)
                .addComponent(txtsubject, javax.swing.GroupLayout.PREFERRED_SIZE, 150, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(19, 19, 19))
        );
        jPanel1Layout.setVerticalGroup(
            jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel1Layout.createSequentialGroup()
                .addContainerGap()
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(jLabel2)
                    .addComponent(txtsubject, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
        );
        jButton1.setText("Create");
```

```
jButton1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton1ActionPerformed(evt);
    }
});
jButton2.setText("Delete");
jButton2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton2ActionPerformed(evt);
    }
});
jButton3.setText("Clear");
jButton3.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton3ActionPerformed(evt);
    }
});
jButton4.setText("Close");
jButton4.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton4ActionPerformed(evt);
    }
});
jTable1.setModel(new javax.swing.table.DefaultTableModel(
```

```
    new Object [][] {
    },
    new String [] {
        "ID", "Subject Name"
    }
) {
    Class[] types = new Class [] {
        java.lang.Integer.class, java.lang.String.class
    };
    public Class getColumnClass(int columnIndex) {
        return types [columnIndex];
    }
});
jTable1.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent evt) {
        jTable1MouseClicked(evt);
    }
});
jScrollPane1.setViewportView(jTable1);
javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(layout.createSequentialGroup()
```

```
            .addContainerGap()
.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addComponent(jScrollPane1, javax.swing.GroupLayout.DEFAULT_SIZE, 381,
Short.MAX_VALUE)
                .addGroup(javax.swing.GroupLayout.Alignment.CENTER,
layout.createSequentialGroup()
.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addGroup(javax.swing.GroupLayout.Alignment.CENTER,
layout.createSequentialGroup()
                        .addComponent(jButton1,
javax.swing.GroupLayout.PREFERRED_SIZE, 80,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addGap(18, 18, 18)
                        .addComponent(jButton3,
javax.swing.GroupLayout.PREFERRED_SIZE, 80,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addGap(18, 18, 18)
                        .addComponent(jButton2,
javax.swing.GroupLayout.PREFERRED_SIZE, 80,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addGap(18, 18, 18)
                        .addComponent(jButton4,
javax.swing.GroupLayout.PREFERRED_SIZE, 80,
javax.swing.GroupLayout.PREFERRED_SIZE))
                    .addComponent(jLabel1, javax.swing.GroupLayout.Alignment.CENTER)
                    .addComponent(jPanel1, javax.swing.GroupLayout.Alignment.CENTER,
javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
```

```
                .addGap(0, 0, Short.MAX_VALUE)))
            .addContainerGap())
        );
        layout.setVerticalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addContainerGap()
                .addComponent(jLabel1)
                .addGap(18, 18, 18)
                .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(18, 18, 18)
.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 40,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jButton3, javax.swing.GroupLayout.PREFERRED_SIZE, 40,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 40,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jButton4, javax.swing.GroupLayout.PREFERRED_SIZE, 40,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGap(18, 18, 18)
                .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE, 198,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
        );
```

```
        pack();
        setLocationRelativeTo(null);
    }// </editor-fold>//GEN-END:initComponents
// This function used for clicking the 'Create' button and creating an instance.
    private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_jButton1ActionPerformed
        // TODO add your handling code here:
        try {
            String subject = txtsubject.getText();
            // This line used for adding the created instance into the MySQL
            pst = con.prepareStatement("CALL insertSubject(?);");
            pst.setString(1, subject);
            pst.executeUpdate();
            JOptionPane.showMessageDialog(this, "Subject is Created");
            txtsubject.setText("");
            Subject_Load();
            txtsubject.requestFocus();
        } catch (SQLException ex) {
            Logger.getLogger(user.class.getName()).log(Level.SEVERE, null, ex);
        }
    }//GEN-LAST:event_jButton1ActionPerformed
    // This function used for showing the selected instance on the blanks.
    private void jTable1MouseClicked(java.awt.event.MouseEvent evt) {//GEN-FIRST:event_jTable1MouseClicked
        // TODO add your handling code here:
```

```
        d = (DefaultTableModel)jTable1.getModel();
        int selectIndex = jTable1.getSelectedRow();
        String id = d.getValueAt(selectIndex, 0).toString();
        txtsubject.setText(d.getValueAt(selectIndex, 1).toString());
    // This line used for disabling to create button when the selected instance is shown by the blanks.
        jButton1.setEnabled(false); }//GEN-
    LAST:event_jTable1MouseClicked
    // This function is used for deleting the selected instance or row.
    private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_jButton2ActionPerformed
        // TODO add your handling code here:
        try {
            d = (DefaultTableModel)jTable1.getModel();
            int selectIndex = jTable1.getSelectedRow();
            // This variable used for knowing which instance or row selected.
            String id = d.getValueAt(selectIndex, 0).toString();
            // With these lines we are able to delete instance from the table according to its id.
            pst = con.prepareStatement("CALL deleteSubject(?);");
            pst.setString(1, id);
            pst.executeUpdate();
            JOptionPane.showMessageDialog(this, "Subject is Deleted");
            txtsubject.setText("");
            Subject_Load();
            txtsubject.requestFocus();
```

```
            jButton1.setEnabled(true);
        } catch (SQLException ex) {
            Logger.getLogger(user.class.getName()).log(Level.SEVERE, null, ex);
        }
    }//GEN-LAST:event_jButton2ActionPerformed
    // This function used for the clearing blanks and also for using 'Clear' button.
    private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-
FIRST:event_jButton3ActionPerformed
        // TODO add your handling code here:
            // These line used for turning empty to blank.
            txtsubject.setText("");
            Subject_Load();
            txtsubject.requestFocus();
// This line used for enabling to create button.
            jButton1.setEnabled(true); }//GEN-
    LAST:event_jButton3ActionPerformed // This
    function used for closing the page.
    private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-
FIRST:event_jButton4ActionPerformed
        // TODO add your handling code here:
        this.setVisible(false);
    }//GEN-LAST:event_jButton4ActionPerformed
    /**
     * @param args the command line arguments
     */
```

```
    public static void main(String args[]) {
        /* Set the Nimbus look and feel */
        //<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
        /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
         * For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
         */
        try {
            for (javax.swing.UIManager.LookAndFeelInfo info : javax.swing.UIManager.getInstalledLookAndFeels()) {
                if ("Nimbus".equals(info.getName())) {
                    javax.swing.UIManager.setLookAndFeel(info.getClassName());
                    break;
                }
            }
        } catch (ClassNotFoundException ex) {
java.util.logging.Logger.getLogger(subject.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
        } catch (InstantiationException ex) {
java.util.logging.Logger.getLogger(subject.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
        } catch (IllegalAccessException ex) {
java.util.logging.Logger.getLogger(subject.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
```

```
        } catch (javax.swing.UnsupportedLookAndFeelException ex) {
java.util.logging.Logger.getLogger(subject.class.getName()).log(java.util.logging.Level.SEV
ERE, null, ex);
        }
        //</editor-fold>
        /* Create and display the form */
        java.awt.EventQueue.invokeLater(new Runnable() {
            public void run() {
                new subject().setVisible(true);
            }
        });
    }
    // Variables declaration - do not modify//GEN-BEGIN:variables
    private javax.swing.JButton jButton1;
    private javax.swing.JButton jButton2;
    private javax.swing.JButton jButton3;
    private javax.swing.JButton jButton4;
    private javax.swing.JLabel jLabel1;
    private javax.swing.JLabel jLabel2;
    private javax.swing.JPanel jPanel1;
    private javax.swing.JScrollPane jScrollPane1;
    private javax.swing.JTable jTable1;
    private javax.swing.JTextField txtsubject;
    // End of variables declaration//GEN-END:variables
}
```

EXAM CLASS

```
import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.PreparedStatement;

import java.sql.ResultSet;

import java.sql.ResultSetMetaData;

import java.sql.SQLException;

import java.text.ParseException;

import java.text.SimpleDateFormat;

import java.util.Date;

import java.util.Vector;

import java.util.logging.Level;

import java.util.logging.Logger;

import javax.swing.JOptionPane;

import javax.swing.table.DefaultTableModel;

/*

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 */

/**

*

 * */
```

```
public class Exam extends javax.swing.JFrame {
    /**
     * Creates new form Exam
     */
    public Exam() {
        initComponents();
        Connect();
        Load_Class();
        //Load_Section();
        Load_Subject();
        Exam_Load();
    }
    Connection con;
    PreparedStatement pst;
    ResultSet rs;
    DefaultTableModel d;
    // Inside this method established the connection between MySQL Server and NetBeans.
    // In addition, this function used for connecting to 'Subject' page.
    public void Connect() {
        try {
            Class.forName("com.mysql.jdbc.Driver"); // For drivers
            con = DriverManager.getConnection("jdbc:mysql://localhost/schoolmanagement",
"root", ""); // Connection object and entering the path of our database
        } catch (ClassNotFoundException ex) {
            Logger.getLogger(user.class.getName()).log(Level.SEVERE, null, ex);
```

```
    } catch (SQLException ex) {
        Logger.getLogger(user.class.getName()).log(Level.SEVERE, null, ex);
    }
}
// This function is used for getting class instance from the database.
public void Load_Class() {
    try {
        pst = con.prepareStatement("select classname from class");
        rs = pst.executeQuery();
        txtclass.removeAllItems();
        // We are adding clasname to combobox.
        while(rs.next()) {
            txtclass.addItem(rs.getString("classname"));
        }
    } catch (SQLException ex) {
        Logger.getLogger(Exam.class.getName()).log(Level.SEVERE, null, ex);
    }
}
/*
// This function is used for getting section instance from the database.
public void Load_Section() {
    try {
        pst = con.prepareStatement("select Distinct section from class");
        rs = pst.executeQuery();
```

```
        txtsection.removeAllItems();
        // We are adding clasname to combobox.
        while(rs.next()) {
            txtsection.addItem(rs.getString("section"));
        }
    } catch (SQLException ex) {
        Logger.getLogger(Exam.class.getName()).log(Level.SEVERE, null, ex);
    }
}
*/
// This function is used for getting subjectname instance from the database.
public void Load_Subject() {
    try {
        pst = con.prepareStatement("select subjectname from subject");
        rs = pst.executeQuery();
        txtsubject.removeAllItems();
        // We are adding clasname to combobox.
        while(rs.next()) {
            txtsubject.addItem(rs.getString("subjectname"));
        }
    } catch (SQLException ex) {
        Logger.getLogger(Exam.class.getName()).log(Level.SEVERE, null, ex);
    }
}
```

```
// This function used for loading the instance to our program's table from the database.
// This function is used for getting the instance from the database.
public void Exam_Load() {
    int c;
    try {
        // pst = con.prepareStatement("CALL `getExam`();");
        pst = con.prepareStatement("SELECT * FROM exam");
        rs = pst.executeQuery();
        ResultSetMetaData rsd = rs.getMetaData();
        c = rsd.getColumnCount();
        d = (DefaultTableModel)jTable1.getModel();
        d.setRowCount(0);
        while(rs.next()) {
            Vector v2 = new Vector();
            for(int i = 1; i <= c; i++) {
                v2.add(rs.getString("eid"));
                v2.add(rs.getString("ename"));
                v2.add(rs.getString("term"));
                v2.add(rs.getString("date"));
                v2.add(rs.getString("class"));
                //v2.add(rs.getString("section"));
                v2.add(rs.getString("subject"));
            }
            d.addRow(v2);
```

```
            }
        } catch (SQLException ex) {
            Logger.getLogger(user.class.getName()).log(Level.SEVERE, null, ex);
        }
      }
    /**
     * This method is called from within the constructor to initialize the form.
     * WARNING: Do NOT modify this code. The content of this method is always
    * regenerated by the Form Editor.
    */
    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-
BEGIN:initComponents
    private void initComponents() {
        jLabel1 = new javax.swing.JLabel();
        jPanel1 = new javax.swing.JPanel();
        jLabel2 = new javax.swing.JLabel();
        jLabel3 = new javax.swing.JLabel();
        jLabel4 = new javax.swing.JLabel();
        jLabel5 = new javax.swing.JLabel();
        jLabel7 = new javax.swing.JLabel();
        txtename = new javax.swing.JTextField();
        txtterm = new javax.swing.JComboBox<>();
        txtclass = new javax.swing.JComboBox<>();
        txtsubject = new javax.swing.JComboBox<>();
```

```
        txtdate = new com.toedter.calendar.JDateChooser();
        jButton1 = new javax.swing.JButton();
        jButton2 = new javax.swing.JButton();
        jButton3 = new javax.swing.JButton();
        jButton4 = new javax.swing.JButton();
        jScrollPane1 = new javax.swing.JScrollPane();
        jTable1 = new javax.swing.JTable();
        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
        jLabel1.setFont(new java.awt.Font("Tahoma", 1, 24)); // NOI18N
        jLabel1.setText("EXAM");
        jPanel1.setBorder(new
javax.swing.border.SoftBevelBorder(javax.swing.border.BevelBorder.RAISED));
        jLabel2.setText("Exam Name");
        jLabel3.setText("Term");
        jLabel4.setText("Date");
        jLabel5.setText("Class");
        jLabel7.setText("Subject");
        txtterm.setModel(new javax.swing.DefaultComboBoxModel<>(new String[] { "First
Term", "Second Term" }));
        javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
        jPanel1.setLayout(jPanel1Layout);
        jPanel1Layout.setHorizontalGroup(
            jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel1Layout.createSequentialGroup()
```

```
            .addGap(104, 104, 104)
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADI
NG)
                .addComponent(jLabel2)
                .addComponent(jLabel3)
                .addComponent(jLabel5)
                .addComponent(jLabel4)
                .addComponent(jLabel7))
            .addGap(64, 64, 64)
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADI
NG, false)
                .addComponent(txtename)
                .addComponent(txtterm, 0, 120, Short.MAX_VALUE)
                .addComponent(txtclass, 0, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
                .addComponent(txtsubject, 0, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
                .addComponent(txtdate, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
            .addContainerGap(104, Short.MAX_VALUE))
        );
        jPanel1Layout.setVerticalGroup(
            jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel1Layout.createSequentialGroup()
                .addGap(34, 34, 34)
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELI
NE)
```

.addComponent(jLabel2)

.addComponent(txtename, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))

.addGap(18, 18, 18)
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

.addComponent(jLabel3)

.addComponent(txtterm, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))

.addGap(18, 18, 18)
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)

.addComponent(jLabel4)

.addComponent(txtdate, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))

.addGap(18, 18, 18)
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

.addComponent(jLabel5)

.addComponent(txtclass, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))

.addGap(18, 18, 18)
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

```
                .addComponent(txtsubject, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jLabel7))
            .addContainerGap(32, Short.MAX_VALUE))
        );
        jButton1.setText("Create");
        jButton1.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton1ActionPerformed(evt);
            }
        });
        jButton2.setText("Delete");
        jButton2.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton2ActionPerformed(evt);
            }
        });
        jButton3.setText("Clear");
        jButton3.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton3ActionPerformed(evt);
            }
        });
        jButton4.setText("Close");
        jButton4.addActionListener(new java.awt.event.ActionListener() {
```

```
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            jButton4ActionPerformed(evt);
        }
    });
    jTable1.setModel(new javax.swing.table.DefaultTableModel(
        new Object [][] {
        },
        new String [] {
            "Exam ID", "Exam Name", "Term", "Date", "Class", "Subject"
        }
    ) {
        Class[] types = new Class [] {
            java.lang.Integer.class, java.lang.String.class, java.lang.String.class,
java.lang.String.class, java.lang.String.class, java.lang.String.class
        };
        public Class getColumnClass(int columnIndex) {
            return types [columnIndex];
        }
    });
    jTable1.addMouseListener(new java.awt.event.MouseAdapter() {
        public void mouseClicked(java.awt.event.MouseEvent evt) {
            jTable1MouseClicked(evt);
        }
    });
    jScrollPane1.setViewportView(jTable1);
```

```
        javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
        getContentPane().setLayout(layout);
        layout.setHorizontalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()
                .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addGroup(layout.createSequentialGroup()
                        .addGap(198, 198, 198)
                        .addComponent(jLabel1)))
                .addGap(89, 89, 89))
            .addGroup(layout.createSequentialGroup()
                .addContainerGap()
.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE,
614, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
81, javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE,
100, javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addGap(18, 18, 18)
```

```
                .addComponent(jButton3, javax.swing.GroupLayout.PREFERRED_SIZE,
100, javax.swing.GroupLayout.PREFERRED_SIZE)

                .addGap(18, 18, 18)

                .addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE,
100, javax.swing.GroupLayout.PREFERRED_SIZE)

                .addGap(18, 18, 18)

                .addComponent(jButton4, javax.swing.GroupLayout.PREFERRED_SIZE,
100, javax.swing.GroupLayout.PREFERRED_SIZE)

                .addGap(79, 79, 79)))

            .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))

        );

        layout.setVerticalGroup(

            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

            .addGroup(layout.createSequentialGroup()

                .addContainerGap()

                .addComponent(jLabel1)

                .addGap(18, 18, 18)

                .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)

                .addGap(18, 18, 18)

    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

                    .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 50,
javax.swing.GroupLayout.PREFERRED_SIZE)

                    .addComponent(jButton3, javax.swing.GroupLayout.PREFERRED_SIZE, 50,
javax.swing.GroupLayout.PREFERRED_SIZE)
```

```
                .addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 50, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jButton4, javax.swing.GroupLayout.PREFERRED_SIZE, 50, javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGap(18, 18, 18)
            .addComponent(jScrollPane1, javax.swing.GroupLayout.DEFAULT_SIZE, 252, Short.MAX_VALUE)
            .addContainerGap())
        );
        pack();
        setLocationRelativeTo(null);
    }// </editor-fold>//GEN-END:initComponents
    // This function used for clicking the 'Create' button and creating an instance.
    private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_jButton1ActionPerformed
        // TODO add your handling code here:
        String examname = txtename.getText();
        String term = txtterm.getSelectedItem().toString();
        // This line for the date button on the exam page.
        SimpleDateFormat df1 = new SimpleDateFormat("yyyy-MM-dd");
        String date = df1.format(txtdate.getDate());
        String classs = txtclass.getSelectedItem().toString();
        //String section = txtsection.getSelectedItem().toString();
        String subject = txtsubject.getSelectedItem().toString();
        // This line used for adding the created instance into the MySQL
        try {
```

```
            pst = con.prepareStatement("insert into exam(ename, term, date, class,
subject)values(?, ?, ?, ?, ?)");
            pst.setString(1, examname);
            pst.setString(2, term);
            pst.setString(3, date);
            pst.setString(4, classs);
            //pst.setString(5, section);
            pst.setString(5, subject);
            pst.executeUpdate();
            JOptionPane.showMessageDialog(this, "Exam is Created");
            // These lines used for clearing the blanks, after created the instance
            // These lines used for turning empty to blanks.
            txtename.setText("");
            // These line used for turning empty to combobox.
            txtterm.setSelectedIndex(-1);
            txtclass.setSelectedIndex(-1);
            //txtsection.setSelectedIndex(-1);
            txtsubject.setSelectedIndex(-1);
            // This line used by setting null to date.
            txtdate.setDate(null);
            // These line used for turning empty to combobox.
            txtename.requestFocus();
            Exam_Load();
        } catch (SQLException ex) {
            Logger.getLogger(Exam.class.getName()).log(Level.SEVERE, null, ex);
```

```
    } }//GEN-
    LAST:event_jButton1ActionPerformed // This
    function used for closing the page.
    private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-
FIRST:event_jButton4ActionPerformed
        // TODO add your handling code here:
        this.setVisible(false);
    }//GEN-LAST:event_jButton4ActionPerformed
    // This function used for the clearing blanks and also for using 'Clear' button.
    private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-
FIRST:event_jButton3ActionPerformed
        // TODO add your handling code here:
        jButton1.setEnabled(true);
        // These lines used for turning empty to blanks.
        txtename.setText("");
        // These line used for turning empty to combobox.
        txtterm.setSelectedIndex(-1);
        txtclass.setSelectedIndex(-1);
        //txtsection.setSelectedIndex(-1);
        txtsubject.setSelectedIndex(-1);
        // This line used by setting null to date.
        txtdate.setDate(null);
        // These line used for turning empty to combobox.
        txtename.requestFocus();
        Exam_Load();
```

```
    }//GEN-LAST:event_jButton3ActionPerformed

    // This function used for showing the selected instance on the blanks.
    private void jTable1MouseClicked(java.awt.event.MouseEvent evt) {//GEN-FIRST:event_jTable1MouseClicked
        try {
            // TODO add your handling code here:
            d = (DefaultTableModel)jTable1.getModel();
            int selectIndex = jTable1.getSelectedRow();
            String id = d.getValueAt(selectIndex, 0).toString();
            txtename.setText(d.getValueAt(selectIndex, 1).toString());
            txtterm.setSelectedItem(d.getValueAt(selectIndex, 2).toString());
            //This line for date
            Date date = new SimpleDateFormat("yyyy-MM-dd").parse((String)d.getValueAt(selectIndex, 3).toString());
            txtdate.setDate(date);
            txtclass.setSelectedItem(d.getValueAt(selectIndex, 4).toString());
            //txtsection.setSelectedItem(d.getValueAt(selectIndex, 5).toString());
            txtsubject.setSelectedItem(d.getValueAt(selectIndex, 5).toString());
            // This line used for disabling to create button when the selected instance is shown by the blanks.
            jButton1.setEnabled(false);
        } catch (ParseException ex) {
            Logger.getLogger(Exam.class.getName()).log(Level.SEVERE, null, ex);
        }
    }//GEN-LAST:event_jTable1MouseClicked
```

```
    // This function is used for deleting the selected instance or row.
    private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_jButton2ActionPerformed
        // TODO add your handling code here:
        try {
            d = (DefaultTableModel)jTable1.getModel();
            int selectIndex = jTable1.getSelectedRow();
            // This variable used for knowing which instance or row selected.
            String eid = d.getValueAt(selectIndex, 0).toString();
            // With these lines we are able to delete instance from the table according to its id.
            pst = con.prepareStatement("delete from exam where eid = ?");
            pst.setString(1, eid);
            pst.executeUpdate();
            JOptionPane.showMessageDialog(this, "Exam is Deleted");
            jButton1.setEnabled(true);
            // These lines used for turning empty to blanks.
            txtename.setText("");
            // These line used for turning empty to combobox.
            txtterm.setSelectedIndex(-1);
            txtclass.setSelectedIndex(-1);
            //txtsection.setSelectedIndex(-1);
            txtsubject.setSelectedIndex(-1);
            // This line used by setting null to date.
            txtdate.setDate(null);
            txtename.requestFocus();
```

```
            Exam_Load();
        } catch (SQLException ex) {
            Logger.getLogger(user.class.getName()).log(Level.SEVERE, null, ex);
        } }//GEN-
    LAST:event_jButton2ActionPerformed /**
     * @param args the command line arguments
     */
    public static void main(String args[]) {
        /* Set the Nimbus look and feel */
        //<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
        /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and
feel.
         * For details see
http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
         */
        try {
            for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
                if ("Nimbus".equals(info.getName())) {
                    javax.swing.UIManager.setLookAndFeel(info.getClassName());
                    break;
                }
            }
```

```
        } catch (ClassNotFoundException ex) {
java.util.logging.Logger.getLogger(Exam.class.getName()).log(java.util.logging.Level.SEVE
RE, null, ex);
        } catch (InstantiationException ex) {
java.util.logging.Logger.getLogger(Exam.class.getName()).log(java.util.logging.Level.SEVE
RE, null, ex);
        } catch (IllegalAccessException ex) {
java.util.logging.Logger.getLogger(Exam.class.getName()).log(java.util.logging.Level.SEVE
RE, null, ex);
        } catch (javax.swing.UnsupportedLookAndFeelException ex) {
java.util.logging.Logger.getLogger(Exam.class.getName()).log(java.util.logging.Level.SEVE
RE, null, ex);
        }
        //</editor-fold>
        /* Create and display the form */
        java.awt.EventQueue.invokeLater(new Runnable() {
            public void run() {
                new Exam().setVisible(true);
            }
        });
    }
    // Variables declaration - do not modify//GEN-BEGIN:variables
    private javax.swing.JButton jButton1;
    private javax.swing.JButton jButton2;
    private javax.swing.JButton jButton3;
    private javax.swing.JButton jButton4;
```

```
    private javax.swing.JLabel jLabel1;
    private javax.swing.JLabel jLabel2;
    private javax.swing.JLabel jLabel3;
    private javax.swing.JLabel jLabel4;
    private javax.swing.JLabel jLabel5;
    private javax.swing.JLabel jLabel7;
    private javax.swing.JPanel jPanel1;
    private javax.swing.JScrollPane jScrollPane1;
    private javax.swing.JTable jTable1;
    private javax.swing.JComboBox<String> txtclass;
    private com.toedter.calendar.JDateChooser txtdate;
    private javax.swing.JTextField txtename;
    private javax.swing.JComboBox<String> txtsubject;
    private javax.swing.JComboBox<String> txtterm;
    // End of variables declaration//GEN-END:variables
}
```

STUDENT CLASSES

```
import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.PreparedStatement;

import java.sql.ResultSet;

import java.sql.ResultSetMetaData;

import java.sql.SQLException;

import java.text.ParseException;

import java.text.SimpleDateFormat;

import java.util.Date;

import java.util.Vector;

import java.util.logging.Level;

import java.util.logging.Logger;

import javax.swing.JOptionPane;

import javax.swing.table.DefaultTableModel;

/*

 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license

 * Click nbfs://nbhost/SystemFileSystem/Templates/GUIForms/JFrame.java to edit this template

 */

/**

*

 *

 */
```

```
public class student extends javax.swing.JFrame {
    /**
     * Creates new form student
     */
    public student() {
        initComponents();
        Connect();
        Load_Class();
        //Load_Section();
        Student_Load();
    }
    Connection con;
    PreparedStatement pst;
    ResultSet rs;
    DefaultTableModel d;
    // Inside this method established the connection between MySQL Server and NetBeans.
    // In addition, this function used for connecting to 'Subject' page.
    public void Connect() {
        try {
            Class.forName("com.mysql.jdbc.Driver"); // For drivers
            con = DriverManager.getConnection("jdbc:mysql://localhost/schoolmanagement",
"root", ""); // Connection object and entering the path of our database
        } catch (ClassNotFoundException ex) {
            Logger.getLogger(user.class.getName()).log(Level.SEVERE, null, ex);
        } catch (SQLException ex) {
```

```
        Logger.getLogger(user.class.getName()).log(Level.SEVERE, null, ex);
    }
}
// This function is used for getting class instance from the database.
public void Load_Class() {
    try {
        pst = con.prepareStatement("select Distinct classname from class");
        rs = pst.executeQuery();
        txtclass.removeAllItems();
        // We are adding clasname to combobox.
        while(rs.next()) {
            txtclass.addItem(rs.getString("classname"));
        }
    } catch (SQLException ex) {
        Logger.getLogger(Exam.class.getName()).log(Level.SEVERE, null, ex);
    }
}
/*
// This function is used for getting section instance from the database.
public void Load_Section() {
    try {
        pst = con.prepareStatement("select Distinct section from class");
        rs = pst.executeQuery();
        txtsection.removeAllItems();
```

```
        // We are adding clasname to combobox.
        while(rs.next()) {
            txtsection.addItem(rs.getString("section"));
        }
    } catch (SQLException ex) {
        Logger.getLogger(Exam.class.getName()).log(Level.SEVERE, null, ex);
    }
}
*/
// This function used for loading the instance to our program's table from the database.
// This function is used for getting the instance from the database.
public void Student_Load() {
    int c;
    try {
        pst = con.prepareStatement("SELECT * FROM student");
        rs = pst.executeQuery();
        ResultSetMetaData rsd = rs.getMetaData();
        c = rsd.getColumnCount();
        d = (DefaultTableModel)jTable1.getModel();
        d.setRowCount(0);
        while(rs.next()) {
            Vector v2 = new Vector();
            for(int i = 1; i <= c; i++) {
```

```
                v2.add(rs.getString("id"));
                v2.add(rs.getString("stname"));
                v2.add(rs.getString("pname"));
                v2.add(rs.getString("dob"));
                v2.add(rs.getString("gender"));
                v2.add(rs.getString("address"));
                v2.add(rs.getString("class"));
                //v2.add(rs.getString("section"));
            }
            d.addRow(v2);
        }
      } catch (SQLException ex) {
          Logger.getLogger(user.class.getName()).log(Level.SEVERE, null, ex);
      }
    }
    /**
     * This method is called from within the constructor to initialize the form.
     * WARNING: Do NOT modify this code. The content of this method is always
     * regenerated by the Form Editor.
     */
    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-
BEGIN:initComponents
    private void initComponents() {
```

```
jLabel1 = new javax.swing.JLabel();

jPanel1 = new javax.swing.JPanel();

jLabel2 = new javax.swing.JLabel();

jLabel3 = new javax.swing.JLabel();

jLabel4 = new javax.swing.JLabel();

jLabel5 = new javax.swing.JLabel();

txtstname = new javax.swing.JTextField();

txtpname = new javax.swing.JTextField();

txtdob = new com.toedter.calendar.JDateChooser();

txtgender = new javax.swing.JComboBox<>();

txtaddress = new javax.swing.JTextField();

txtclass = new javax.swing.JComboBox<>();

jLabel7 = new javax.swing.JLabel();

jLabel8 = new javax.swing.JLabel();

jButton1 = new javax.swing.JButton();

jButton2 = new javax.swing.JButton();

jButton3 = new javax.swing.JButton();

jButton4 = new javax.swing.JButton();

jButton5 = new javax.swing.JButton();

jScrollPane1 = new javax.swing.JScrollPane();

jTable1 = new javax.swing.JTable();

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

jLabel1.setFont(new java.awt.Font("Tahoma", 1, 24)); // NOI18N

jLabel1.setText("STUDENT REGISTRATION");
```

```
        jPanel1.setBorder(new
javax.swing.border.SoftBevelBorder(javax.swing.border.BevelBorder.RAISED));
        jLabel2.setFont(new java.awt.Font("Tahoma", 1, 12)); // NOI18N
        jLabel2.setText("Student Name");
        jLabel3.setFont(new java.awt.Font("Tahoma", 1, 12)); // NOI18N
        jLabel3.setText("Student Surname");
        jLabel4.setFont(new java.awt.Font("Tahoma", 1, 12)); // NOI18N
        jLabel4.setText("Date of Birth");
        jLabel5.setFont(new java.awt.Font("Tahoma", 1, 12)); // NOI18N
        jLabel5.setText("Gender");
        txtgender.setModel(new javax.swing.DefaultComboBoxModel<>(new String[] {
"Male", "Female" }));
        jLabel7.setFont(new java.awt.Font("Tahoma", 1, 12)); // NOI18N
        jLabel7.setText("Address");
        jLabel8.setFont(new java.awt.Font("Tahoma", 1, 12)); // NOI18N
        jLabel8.setText("Class");
        javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
        jPanel1.setLayout(jPanel1Layout);
        jPanel1Layout.setHorizontalGroup(
            jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel1Layout.createSequentialGroup()
                .addGap(44, 44, 44)
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADI
NG)
                    .addComponent(jLabel4)
                    .addComponent(jLabel3)
```

```
                .addComponent(jLabel2)
                .addComponent(jLabel5)
                .addComponent(jLabel7)
                .addComponent(jLabel8))
            .addGap(31, 31, 31)
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADI
NG)
                .addComponent(txtgender, javax.swing.GroupLayout.Alignment.TRAILING, 0,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                .addComponent(txtpname, javax.swing.GroupLayout.Alignment.TRAILING)
                .addComponent(txtstname, javax.swing.GroupLayout.Alignment.TRAILING)
                .addComponent(txtdob, javax.swing.GroupLayout.DEFAULT_SIZE, 124,
Short.MAX_VALUE)
                .addComponent(txtaddress)
                .addComponent(txtclass, 0, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
            .addGap(36, 36, 36))
        );
        jPanel1Layout.setVerticalGroup(
            jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel1Layout.createSequentialGroup()
                .addGap(34, 34, 34)
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILI
NG)
                .addComponent(txtstname, javax.swing.GroupLayout.PREFERRED_SIZE, 30,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jLabel2))
```

```
            .addGap(18, 18, 18)
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                .addComponent(txtpname, javax.swing.GroupLayout.PREFERRED_SIZE, 30, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jLabel3))
            .addGap(18, 18, 18)
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                .addComponent(txtdob, javax.swing.GroupLayout.PREFERRED_SIZE, 30, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jLabel4))
            .addGap(18, 18, 18)
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                .addComponent(jLabel5)
                .addComponent(txtgender, javax.swing.GroupLayout.PREFERRED_SIZE, 30, javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGap(18, 18, 18)
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                .addComponent(txtaddress, javax.swing.GroupLayout.PREFERRED_SIZE, 30, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jLabel7))
            .addGap(18, 18, 18)
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
```

```
                .addComponent(txtclass, javax.swing.GroupLayout.PREFERRED_SIZE, 30,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jLabel8))
            .addContainerGap(36, Short.MAX_VALUE))
        );
        jButton1.setText("Create");
        jButton1.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton1ActionPerformed(evt);
            }
        });
        jButton2.setText("Update");
        jButton2.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton2ActionPerformed(evt);
            }
        });
        jButton3.setText("Delete");
        jButton3.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton3ActionPerformed(evt);
            }
        });
        jButton4.setText("Clear");
        jButton4.addActionListener(new java.awt.event.ActionListener() {
```

```
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            jButton4ActionPerformed(evt);
        }
    });
    jButton5.setText("Close");
    jButton5.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            jButton5ActionPerformed(evt);
        }
    });
    jTable1.setModel(new javax.swing.table.DefaultTableModel(
        new Object [][] {
        },
        new String [] {
            "Student ID", "Student Name", "Student Surname", "Date of Birth", "Gender",
"Address", "Class"
        }
    ));
    jTable1.addMouseListener(new java.awt.event.MouseAdapter() {
        public void mouseClicked(java.awt.event.MouseEvent evt) {
            jTable1MouseClicked(evt);
        }
    });
    jScrollPane1.setViewportView(jTable1);
```

```
javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
layout.setHorizontalGroup(
   layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
   .addGroup(layout.createSequentialGroup()
      .addContainerGap()
.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.CENTER)
         .addComponent(jLabel1)
         .addGroup(layout.createSequentialGroup()
            .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
               .addGroup(layout.createSequentialGroup()
                  .addComponent(jButton1,
javax.swing.GroupLayout.PREFERRED_SIZE, 100,
javax.swing.GroupLayout.PREFERRED_SIZE)
               .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                  .addComponent(jButton2,
javax.swing.GroupLayout.PREFERRED_SIZE, 100,
javax.swing.GroupLayout.PREFERRED_SIZE)
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                  .addComponent(jButton4,
javax.swing.GroupLayout.PREFERRED_SIZE, 100,
javax.swing.GroupLayout.PREFERRED_SIZE)
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
```

```
                    .addComponent(jButton3,
javax.swing.GroupLayout.PREFERRED_SIZE, 100,
javax.swing.GroupLayout.PREFERRED_SIZE)

                    .addGap(5, 5, 5)

                    .addComponent(jButton5,
javax.swing.GroupLayout.PREFERRED_SIZE, 100,
javax.swing.GroupLayout.PREFERRED_SIZE))

                .addComponent(jScrollPane1,
javax.swing.GroupLayout.PREFERRED_SIZE, 872,
javax.swing.GroupLayout.PREFERRED_SIZE))))

            .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))

        );

        layout.setVerticalGroup(

            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

            .addGroup(layout.createSequentialGroup()

                .addContainerGap()

                .addComponent(jLabel1)

                .addGap(18, 18, 18)
.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING,
false)

                    .addComponent(jPanel1, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

                    .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE, 0,
Short.MAX_VALUE))

                .addGap(18, 18, 18)


.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
```

```
                .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 50,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 50,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jButton4, javax.swing.GroupLayout.PREFERRED_SIZE, 50,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jButton3, javax.swing.GroupLayout.PREFERRED_SIZE, 50,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jButton5, javax.swing.GroupLayout.PREFERRED_SIZE, 50,
javax.swing.GroupLayout.PREFERRED_SIZE))
            .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
        );
        pack();
        setLocationRelativeTo(null);
    }// </editor-fold>//GEN-END:initComponents
    // This function used for clicking the 'Create' button and creating an instance.
    private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-
FIRST:event_jButton1ActionPerformed
        // TODO add your handling code here:
        String stname = txtstname.getText();
        String pname = txtpname.getText();
        // This line for the date button on the student page.
        SimpleDateFormat df = new SimpleDateFormat("yyyy-MM-dd");
        String date = df.format(txtdob.getDate());
```

```
        String gender = txtgender.getSelectedItem().toString();
        String address = txtaddress.getText();
        String classes = txtclass.getSelectedItem().toString();
        //String section = txtsection.getSelectedItem().toString();
        try {
            // This line used for adding the created instance into the MySQL
            pst = con.prepareStatement("insert into student(stname, pname, dob, gender, address, class)values(?, ?, ?, ?, ?, ?)");
            pst.setString(1, stname);
            pst.setString(2, pname);
            pst.setString(3, date);
            pst.setString(4, gender);
            pst.setString(5, address);
            pst.setString(6, classes);
            //pst.setString(7, section);
            pst.executeUpdate();
            JOptionPane.showMessageDialog(this, "Student is Created");
            //txtstname.requestFocus();
            txtstname.setText("");
            txtpname.setText("");
            txtdob.setDate(null);
            txtgender.setSelectedIndex(-1);
            txtaddress.setText("");
            txtclass.setSelectedIndex(-1);
            //txtsection.setSelectedIndex(-1);
```

```
            txtstname.requestFocus();
            Student_Load();
        } catch (SQLException ex) {
            Logger.getLogger(student.class.getName()).log(Level.SEVERE, null, ex);
        }
    }//GEN-LAST:event_jButton1ActionPerformed
    // This function used for showing the selected instance on the blanks.
    private void jTable1MouseClicked(java.awt.event.MouseEvent evt) {//GEN-
FIRST:event_jTable1MouseClicked
        try {
            // TODO add your handling code here:
            d = (DefaultTableModel)jTable1.getModel();
            int selectIndex = jTable1.getSelectedRow();
            String id = d.getValueAt(selectIndex, 0).toString();
            txtstname.setText(d.getValueAt(selectIndex, 1).toString());
            txtpname.setText(d.getValueAt(selectIndex, 2).toString());
            //This line for date
            Date date = new SimpleDateFormat("yyyy-MM-
dd").parse((String)d.getValueAt(selectIndex, 3).toString());
            txtdob.setDate(date);
            txtgender.setSelectedItem(d.getValueAt(selectIndex, 4).toString());
            txtaddress.setText(d.getValueAt(selectIndex, 5).toString());
            txtclass.setSelectedItem(d.getValueAt(selectIndex, 6).toString());
            //txtsection.setSelectedItem(d.getValueAt(selectIndex, 7).toString());
```

```
            // This line used for disabling to create button when the selected instance is shown by the blanks.
            jButton1.setEnabled(false);
        } catch (ParseException ex) {
            Logger.getLogger(student.class.getName()).log(Level.SEVERE, null, ex);
        }
    }//GEN-LAST:event_jTable1MouseClicked
    // This function used for the updating the instance's values.
    private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_jButton2ActionPerformed
        // TODO add your handling code here:
            d = (DefaultTableModel)jTable1.getModel();
            int selectIndex = jTable1.getSelectedRow();
            // When the user select the instance, its id will be stored in the 'selectIndex' and assign to 'id' variable.
            String id = d.getValueAt(selectIndex, 0).toString();
            String stname = txtstname.getText();
            String pname = txtpname.getText();
            // This line for the date button on the student page.
            SimpleDateFormat df = new SimpleDateFormat("yyyy-MM-dd");
            String date = df.format(txtdob.getDate());
            String gender = txtgender.getSelectedItem().toString();
            String address = txtaddress.getText();
            String classes = txtclass.getSelectedItem().toString();
            //String section = txtsection.getSelectedItem().toString();
```

```
try {
// With these lines, we can available to change all of the attributes without password.
pst = con.prepareStatement("update student set stname = ?, pname = ?, dob = ?,
gender = ?, address = ?, class = ? where id = ?");
pst.setString(1, stname);
pst.setString(2, pname);
pst.setString(3, date);
pst.setString(4, gender);
pst.setString(5, address);
pst.setString(6, classes);
//pst.setString(7, section);
pst.setString(7, id);
pst.executeUpdate();
JOptionPane.showMessageDialog(this, "Student is Updated");
Student_Load();
// This line used for the enable to 'Create' button after updating the selected instance.
jButton1.setEnabled(true);
// These lines used for clearing the blanks, after created the instance.
txtstname.setText("");
txtpname.setText("");
txtdob.setDate(null);
txtgender.setSelectedIndex(-1);
txtaddress.setText("");
txtclass.setSelectedIndex(-1);
//txtsection.setSelectedIndex(-1);
```

```
            txtstname.requestFocus();
            Student_Load();
        } catch (SQLException ex) {
            Logger.getLogger(user.class.getName()).log(Level.SEVERE, null, ex);
        }
    }//GEN-LAST:event_jButton2ActionPerformed
    private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_jButton4ActionPerformed
        // TODO add your handling code here:
        jButton1.setEnabled(true);
        // These lines used for turning empty to blanks.
        txtstname.setText("");
        txtpname.setText("");
        txtdob.setDate(null);
        txtgender.setSelectedIndex(-1);
        txtaddress.setText("");
        txtclass.setSelectedIndex(-1);
        //txtsection.setSelectedIndex(-1);
        txtstname.requestFocus();
        Student_Load();
    }//GEN-LAST:event_jButton4ActionPerformed
    // This function is used for deleting the selected instance or row.
    private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_jButton3ActionPerformed
        // TODO add your handling code here:
```

```
try {
    d = (DefaultTableModel)jTable1.getModel();
    int selectIndex = jTable1.getSelectedRow();
    // This variable used for knowing which instance or row selected.
    String id = d.getValueAt(selectIndex, 0).toString();
    // With these lines we are able to delete instance from the table according to its id.
    pst = con.prepareStatement("delete from student where id = ?");
    pst.setString(1, id);
    pst.executeUpdate();
    JOptionPane.showMessageDialog(this, "Student is Deleted");
    jButton1.setEnabled(true);
    // These lines used for turning empty to blanks.
    txtstname.setText("");
    txtpname.setText("");
    txtdob.setDate(null);
    txtgender.setSelectedIndex(-1);
    txtaddress.setText("");
    txtclass.setSelectedIndex(-1);
    //txtsection.setSelectedIndex(-1);
    txtstname.requestFocus();
    Student_Load();
} catch (SQLException ex) {
    Logger.getLogger(user.class.getName()).log(Level.SEVERE, null, ex);
}
```

```
    }//GEN-LAST:event_jButton3ActionPerformed
// This function used for closing the our page.
    private void jButton5ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-
FIRST:event_jButton5ActionPerformed
        // TODO add your handling code here:
        this.setVisible(false); }//GEN-
    LAST:event_jButton5ActionPerformed /**
     * @param args the command line arguments
     */
    public static void main(String args[]) {
        /* Set the Nimbus look and feel */
        //<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
        /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and
feel.
         * For details see
http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
         */
        try {
            for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
                if ("Nimbus".equals(info.getName())) {
                    javax.swing.UIManager.setLookAndFeel(info.getClassName());
                    break;
                }
            }
```

```
        } catch (ClassNotFoundException ex) {
java.util.logging.Logger.getLogger(student.class.getName()).log(java.util.logging.Level.SEV
ERE, null, ex);
        } catch (InstantiationException ex) {
java.util.logging.Logger.getLogger(student.class.getName()).log(java.util.logging.Level.SEV
ERE, null, ex);
        } catch (IllegalAccessException ex) {
java.util.logging.Logger.getLogger(student.class.getName()).log(java.util.logging.Level.SEV
ERE, null, ex);
        } catch (javax.swing.UnsupportedLookAndFeelException ex) {
java.util.logging.Logger.getLogger(student.class.getName()).log(java.util.logging.Level.SEV
ERE, null, ex);
        }
        //</editor-fold>
        /* Create and display the form */
        java.awt.EventQueue.invokeLater(new Runnable() {
            public void run() {
                new student().setVisible(true);
            }
        });
    }
    // Variables declaration - do not modify//GEN-BEGIN:variables
    private javax.swing.JButton jButton1;
    private javax.swing.JButton jButton2;
    private javax.swing.JButton jButton3;
    private javax.swing.JButton jButton4;
```

```
    private javax.swing.JButton jButton5;
    private javax.swing.JLabel jLabel1;
    private javax.swing.JLabel jLabel2;
    private javax.swing.JLabel jLabel3;
    private javax.swing.JLabel jLabel4;
    private javax.swing.JLabel jLabel5;
    private javax.swing.JLabel jLabel7;
    private javax.swing.JLabel jLabel8;
    private javax.swing.JPanel jPanel1;
    private javax.swing.JScrollPane jScrollPane1;
    private javax.swing.JTable jTable1;
    private javax.swing.JTextField txtaddress;
    private javax.swing.JComboBox<String> txtclass;
    private com.toedter.calendar.JDateChooser txtdob;
    private javax.swing.JComboBox<String> txtgender;
    private javax.swing.JTextField txtpname;
    private javax.swing.JTextField txtstname;
    // End of variables declaration//GEN-END:variables
}
```