Mapúa University

School Of Information Technology

JavaHub: Asset Acquisition and Monitoring System

A project in Object-oriented Programming (CS129-8L)

by:

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Submitted to:

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I. PROJECT CONTEXT

a. Description

JavaHub is an Asset Acquisition and Monitoring System that fulfills and exceeds the minimum requirements of managing and monitoring a maximum of five equipment, which are to be used in a maximum of three respective offices. This system allows the user to assign equipment in its respective office, to record the condition of that equipment, and to generate reports listing all equipment that was added and that was lost or disposed of into and from the database, respectively.

Before running the program, the user must first run the Apache and MySQL modules on the XAMPP Control Panel v3.3.0 on his computer to access the phpMyAdmin workbench from his browser. This is essential to the program since JavaHub is connected to a MySQL database, wherein JavaHub's offices (tables) and equipment (attributes) will be securely stored. Upon opening the NetBeans IDE, a message prompt will appear asking the user to resolve issues. To resolve these issues, the user must ensure that the project contains the mysql-connector-java-8.0.26 as this will allow the MySQL database to connect with Java. After doing all these necessary steps, the user may now begin running the program.

Upon running the program, the user will be prompted to log in with a username and password. He also has the option to register for a new account by clicking the "New user? Click here to register." button, where he will then be transferred to a new pane asking for his name, chosen username, and chosen password of five characters or more. After completing his details on the registration form and clicking the "REGISTER" button, he may finally enter his username and password in the login window. Once the user enters his correct username and password, he will be greeted by a message prompt and be led to JavaHub's menu window.

In the menu window, the user may choose from the following offices of JavaHub: Papers Office, Communications Office, and Head Office. When he selects an office, he will be redirected to the Monitor Equipment window, where he can insert, modify, and delete equipment. To insert an equipment, the user must begin by filling out the equipment name, by selecting the equipment's condition, and identifying the quantity of the equipment being added to the database. (Note: The ID of the equipment does not need to be filled out for inserting an equipment at this point, as it

is automatically incremented by the database while the user inputs the details of the equipment.) After filling out the necessary details for the equipment, the user may select the “INSERT” button to store the newly added equipment into the database. The user’s actions on adding, modifying, and deleting the equipment will be mirrored onto the table located on the left side of the Monitor Equipment window. To modify an equipment, the user must input the ID of the equipment that he wants to modify and fill out the necessary details that he is to modify. Afterwards, he may then select the “MODIFY” button to change the initial details to his desired content. Lastly, to delete an equipment, the user can simply input the ID of the equipment and then select the “DELETE” button to remove the specified equipment ID from the table and the database. (Note: The area where the price of the equipment will be stored will only be made available to the user when he selects the Lost/Disposed equipment option in the combo box.)

If the user wanted to generate a report that listed all lost or disposed equipment, he simply had to select the “GENERATE PURCHASE” button at the lower right corner of the window to be transferred to the Purchases Report (Lost/Disposed report) window. In this window, the user will see a table listing the equipment lost or disposed of and its respective Damage or Replacement cost (fifth column). The reason why the Price text field was only available to the Lost/Disposed equipment was so that only the prices of the Lost/Disposed equipment may be generated and displayed onto the Purchases Report window. After viewing the Lost/Disposed report, the user may choose to select the “HELP” button to aid him in navigating around the program, or he may choose to select the “GO BACK” button to return to the previous window.

A few functionalities were added to the program to improve the navigability and aesthetic appeal of the program. In the Menu window, the “ACCOUNT” button displays the user’s name, username, and role through a message prompt. A “NOTIFICATIONS” button is also present to show the user the current build of the program and its upcoming build. Next, a “HELP” button was made available to the user to help easy navigation through the program, and, finally, an “EXIT” button to leave the current window.

b. Purpose

The purpose of the JavaHub Asset Acquisition and Monitoring System is to keep track and manage the physical equipment and assets of the company. They can be managed by simply allocating the assets to an office. This Asset Acquisition and Monitoring System improves the reliability and availability of the physical assets while minimizing risk and operating costs. This is a method of asset management that prioritizes business goals over standard asset dependability and availability goals. Asset maintenance, asset tracking, and loss prevention are the primary reasons for implementing fixed asset management.

Thus, this enables the JavaHub company to account for all of its assets. The company will know where assets are located and whether there have been changes made to them. There have been instances where assets that have been lost, destroyed, or stolen have been incorrectly reported on the books. The company will then be informed of any assets that have been lost, and they will be removed from the books. Consequently, they will also try to replace these assets by purchasing new ones.

c. Benefit

Having this system would have multiple benefits. In order for an asset acquisition and monitoring system to be effective, it must be backed up by a system that can track and preserve valuable assets. They work in a similar way to fleet management systems, but they may be used on a much larger scale. Assets like cars, tools, equipment, procedures, and even people can be assessed and managed efficiently from one central ‘hub' by collaborating with other company divisions, locations, and facilities. This method of working will assist your company in reducing overall capital and operating expenditures associated with your assets.

II. PROJECT DESIGN

a. UML Use Case Diagram

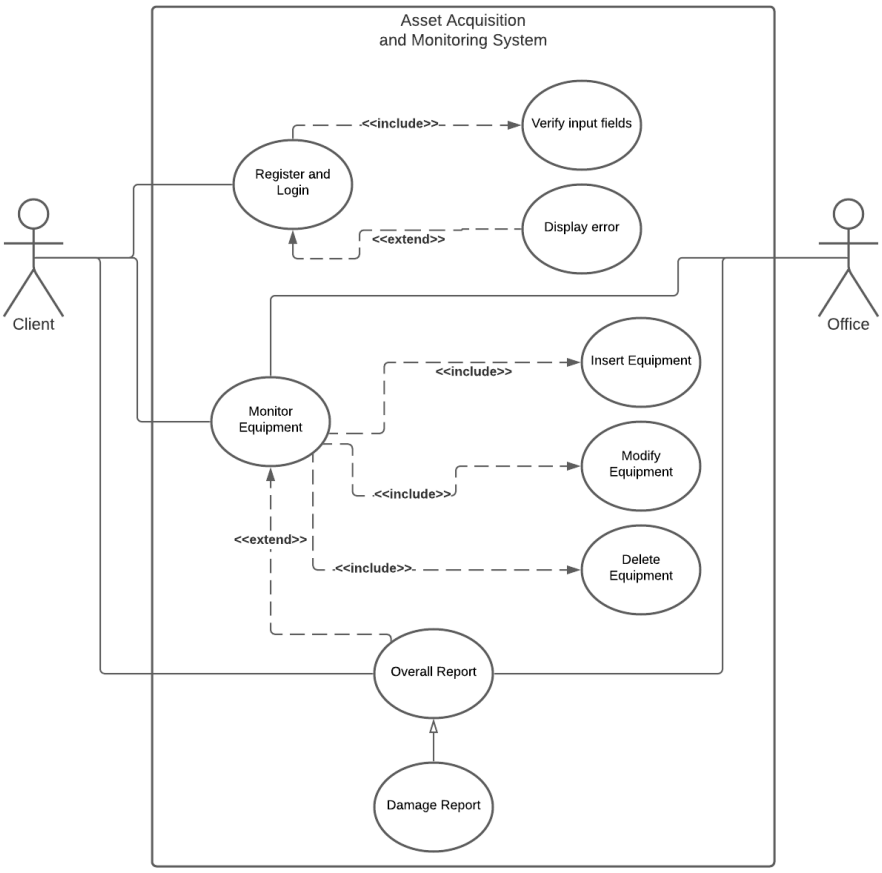


Figure 1.1 Use-Case Diagram of Asset Acquisition

In *Figure 1.1* as shown above, the external objects, the primary actor is the Client who will utilize the system in order to achieve the output. The secondary actor of the system will be the Office, this is because it will be the constituent that will provide and feed the necessary information throughout the system as it will be directly utilized throughout the system's algorithm. The first two windows or the first two processes are Login and Register processes, the action of verifying the fields will be vital because it is necessary to validate whether the user input corresponds to the conditions of the program, thus their relationship will be inclusive. When the user fails the verification, an error will appear to indicate what he has entered is wrong, this depicts an extension relationship because it can be considered as unnecessary, although it is a feature of the program so that the user may know that he needs to input the

fields again. The Office actor will not be connected to this window because such is unaware of the identity of the Client.

The case action of Monitoring Equipment will be the premier process of the system, the Client will use such a process in order to fulfill the objective of the program, while the Office provides its details such as its Name and other credentials needed. The following included case actions; Insert Equipment, Modify Equipment, and Delete Equipment are vital processes that are inclusive along with the Monitor Equipment, such is implemented so that the user will be able to do the necessary undertakings in the system. If these are omitted, the Client will not be able to successfully monitor the equipment.

The case action of generating the Overall Report will extend from the case action of Monitor Equipment because its details will be essentially permitted into the report, thus bearing the extension relationship, it is unnecessary however the system treats it as an additional feature. Furthermore, the Damage Report will inherit the details from the Overall Report and will eventually output the equipment that are tagged with necessary conditions that allows it to be a part of the former case action.

b. UML Class Diagram (Be sure to apply OOP features like inheritance, polymorphism, abstract class and/or interface)

Design Patterns (ProjectLibs)

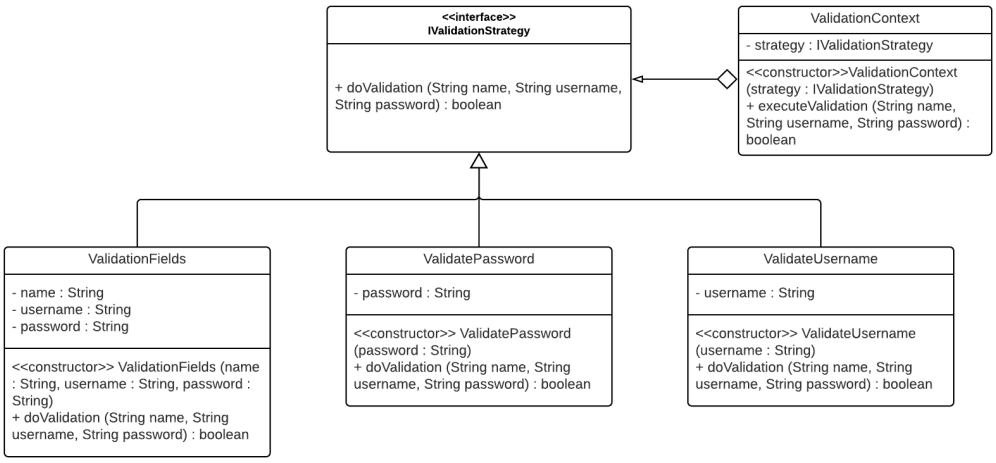


Figure 2.1 Strategy pattern applied to Register Validation

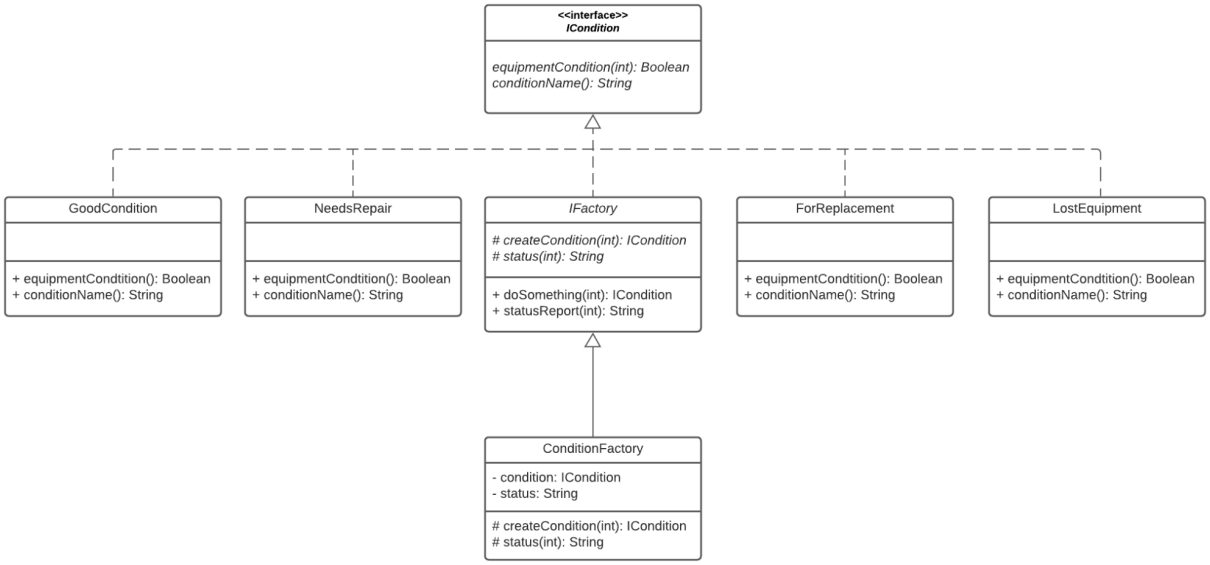


Figure 2.2 Factory pattern assigned to the Equipment Conditions

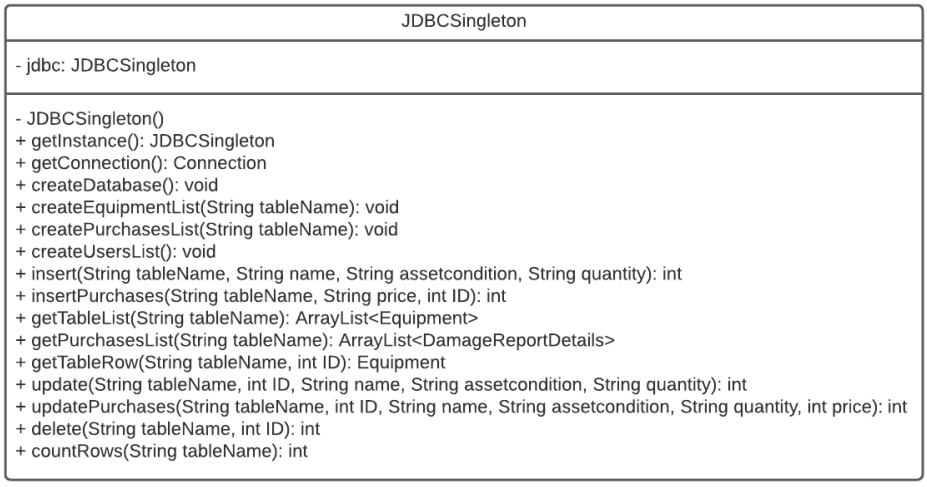


Figure 2.3 Singleton Pattern assigned to the JDBCSingleton Class

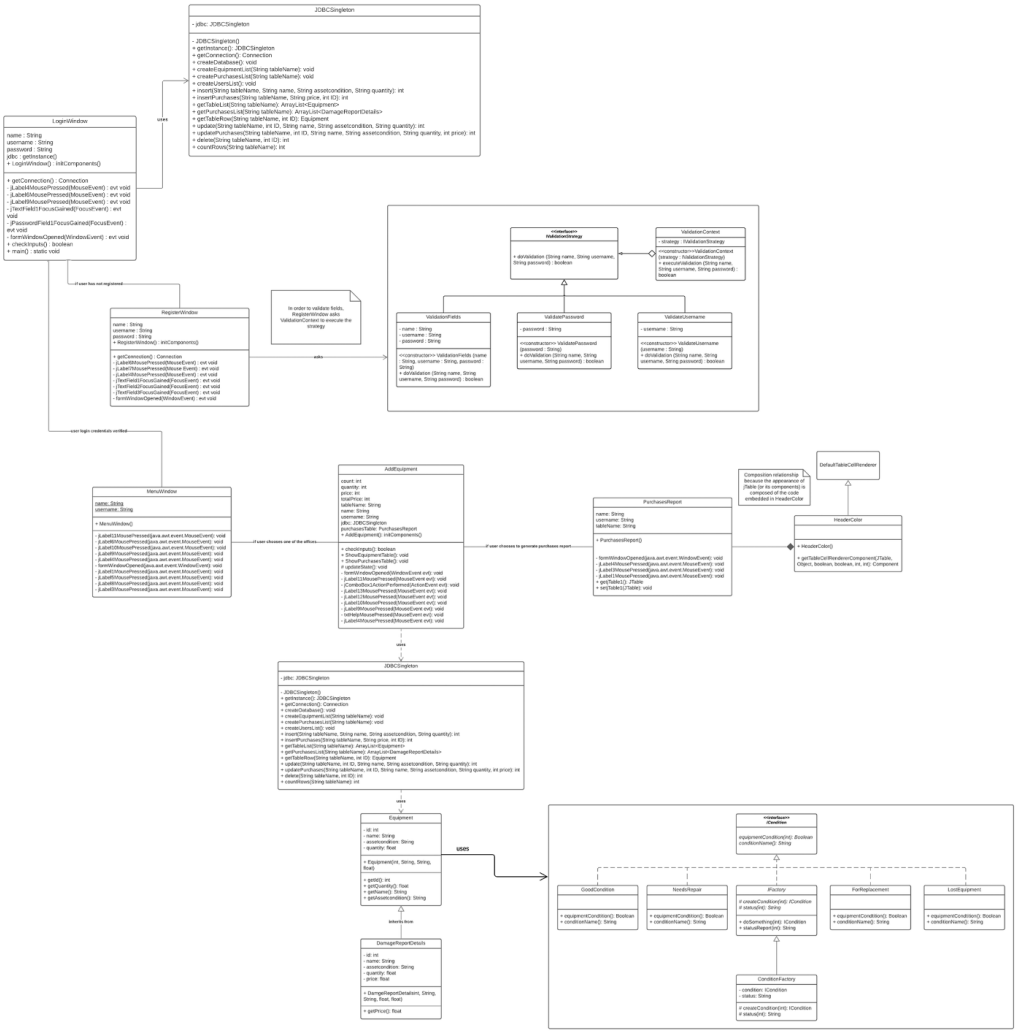


Figure 2.4 Overall Class Diagram with GUI

c. Design Pattern/s Used (Minimum of 2)

The following design patterns applied in the program are enlisted below:

a.) Factory Pattern is a creational design pattern that involves creating an object without exposing the nature of the algorithm or the logic itself to the client and eventually notes some references to the newly created object while using a common interface.

Factory pattern is applied on the development of the system's damage report, where the system generates a report of the equipment that is classified with the lost or disposed condition. Classes of the project that are used to apply with the mentioned design pattern are as follows; ConditionFactory, DamageReportDetails, ForReplacement, GoodCondition, ICondition, IFactory, LostEquipment and NeedsRepair.

b.) Singleton Pattern is the involvement of a single class that is responsible for creating an object while ensuring that a single object is created. The class provides a way to access its only object which can be accessed directly without the need to instantiate the object of the class.

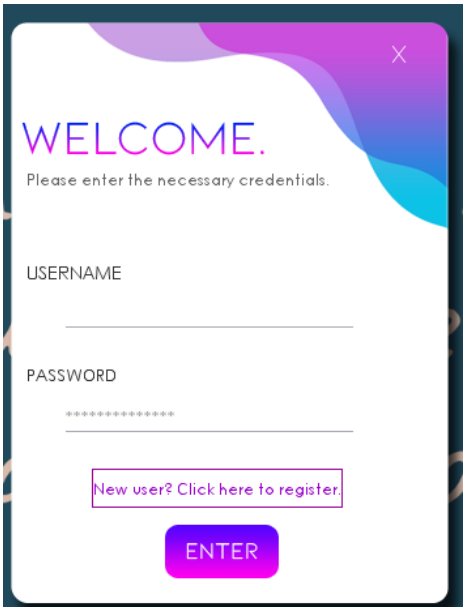
Singleton pattern is applied with the class JDBCSingleton, which serves to be the distributor of the execution of SQL database connection and SQL queries, especially when it comes to the creation of databases and tables. Hence, once the related class is called from the other classes, it is directly accessed without executing the necessity to instantiate what is needed from the class.

c.) Strategy Pattern is a behavioral class whose algorithm is changed at run time. The design pattern involves creating objects that represent various strategies to execute and a context object whose behavior depends on the strategy object. In this case, the strategy object changes the execution of the algorithm of the context object.

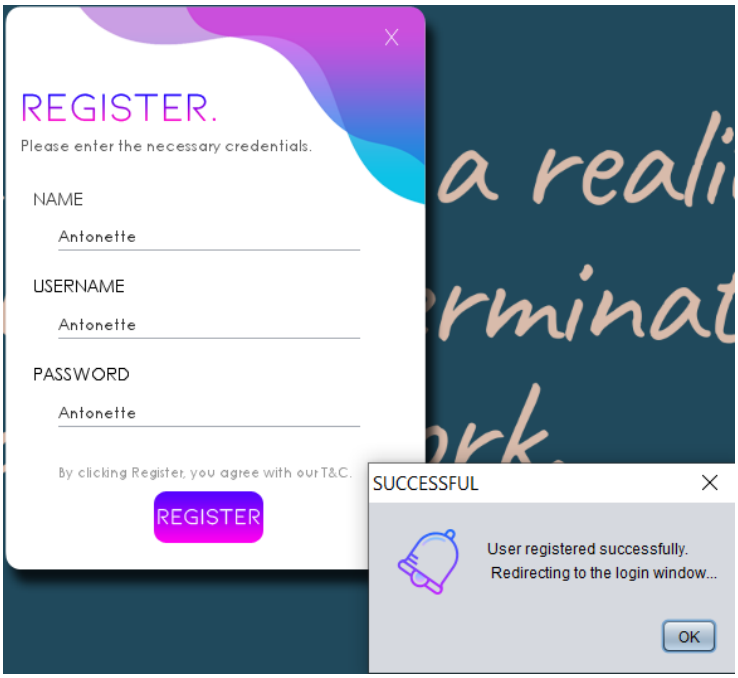
Strategy pattern is applied on the validation of the user's input credentials in the registration form. The following classes that are involved in this pattern are the following; IValidationStrategy, ValidateUsername, ValidatePassword, ValidationFields and ValidationContext. Essentially, the algorithm of the pattern will depend on what input the user has entered into his credentials, as to which condition or code will be executed, thus one can say that the validation output will depend if either the user has a flaw in typing his username, password, or other fields.

III. SAMPLE SCREEN SHOTS

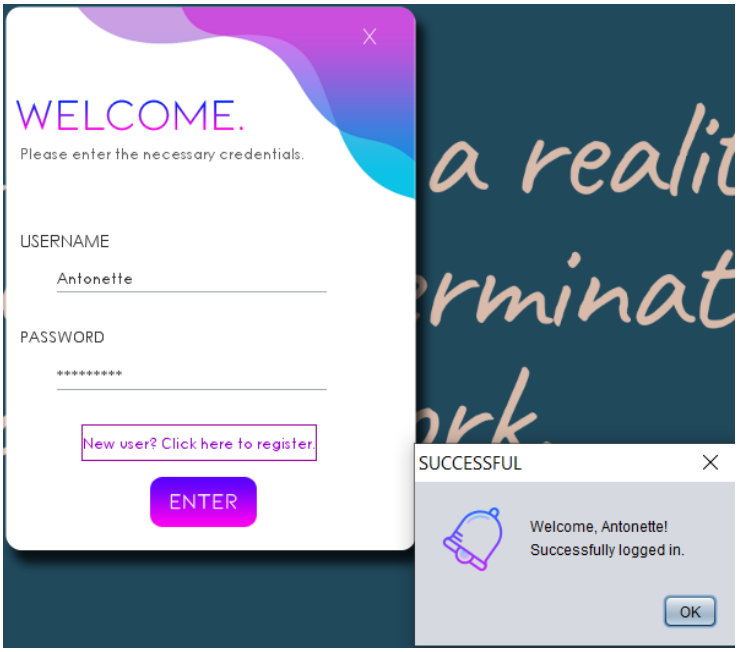
1. Login Window



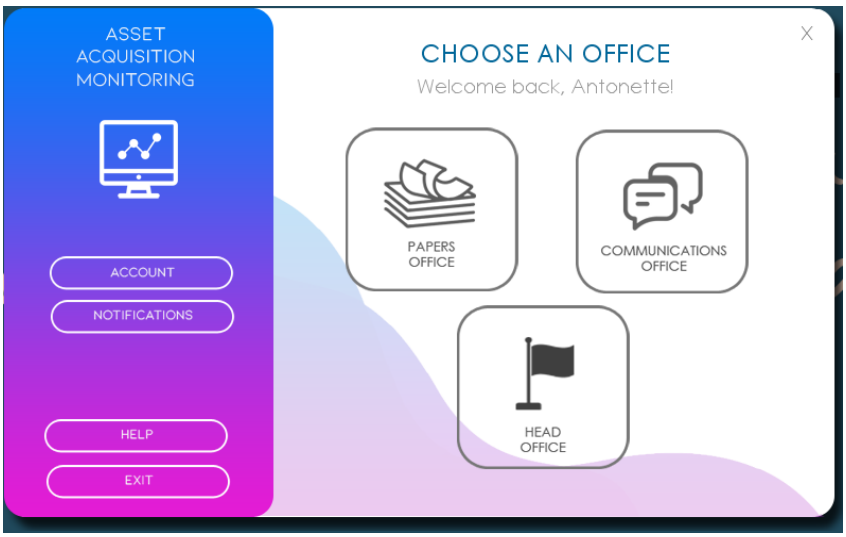
2. Registration Window with a Message Prompt



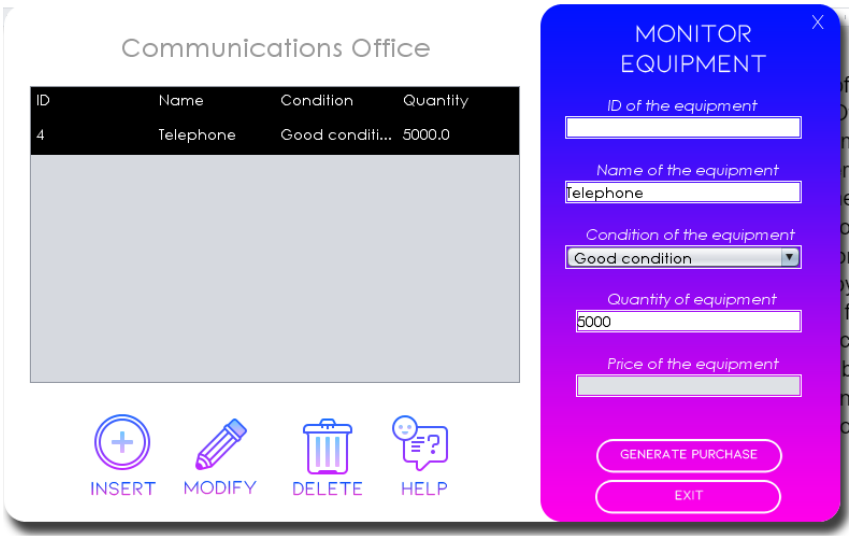
3. Login Window with a Message Prompt



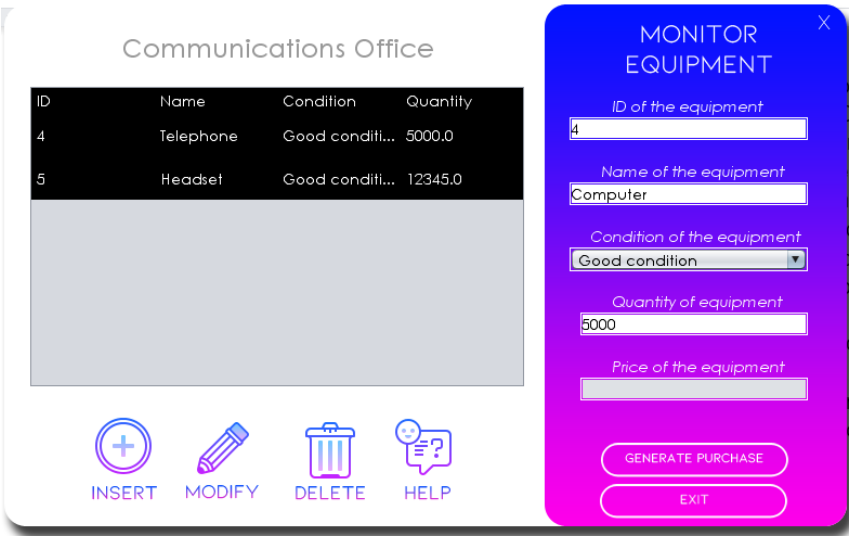
4. Menu Window

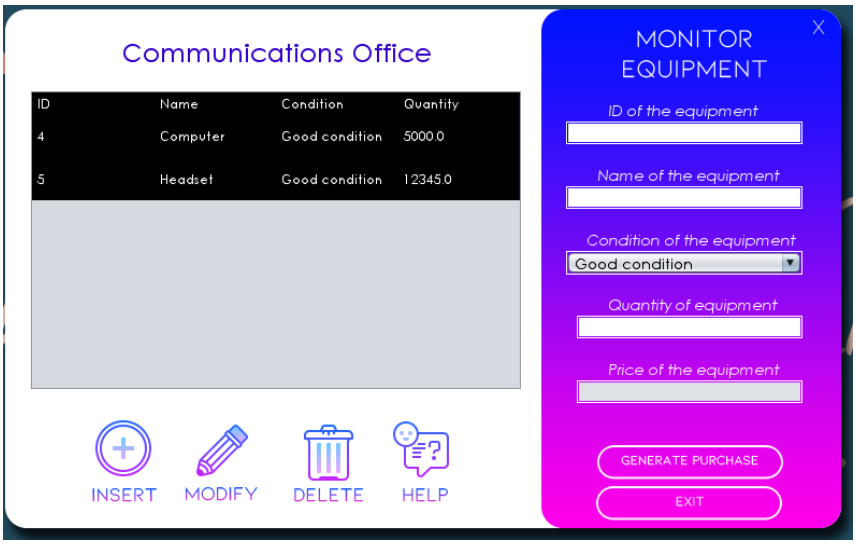


5. Monitor Equipment Window (Equipment Insertion)

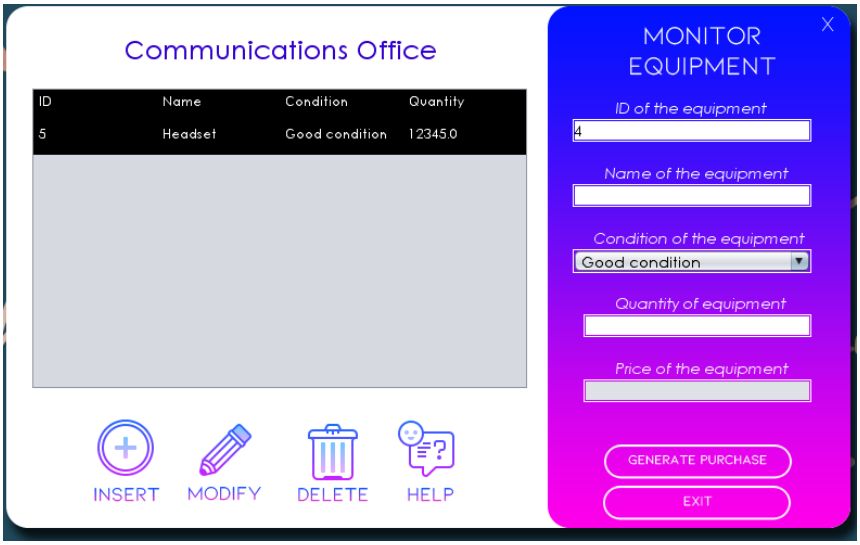


6. Monitor Equipment Window (Equipment Modification)

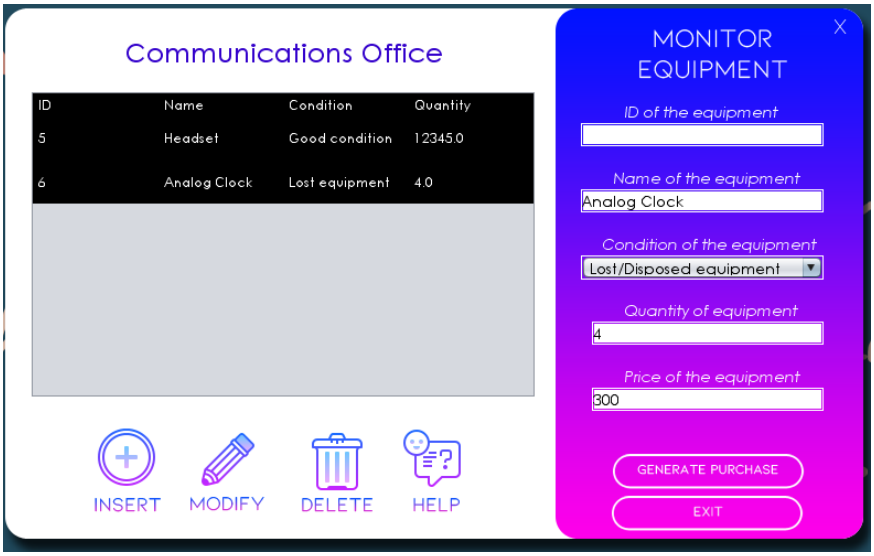




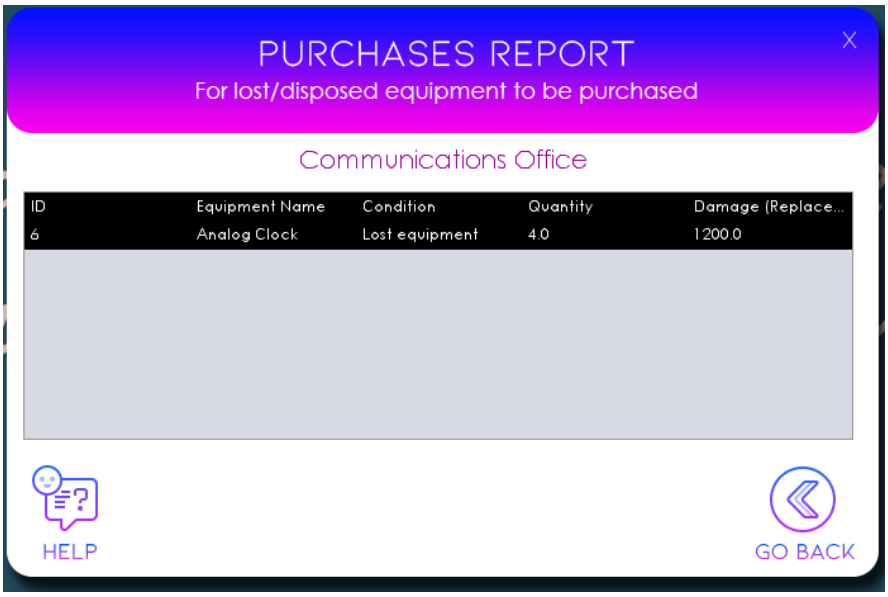
7. Monitor Equipment Window (Equipment Deletion)



8. Monitor Equipment Window with Lost/Disposed Equipment on Table

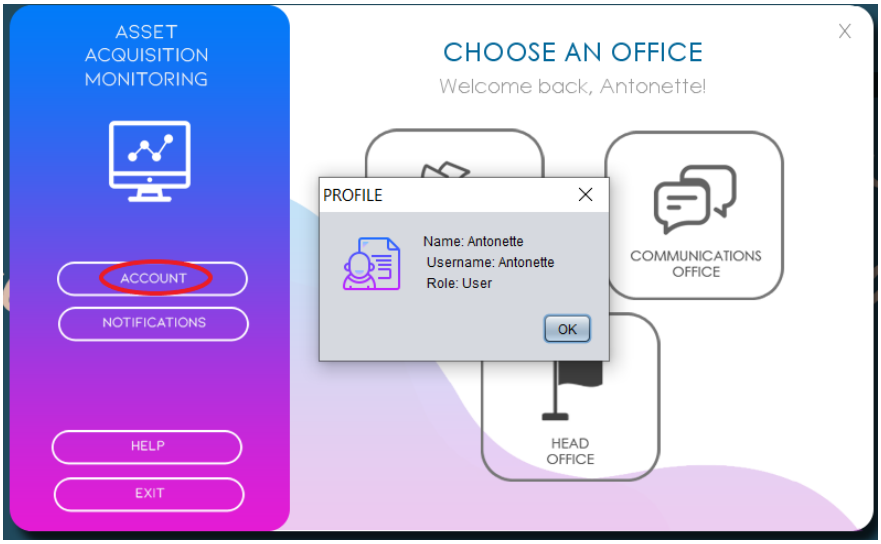


9. Purchases Report Window with Lost/Disposed Equipment and its Damage Cost

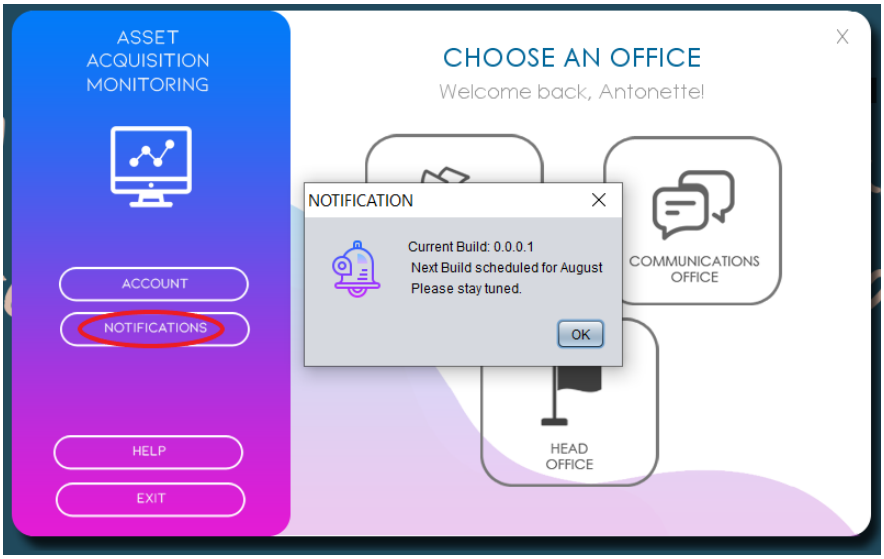


Additional Features of the Program:

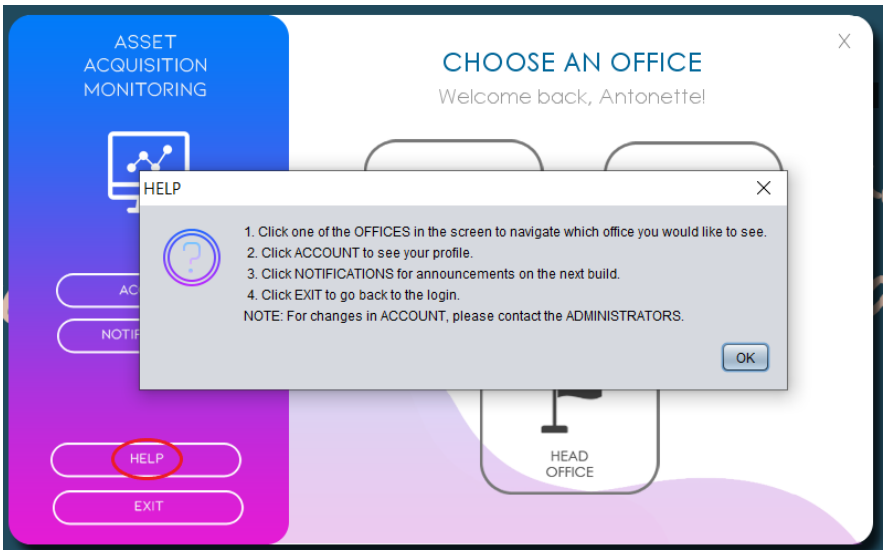
1. Menu Window (ACCOUNT Button)

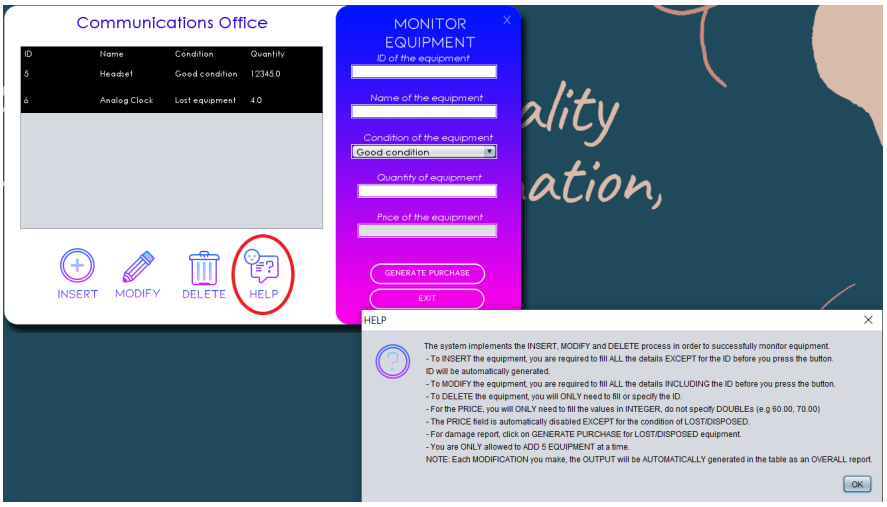


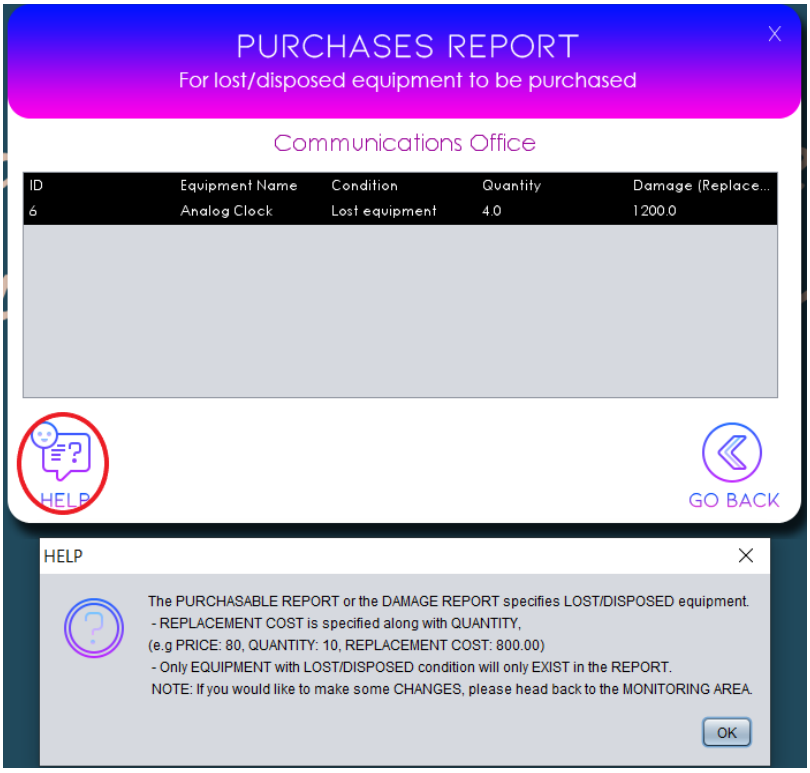
2. Menu Window (NOTIFICATIONS Button)



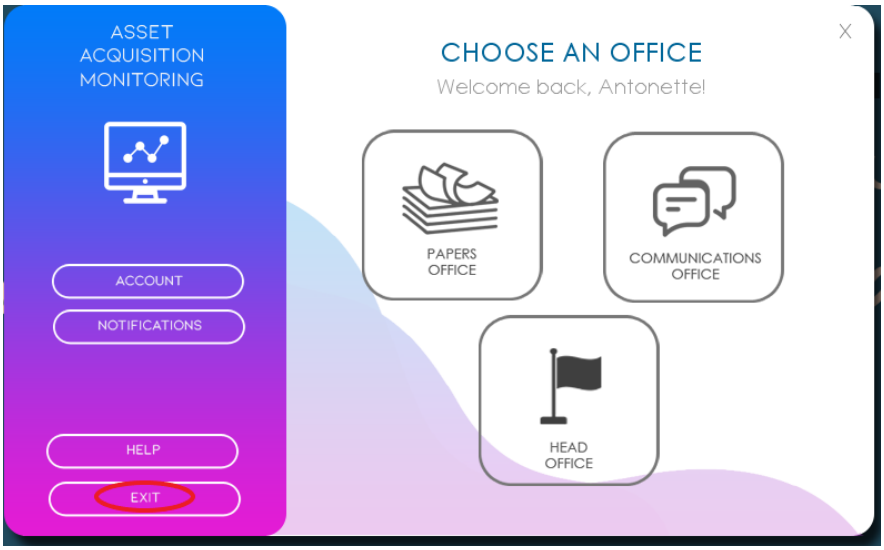
3. Menu Window (HELP Button)

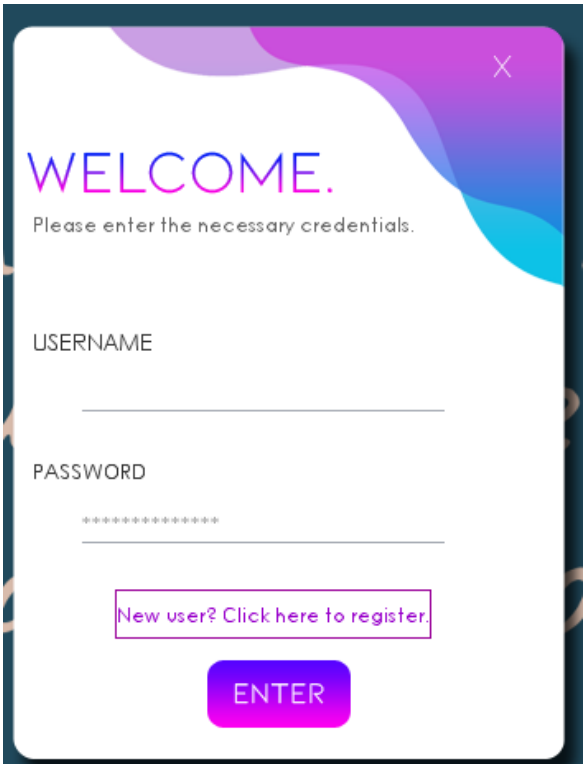

ASSET
ACQUISITION
MONITORING
CHOOSE AN OFFICE
Welcome back, Antonette!
HELP
1. Click one of the OFFICES in the screen to navigate which office you would like to see.
2. Click ACCOUNT to see your profile.
3. Click NOTIFICATIONS for announcements on the next build.
4. Click EXIT to go back to the login.
NOTE: For changes in ACCOUNT, please contact the ADMINISTRATORS.
OK
HELP
EXIT
HEAD
OFFICE


Communications Office
ID
Name
Condition
Quantity
5
Headset
Good condition
12345.0
6
Analog Clock
Lost equipment
4.0
INSERT
MODIFY
DELETE
HELP
MONITOR
EQUIPMENT
ID of the equipment
Name of the equipment
Condition of the equipment
Good condition
Quantity of equipment
Price of the equipment
GENERATE PURCHASE
EXIT
HELP
The system implements the INSERT, MODIFY and DELETE process in order to successfully monitor equipment.
- To INSERT the equipment, you are required to fill ALL the details EXCEPT for the ID before you press the button.
ID will be automatically generated.
- To MODIFY the equipment, you are required to fill ALL the details INCLUDING the ID before you press the button.
- To DELETE the equipment, you will ONLY need to fill or specify the ID.
- For the PRICE, you will ONLY need to fill the values in INTEGER, do not specify DOUBLEs (e.g 60.00, 70.00)
- The PRICE field is automatically disabled EXCEPT for the condition of LOST/DISPOSED.
- For damage report, click on GENERATE PURCHASE for LOST/DISPOSED equipment.
- You are ONLY allowed to ADD 5 EQUIPMENT at a time.
NOTE: Each MODIFICATION you make, the OUTPUT will be AUTOMATICALLY generated in the table as an OVERALL report.
OK



4. Menu Window (After EXIT button)





IV. PROJECT PROGRAM LISTING – source code

For LoginWindow

```
/*
  * To change this license header, choose License Headers in Project
      Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */
package ProjectApps;


import java.awt.Color;
import ProjectLibs.*;
import java.sql.Connection;
import java.sql.DriverManager;
```

```
import java.sql.PreparedStatement;
import java.sql.SQLException;
import java.sql.ResultSet;
import java.util.logging.Level;
import java.util.logging.Logger;
import javax.swing.JOptionPane;
import java.awt.Dimension;
import java.awt.Toolkit;
import javax.swing.ImageIcon;
/**
 *
 * @author Alyssa
 */
public class LoginWindow extends javax.swing.JFrame {

    /**
     * Creates new form LoginWindow
     */

    String name, username, password;
    JDBCSingleton jdbc= JDBCSingleton.getInstance();

    public LoginWindow() {
        initComponents();
        Dimension dim = Toolkit.getDefaultToolkit().getScreenSize();
```

```
                    this.setLocation(dim.width/2-this.getSize().width/2,
  dim.height/2-this.getSize().height/2);

    this.setBackground(new Color(0,0,0,0));

    jPanel1.setBackground(new Color(0, 0, 0, 0));

}



// get the connection from the database

public Connection getConnection()

{

    Connection con = null;



    try {

                                                                  con     =
  DriverManager.getConnection("jdbc:mysql://localhost/assetdb",
  "root","");

        return con;

    } catch (SQLException ex) {

          Logger.getLogger(LoginWindow.class.getName()).log(Level.SEVERE,
  null, ex);

        return null;

    }

}

/**

  * 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() {

    jPanel1 = new javax.swing.JPanel();
    jLabel1 = new javax.swing.JLabel();
    jTextField1 = new javax.swing.JTextField();
    jLabel5 = new javax.swing.JLabel();
    jSeparator1 = new javax.swing.JSeparator();
    jLabel2 = new javax.swing.JLabel();
    jPasswordField1 = new javax.swing.JPasswordField();
    jSeparator2 = new javax.swing.JSeparator();
    jLabel4 = new javax.swing.JLabel();
    jLabel6 = new javax.swing.JLabel();
    jLabel9 = new javax.swing.JLabel();
    jLabel3 = new javax.swing.JLabel();
    jLabel7 = new javax.swing.JLabel();

    setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
    setUndecorated(true);
    setOpacity(0.0F);
    addWindowListener(new java.awt.event.WindowAdapter() {
        public void windowOpened(java.awt.event.WindowEvent evt) {
            formWindowOpened(evt);
        }
    });
```

```
  jPanel1.setOpaque(false);

  jPanel1.setLayout(new org.netbeans.lib.awtextra.AbsoluteLayout());



      jLabel1.setFont(new java.awt.Font("Century Gothic", 0, 14)); //
NOI18N

  jLabel1.setForeground(new java.awt.Color(51, 51, 51));

  jLabel1.setText("USERNAME");

                                          jPanel1.add(jLabel1,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(50, 200, -1, -1));



   jTextField1.setFont(new java.awt.Font("Century Gothic", 0, 12)); //
NOI18N

  jTextField1.setForeground(new java.awt.Color(153, 153, 153));

  jTextField1.setText("Enter username");

  jTextField1.setBorder(null);

  jTextField1.addFocusListener(new java.awt.event.FocusAdapter() {

      public void focusGained(java.awt.event.FocusEvent evt) {

          jTextField1FocusGained(evt);

      }

  });

  jTextField1.addActionListener(new java.awt.event.ActionListener() {

      public void actionPerformed(java.awt.event.ActionEvent evt) {

          jTextField1ActionPerformed(evt);

      }

  });

                                       jPanel1.add(jTextField1,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(80, 230, 220, 20));
```

```
      jLabel5.setFont(new java.awt.Font("Century Gothic", 0, 12)); // 
NOI18N

  jLabel5.setForeground(new java.awt.Color(102, 102, 102));

  jLabel5.setText("Please enter the necessary credentials.");

                                              jPanel1.add(jLabel5,      new 
org.netbeans.lib.awtextra.AbsoluteConstraints(50, 130, -1, -1));



  jSeparator1.setForeground(new java.awt.Color(102, 102, 102));

                                         jPanel1.add(jSeparator1,      new 
org.netbeans.lib.awtextra.AbsoluteConstraints(80, 250, 220, 20));



  jLabel2.setBackground(new java.awt.Color(204, 204, 204));

      jLabel2.setFont(new java.awt.Font("Century Gothic", 0, 12)); // 
NOI18N

  jLabel2.setForeground(new java.awt.Color(51, 51, 51));

  jLabel2.setText("PASSWORD");

                                            jPanel1.add(jLabel2,      new 
org.netbeans.lib.awtextra.AbsoluteConstraints(50, 280, -1, -1));



   jPasswordField1.setFont(new java.awt.Font("Century Gothic", 0, 12)); 
// NOI18N

  jPasswordField1.setForeground(new java.awt.Color(153, 153, 153));

  jPasswordField1.setText("Enter password");

  jPasswordField1.setBorder(null);

  jPasswordField1.addFocusListener(new java.awt.event.FocusAdapter() {

      public void focusGained(java.awt.event.FocusEvent evt) {

          jPasswordField1FocusGained(evt);

      }
```

```
  });

                                    jPanel1.add(jPasswordField1,     new
org.netbeans.lib.awtextra.AbsoluteConstraints(80, 310, 220, 20));



  jSeparator2.setForeground(new java.awt.Color(102, 102, 102));

                                          jPanel1.add(jSeparator2,     new
org.netbeans.lib.awtextra.AbsoluteConstraints(80, 330, 220, 30));



                                                    jLabel4.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/Images/enter_button.png
"))); // NOI18N

  jLabel4.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));

  jLabel4.addMouseListener(new java.awt.event.MouseAdapter() {

      public void mousePressed(java.awt.event.MouseEvent evt) {

          jLabel4MousePressed(evt);

      }

  });

                                           jPanel1.add(jLabel4,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(150, 400, -1, -1));



      jLabel6.setFont(new  java.awt.Font("Century  Gothic",  0,  12));  //
NOI18N

  jLabel6.setForeground(new java.awt.Color(153, 0, 204));

  jLabel6.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);

  jLabel6.setText("New user? Click here to register.");

              jLabel6.setBorder(new   javax.swing.border.LineBorder(new
java.awt.Color(153, 0, 153), 1, true));

  jLabel6.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));

  jLabel6.addMouseListener(new java.awt.event.MouseAdapter() {
```

```
      public void mousePressed(java.awt.event.MouseEvent evt) {

          jLabel6MousePressed(evt);

      }

  });

                                          jPanel1.add(jLabel6,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(100, 360, -1, 30));



      jLabel9.setFont(new  java.awt.Font("Century  Gothic",  0,  18));  //
NOI18N

  jLabel9.setForeground(new java.awt.Color(255, 255, 255));

  jLabel9.setText("X");

  jLabel9.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));

  jLabel9.addMouseListener(new java.awt.event.MouseAdapter() {

      public void mousePressed(java.awt.event.MouseEvent evt) {

          jLabel9MousePressed(evt);

      }

  });

                                          jPanel1.add(jLabel9,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(330, 30, 30, -1));



  jLabel3.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);

                                                  jLabel3.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/Images/login_window.png
"))); // NOI18N

                                          jPanel1.add(jLabel3,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(30, 10, -1, -1));



                                                  jLabel7.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/Images/login_shadow.png
"))); // NOI18N
```

```
                                                jPanel1.add(jLabel7,      new
  org.netbeans.lib.awtextra.AbsoluteConstraints(20, 10, -1, -1));



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

    getContentPane().setLayout(layout);

    layout.setHorizontalGroup(


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

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

    );

    layout.setVerticalGroup(


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

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

    );



    pack();

    setLocationRelativeTo(null);

}// </editor-fold>



 private void jTextField1ActionPerformed(java.awt.event.ActionEvent evt)
  {

    // TODO add your handling code here:

}



private void jLabel4MousePressed(java.awt.event.MouseEvent evt) {
```

```
  // TODO add your handling code here:


  // assignation of values

  String username = jTextField1.getText();

  String password = String.valueOf(jPasswordField1.getPassword());

  String name = null;


  Connection con1;

  ResultSet rs;


  // after checking inputs, validate whether the username and password
exists in the database

 if (checkInputs()) {

  try {

          Connection con = getConnection();

            PreparedStatement ps = con.prepareStatement("SELECT * FROM
`users` WHERE `username` = ? AND `password` = ?");

          ps.setString(1,username);

          ps.setString(2,password);


          rs = ps.executeQuery();


          // if username and password are existing in the database

          if (rs.next()) {

             name = rs.getString("name");

                                    ImageIcon  bell  =  new  ImageIcon
("src/Images/icons8_bell_64px.png");
```

```
                JOptionPane.showMessageDialog(this, "Welcome, " + name +
"!        \nSuccessfully        logged        in.",        "SUCCESSFUL",
JOptionPane.INFORMATION_MESSAGE, bell);

                MenuWindow menu = new MenuWindow();

                menu.setVisible(true);

                menu.username = username;

                menu.name = name;

                menu.pack();

                this.dispose();

            }



            else {

                                        ImageIcon  bell  =  new  ImageIcon
("src/Images/icons8_unavailable_64px_1.png");

                 JOptionPane.showMessageDialog(this, "Invalid username or
password.", "ERROR", JOptionPane.ERROR_MESSAGE, bell);

            }



            } catch (Exception ex) {

                JOptionPane.showMessageDialog(null, ex.getMessage());

 }

 }



 else {

                                        ImageIcon  bell  =  new  ImageIcon
("src/Images/icons8_private_64px.png");

                    JOptionPane.showMessageDialog(this, "Please fill all
fields.", "ERROR", JOptionPane.ERROR_MESSAGE, bell);

 }
```

```
}

private void jLabel6MousePressed(java.awt.event.MouseEvent evt) {
    // TODO add your handling code here:
    RegisterWindow register = new RegisterWindow();
    register.setVisible(true);
    register.pack();
    this.dispose();

}

private void jLabel9MousePressed(java.awt.event.MouseEvent evt) {
    // TODO add your handling code here:

    this.dispose();
}

private void jTextField1FocusGained(java.awt.event.FocusEvent evt) {
    // TODO add your handling code here:

    jTextField1.setText("");
    jTextField1.setForeground(new Color(51,51,51));
}

private void jPasswordField1FocusGained(java.awt.event.FocusEvent evt) {
```

```
    // TODO add your handling code here:


    jPasswordField1.setText("");

    jPasswordField1.setForeground(new Color(51,51,51));

}


private void formWindowOpened(java.awt.event.WindowEvent evt) {

    // TODO add your handling code here:


    try {

        jdbc.createDatabase();

        jdbc.createUsersList();

    } catch (ClassNotFoundException ex) {

          Logger.getLogger(LoginWindow.class.getName()).log(Level.SEVERE,
  null, ex);

    }


    for (double i = 0.0; i <= 1.0; i = i + 0.1)

    {

        String val = i + "";

        float f = Float.valueOf(val);

        this.setOpacity(f);


        try {

            Thread.sleep(30);

        }
```

```
        catch (Exception e) {
            JOptionPane.showMessageDialog(this, e.getMessage());
        }
    }
}

    public boolean checkInputs() {

        String password = String.valueOf(jPasswordField1.getPassword());
        String username = jTextField1.getText();

    // if username and password are not filled out
        if (username == null || password == null) {
            return false;
        }

        else {
        return true;
        }
    }
/**
 * @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.ht
  ml

     */

    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(LoginWindow.class.getName()).log(ja
  va.util.logging.Level.SEVERE, null, ex);

    } catch (InstantiationException ex) {


  java.util.logging.Logger.getLogger(LoginWindow.class.getName()).log(ja
  va.util.logging.Level.SEVERE, null, ex);

    } catch (IllegalAccessException ex) {


  java.util.logging.Logger.getLogger(LoginWindow.class.getName()).log(ja
  va.util.logging.Level.SEVERE, null, ex);

    } catch (javax.swing.UnsupportedLookAndFeelException ex) {
```

```
    java.util.logging.Logger.getLogger(LoginWindow.class.getName()).log(ja
    va.util.logging.Level.SEVERE, null, ex);
        }
        //</editor-fold>

        /* Create and display the form */
        java.awt.EventQueue.invokeLater(new Runnable() {
            public void run() {
                new LoginWindow().setVisible(true);
            }
        });
    }

    // Variables declaration - do not modify
    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.JLabel jLabel9;
    private javax.swing.JPanel jPanel1;
    private javax.swing.JPasswordField jPasswordField1;
    private javax.swing.JSeparator jSeparator1;
    private javax.swing.JSeparator jSeparator2;
```

```
    private javax.swing.JTextField jTextField1;

    // End of variables declaration

}
```

For RegisterWindow

```
/*

  *  To  change  this  license  header,  choose  License  Headers  in  Project
     Properties.

 * To change this template file, choose Tools | Templates

 * and open the template in the editor.

 */

package ProjectApps;

import ProjectLibs.*;

import java.awt.Color;

import java.awt.Dimension;

import java.awt.Toolkit;

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.ImageIcon;

import javax.swing.JOptionPane;

/**

 *
```

```
 * @author Alyssa
 */
public class RegisterWindow extends javax.swing.JFrame {

    /**
     * Creates new form RegisterWindow
     */
   String username, name, password;

    public RegisterWindow() {
        initComponents();
        Dimension dim = Toolkit.getDefaultToolkit().getScreenSize();
                        this.setLocation(dim.width/2-this.getSize().width/2,
      dim.height/2-this.getSize().height/2);
        this.setBackground(new Color(0,0,0,0));
        jPanel1.setBackground(new Color(0, 0, 0, 0));
    }

    // secure connection to the database
    public Connection getConnection()
    {
        Connection con = null;

        try {
                                                                    con      =
      DriverManager.getConnection("jdbc:mysql://localhost/assetdb",
      "root","");
```

```
        return con;
    } catch (SQLException ex) {
  Logger.getLogger(RegisterWindow.class.getName()).log(Level.SEVERE,
  null, ex);
        return null;
    }
}
/**
  * 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() {

    jPanel1 = new javax.swing.JPanel();
    jLabel5 = new javax.swing.JLabel();
    jSeparator2 = new javax.swing.JSeparator();
    jSeparator3 = new javax.swing.JSeparator();
    jTextField1 = new javax.swing.JTextField();
    jTextField2 = new javax.swing.JTextField();
    jTextField3 = new javax.swing.JTextField();
    jSeparator1 = new javax.swing.JSeparator();
    jLabel7 = new javax.swing.JLabel();
```

```
  jLabel8 = new javax.swing.JLabel();

  jLabel6 = new javax.swing.JLabel();

  jLabel3 = new javax.swing.JLabel();

  jLabel1 = new javax.swing.JLabel();

  jLabel2 = new javax.swing.JLabel();

  jLabel4 = new javax.swing.JLabel();

  jLabel9 = new javax.swing.JLabel();


  setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

  setUndecorated(true);

  setOpacity(0.0F);

  addWindowListener(new java.awt.event.WindowAdapter() {

      public void windowOpened(java.awt.event.WindowEvent evt) {

          formWindowOpened(evt);

      }

  });


  jPanel1.setLayout(new org.netbeans.lib.awtextra.AbsoluteLayout());


      jLabel5.setFont(new java.awt.Font("Century Gothic", 0, 12)); //
NOI18N

  jLabel5.setForeground(new java.awt.Color(102, 102, 102));

  jLabel5.setText("Please enter the necessary credentials.");

                                          jPanel1.add(jLabel5,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(50, 120, -1, -1));


  jSeparator2.setForeground(new java.awt.Color(102, 102, 102));
```

```
                                        jPanel1.add(jSeparator2,     new
org.netbeans.lib.awtextra.AbsoluteConstraints(80, 280, 240, 20));



  jSeparator3.setForeground(new java.awt.Color(102, 102, 102));

                                        jPanel1.add(jSeparator3,     new
org.netbeans.lib.awtextra.AbsoluteConstraints(80, 350, 240, 20));



   jTextField1.setFont(new java.awt.Font("Century Gothic", 0, 12)); //
NOI18N

  jTextField1.setForeground(new java.awt.Color(153, 153, 153));

  jTextField1.setText("Enter your real first name.");

  jTextField1.setBorder(null);

  jTextField1.addFocusListener(new java.awt.event.FocusAdapter() {

      public void focusGained(java.awt.event.FocusEvent evt) {

          jTextField1FocusGained(evt);

      }

  });

                                        jPanel1.add(jTextField1,     new
org.netbeans.lib.awtextra.AbsoluteConstraints(80, 190, 240, 20));



   jTextField2.setFont(new java.awt.Font("Century Gothic", 0, 12)); //
NOI18N

  jTextField2.setForeground(new java.awt.Color(153, 153, 153));

  jTextField2.setText("Enter a unique username.");

  jTextField2.setBorder(null);

  jTextField2.addFocusListener(new java.awt.event.FocusAdapter() {

      public void focusGained(java.awt.event.FocusEvent evt) {

          jTextField2FocusGained(evt);
```

```
        }

    });

                                            jPanel1.add(jTextField2,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(80, 260, 240, 20));



     jTextField3.setFont(new java.awt.Font("Century Gothic", 0, 12)); //
NOI18N

    jTextField3.setForeground(new java.awt.Color(153, 153, 153));

    jTextField3.setText("Password must be up to 5 char or more.");

    jTextField3.setBorder(null);

    jTextField3.addFocusListener(new java.awt.event.FocusAdapter() {

        public void focusGained(java.awt.event.FocusEvent evt) {

            jTextField3FocusGained(evt);

        }

    });

                                            jPanel1.add(jTextField3,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(80, 330, 240, 20));



    jSeparator1.setForeground(new java.awt.Color(102, 102, 102));

                                            jPanel1.add(jSeparator1,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(80, 210, 240, 10));



        jLabel7.setFont(new java.awt.Font("Century Gothic", 0, 18)); //
NOI18N

    jLabel7.setForeground(new java.awt.Color(255, 255, 255));

    jLabel7.setText("X");

    jLabel7.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));

    jLabel7.addMouseListener(new java.awt.event.MouseAdapter() {
```

```
      public void mousePressed(java.awt.event.MouseEvent evt) {

          jLabel7MousePressed(evt);

      }

  });

                                          jPanel1.add(jLabel7,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(340, 30, -1, -1));



      jLabel8.setFont(new  java.awt.Font("Century  Gothic",  0,  11));  //
NOI18N

  jLabel8.setForeground(new java.awt.Color(153, 153, 153));

  jLabel8.setText("By clicking Register, you agree with our T&C.");

                                          jPanel1.add(jLabel8,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(80, 380, -1, -1));



                                                  jLabel6.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/Images/register_button.
png"))); // NOI18N

  jLabel6.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));

  jLabel6.addMouseListener(new java.awt.event.MouseAdapter() {

      public void mousePressed(java.awt.event.MouseEvent evt) {

          jLabel6MousePressed(evt);

      }

  });

                                          jPanel1.add(jLabel6,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(150, 400, -1, -1));



      jLabel3.setFont(new  java.awt.Font("Century  Gothic",  0,  14));  //
NOI18N

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

```
                                        jPanel1.add(jLabel3,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(60, 300, -1, -1));



     jLabel1.setFont(new java.awt.Font("Century Gothic", 0, 14)); //
NOI18N

  jLabel1.setForeground(new java.awt.Color(51, 51, 51));

  jLabel1.setText("NAME");

                                        jPanel1.add(jLabel1,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(60, 160, -1, 20));



     jLabel2.setFont(new java.awt.Font("Century Gothic", 0, 14)); //
NOI18N

  jLabel2.setText("USERNAME");

                                        jPanel1.add(jLabel2,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(60, 230, -1, -1));



                                            jLabel4.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/Images/register_window.
png"))); // NOI18N

                                        jPanel1.add(jLabel4,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(30, 10, -1, -1));



                                            jLabel9.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/Images/register_shadow.
png"))); // NOI18N

                                        jPanel1.add(jLabel9,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(20, 10, -1, -1));



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

  getContentPane().setLayout(layout);

  layout.setHorizontalGroup(
```

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

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

    );

    layout.setVerticalGroup(


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

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

    );



    pack();

    setLocationRelativeTo(null);

}// </editor-fold>



private void jLabel6MousePressed(java.awt.event.MouseEvent evt) {

    // TODO add your handling code here:

    name = jTextField1.getText();

    username = jTextField2.getText();

    password = jTextField3.getText();



    Connection con1;

    ResultSet rs;



   // validation strategy

          ValidationContext contextFields = new ValidationContext(new
  ValidationFields(name, username, password));
```

```
       ValidationContext contextUsername = new ValidationContext(new
ValidateUsername(username));

      ValidationContext contextPassword = new ValidationContext (new
ValidatePassword(password));



  if (contextFields.executeValidation(name, username, password)) {

                                ImageIcon   bell   =   new   ImageIcon
("src/Images/icons8_private_64px.png");

            JOptionPane.showMessageDialog(this, "Please fill all the
required fields.", "ERROR", JOptionPane.ERROR_MESSAGE, bell);

  }



          else  if  (contextUsername.executeValidation(name,  username,
password)) {

                                ImageIcon   bell   =   new   ImageIcon
("src/Images/icons8_private_64px.png");

         JOptionPane.showMessageDialog(this, "Username already exists.
Please enter another.", "ERROR", JOptionPane.ERROR_MESSAGE, bell);

  }



          else  if  (contextPassword.executeValidation(name,  username,
password)) {

                                ImageIcon   bell   =   new   ImageIcon
("src/Images/icons8_private_64px.png");

         JOptionPane.showMessageDialog(this, "Password must be up to 5
characters.", "ERROR", JOptionPane.ERROR_MESSAGE, bell);

  }



  else {



  // successfully register user into the database
```

```
    try {

            Connection con = getConnection();

                PreparedStatement ps = con.prepareStatement("INSERT INTO
  users(name,username,password) values(?,?,?)");

            ps.setString(1,name);

            ps.setString(2,username);

            ps.setString(3,password);



            ps.executeUpdate();

                                    ImageIcon bell = new ImageIcon
  ("src/Images/icons8_bell_64px.png");

                  JOptionPane.showMessageDialog(this, "User registered
  successfully.\n Redirecting to the login window...", "SUCCESSFUL",
  JOptionPane.INFORMATION_MESSAGE, bell);

            LoginWindow login = new LoginWindow();

            this.setVisible(false);

            login.setVisible(true);



            } catch (Exception ex) {

                JOptionPane.showMessageDialog(null, ex.getMessage());

    }



    }


}


private void jLabel7MousePressed(java.awt.event.MouseEvent evt) {

    // TODO add your handling code here:
```

```
    this.dispose();
}

private void jTextField1FocusGained(java.awt.event.FocusEvent evt) {
    // TODO add your handling code here:

    jTextField1.setText("");
    jTextField1.setForeground(new Color(51,51,51));
}

private void jTextField2FocusGained(java.awt.event.FocusEvent evt) {
    // TODO add your handling code here:

    jTextField2.setText("");
    jTextField2.setForeground(new Color(51,51,51));
}

private void jTextField3FocusGained(java.awt.event.FocusEvent evt) {
    // TODO add your handling code here:

    jTextField3.setText("");
    jTextField3.setForeground(new Color(51,51,51));
}

private void formWindowOpened(java.awt.event.WindowEvent evt) {
```

```
    // TODO add your handling code here:


          for (double i = 0.0; i <= 1.0; i = i + 0.1)
    {
        String val = i + "";
        float f = Float.valueOf(val);
        this.setOpacity(f);

        try {
            Thread.sleep(30);
        }

        catch (Exception e) {
            JOptionPane.showMessageDialog(this, e.getMessage());
        }
    }
}



/**
 * @param args the command line arguments
 */

// Variables declaration - do not modify
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.JLabel jLabel8;
    private javax.swing.JLabel jLabel9;
    private javax.swing.JPanel jPanel1;
    private javax.swing.JSeparator jSeparator1;
    private javax.swing.JSeparator jSeparator2;
    private javax.swing.JSeparator jSeparator3;
    private javax.swing.JTextField jTextField1;
    private javax.swing.JTextField jTextField2;
    private javax.swing.JTextField jTextField3;
    // End of variables declaration
}
```

For MenuWindow

```
/*
  * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */
package ProjectApps;
```

```
import java.awt.Color;
import java.awt.Dimension;
import java.awt.Toolkit;
import javax.swing.ImageIcon;
import javax.swing.JOptionPane;


/**
 *
 * @author Alyssa
 */
public class MenuWindow extends javax.swing.JFrame {


    /**
     * Creates new form MenuWindow
     */


    static String name, username;


    public MenuWindow() {
        initComponents();
        Dimension dim = Toolkit.getDefaultToolkit().getScreenSize();
                          this.setLocation(dim.width/2-this.getSize().width/2,
dim.height/2-this.getSize().height/2);
        this.setBackground(new Color(0,0,0,0));
        jPanel1.setBackground(new Color(0, 0, 0, 0));
    }
```

```
    /**
      * 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() {


        jPanel1 = new javax.swing.JPanel();
        jLabel13 = new javax.swing.JLabel();
        jLabel11 = new javax.swing.JLabel();
        jLabel10 = new javax.swing.JLabel();
        jLabel4 = new javax.swing.JLabel();
        jLabel9 = new javax.swing.JLabel();
        jLabel8 = new javax.swing.JLabel();
        jLabel7 = new javax.swing.JLabel();
        jLabel6 = new javax.swing.JLabel();
        jLabel5 = new javax.swing.JLabel();
        jLabel1 = new javax.swing.JLabel();
        jLabel3 = new javax.swing.JLabel();
        jLabel2 = new javax.swing.JLabel();
        jLabel12 = new javax.swing.JLabel();
```

```
        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
        setUndecorated(true);
        setOpacity(0.0F);
        addWindowListener(new java.awt.event.WindowAdapter() {
            public void windowOpened(java.awt.event.WindowEvent evt) {
                formWindowOpened(evt);
            }
        });
                                                getContentPane().setLayout(new
org.netbeans.lib.awtextra.AbsoluteLayout());

        jPanel1.setLayout(new org.netbeans.lib.awtextra.AbsoluteLayout());

           jLabel13.setFont(new java.awt.Font("Century Gothic", 0, 18)); //
NOI18N
        jLabel13.setForeground(new java.awt.Color(153, 153, 153));
        jLabel13.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
        jLabel13.setText("Welcome back, user!");
                                                jPanel1.add(jLabel13,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(256, 70, 550, -1));

           jLabel11.setFont(new java.awt.Font("Century Gothic", 0, 18)); //
NOI18N
        jLabel11.setForeground(new java.awt.Color(102, 102, 102));
        jLabel11.setText("X");
                                                        jLabel11.setCursor(new
java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));
        jLabel11.addMouseListener(new java.awt.event.MouseAdapter() {
```

```
            public void mousePressed(java.awt.event.MouseEvent evt) {

                jLabel11MousePressed(evt);

            }

        });

                                                jPanel1.add(jLabel11,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(770, 20, -1, -1));



                                                          jLabel10.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/Images/head_button.png")));
// NOI18N

                                                        jLabel10.setCursor(new
java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));

        jLabel10.addMouseListener(new java.awt.event.MouseAdapter() {

            public void mousePressed(java.awt.event.MouseEvent evt) {

                jLabel10MousePressed(evt);

            }

        });

                                                jPanel1.add(jLabel10,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(440, 280, -1, 170));



                                                          jLabel4.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/Images/papers_button.png")));
// NOI18N

        jLabel4.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));

        jLabel4.addMouseListener(new java.awt.event.MouseAdapter() {

            public void mousePressed(java.awt.event.MouseEvent evt) {

                jLabel4MousePressed(evt);

            }

        });
```

```
                                                jPanel1.add(jLabel4,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(330, 110, 190, 180));



                                                            jLabel9.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/Images/communications_button.
png"))); // NOI18N

        jLabel9.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));

        jLabel9.addMouseListener(new java.awt.event.MouseAdapter() {

            public void mousePressed(java.awt.event.MouseEvent evt) {

                jLabel9MousePressed(evt);

            }

        });

                                                jPanel1.add(jLabel9,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(550, 115, -1, 170));



                                                            jLabel8.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/Images/help_button.png")));
// NOI18N

        jLabel8.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));

        jLabel8.addMouseListener(new java.awt.event.MouseAdapter() {

            public void mousePressed(java.awt.event.MouseEvent evt) {

                jLabel8MousePressed(evt);

            }

        });

                                                jPanel1.add(jLabel8,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(50, 390, 210, 40));



            jLabel7.setFont(new java.awt.Font("Century Gothic", 0, 24)); //
NOI18N

        jLabel7.setForeground(new java.awt.Color(0, 102, 153));
```

```
        jLabel7.setText("CHOOSE AN OFFICE");

                                                jPanel1.add(jLabel7,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(410, 0, 250, 100));



                                                            jLabel6.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/Images/exit_button.png")));
// NOI18N

        jLabel6.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));

        jLabel6.addMouseListener(new java.awt.event.MouseAdapter() {

            public void mousePressed(java.awt.event.MouseEvent evt) {

                jLabel6MousePressed(evt);

            }

        });

                                                jPanel1.add(jLabel6,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(50, 430, -1, -1));



                                                            jLabel5.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/Images/notifications_button.p
ng"))); // NOI18N

        jLabel5.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));

        jLabel5.addMouseListener(new java.awt.event.MouseAdapter() {

            public void mousePressed(java.awt.event.MouseEvent evt) {

                jLabel5MousePressed(evt);

            }

        });

                                                jPanel1.add(jLabel5,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(50, 270, 230, 60));
```

```
                                                        jLabel1.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/Images/account_button.png")))
; // NOI18N

        jLabel1.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));

        jLabel1.addMouseListener(new java.awt.event.MouseAdapter() {

            public void mousePressed(java.awt.event.MouseEvent evt) {

                jLabel1MousePressed(evt);

            }

        });

                                                jPanel1.add(jLabel1,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(50, 230, 250, -1));



                                                        jLabel3.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/Images/system_icon.png")));
// NOI18N

        jLabel3.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));

        jLabel3.addMouseListener(new java.awt.event.MouseAdapter() {

            public void mousePressed(java.awt.event.MouseEvent evt) {

                jLabel3MousePressed(evt);

            }

        });

                                                jPanel1.add(jLabel3,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(100, 100, 100, -1));



                                                        jLabel2.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/Images/menu_windoww.png")));
// NOI18N

                                                jPanel1.add(jLabel2,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(10, 0, 840, -1));
```

```
                                                        jLabel12.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/Images/menu_shadow.png")));
// NOI18N

                                                    jPanel1.add(jLabel12,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(10, 10, 810, 490));



                                               getContentPane().add(jPanel1,     new
org.netbeans.lib.awtextra.AbsoluteConstraints(0, 0, 860, -1));



        pack();

        setLocationRelativeTo(null);

    }// </editor-fold>



    private void jLabel11MousePressed(java.awt.event.MouseEvent evt) {

        // TODO add your handling code here:



        this.dispose();

    }



    private void jLabel6MousePressed(java.awt.event.MouseEvent evt) {

        // TODO add your handling code here:



        LoginWindow login = new LoginWindow();

        login.setVisible(true);

        login.pack();

        this.dispose();

    }
```

```
private void jLabel10MousePressed(java.awt.event.MouseEvent evt) {
    // TODO add your handling code here:

    AddEquipment add = new AddEquipment();
    add.name = name;
    add.username = username;
    add.setVisible(true);
    add.pack();
    this.dispose();

    add.tableName = "HeadOffice";
}

private void jLabel9MousePressed(java.awt.event.MouseEvent evt) {
    // TODO add your handling code here:

    AddEquipment add = new AddEquipment();
    add.name = name;
    add.username = username;
    add.setVisible(true);
    add.pack();
    this.dispose();

    add.tableName = "CommunicationsOffice";
}
```

```
private void jLabel4MousePressed(java.awt.event.MouseEvent evt) {
    // TODO add your handling code here:

    AddEquipment add = new AddEquipment();
    add.name = name;
    add.username = username;
    add.setVisible(true);
    add.pack();
    this.dispose();

    add.tableName = "PapersOffice";
}

private void formWindowOpened(java.awt.event.WindowEvent evt) {
    // TODO add your handling code here:

    jLabel13.setText("Welcome back, " + name + "! ");
    for (double i = 0.0; i <= 1.0; i = i + 0.1)
    {
        String val = i + "";
        float f = Float.valueOf(val);
        this.setOpacity(f);

        try {
            Thread.sleep(30);
        }
```

```
            catch (Exception e) {
                JOptionPane.showMessageDialog(this, e.getMessage());
            }
        }

    }

    private void jLabel1MousePressed(java.awt.event.MouseEvent evt) {
        // TODO add your handling code here:
        String output;

                                ImageIcon account = new ImageIcon
("src/Images/icons8_profile_64px.png");
          output = "Name: " + name + "\n Username: " + username + "\n Role:
User";
                    JOptionPane.showMessageDialog(this, output, "PROFILE",
JOptionPane.INFORMATION_MESSAGE, account);
    }

    private void jLabel5MousePressed(java.awt.event.MouseEvent evt) {
        // TODO add your handling code here:

                                ImageIcon notifs = new ImageIcon
("src/Images/icons8_notification_64px.png");
         JOptionPane.showMessageDialog(this, "Current Build: 0.0.0.1 \n Next
Build scheduled for August \n Please stay tuned.", "NOTIFICATION",
JOptionPane.INFORMATION_MESSAGE, notifs);
    }
```

```
    private void jLabel8MousePressed(java.awt.event.MouseEvent evt) {

        // TODO add your handling code here:



        ImageIcon help = new ImageIcon ("src/Images/icons8_help_64px.png");

         JOptionPane.showMessageDialog(this, "1. Click one of the OFFICES in
the screen to navigate which office you would like to see. \n 2. Click
ACCOUNT to see your profile. \n 3. Click NOTIFICATIONS for announcements on
the next build. \n 4. Click EXIT to go back to the login."

                     + "\nNOTE: For changes in ACCOUNT, please contact the
ADMINISTRATORS.", "HELP", JOptionPane.INFORMATION_MESSAGE, help);




    }



    private void jLabel3MousePressed(java.awt.event.MouseEvent evt) {

        // TODO add your handling code here:

                                  ImageIcon    admin    =    new    ImageIcon
("src/Images/icons8_administrative_tools_64px.png");

        JOptionPane.showMessageDialog(this, "The ADMINISTRATION Panel \n"

                    + "Marc Chan \n Alyssa Pepito \n Dean Sanson \n Keziah
Soleño  \n  Kerstein  Tadena  ",  "ADMIN",  JOptionPane.INFORMATION_MESSAGE,
admin);

    }



    /**

     * @param args the command line arguments

     */
```

```
        // Variables declaration - do not modify
        private javax.swing.JLabel jLabel1;
        private javax.swing.JLabel jLabel10;
        private javax.swing.JLabel jLabel11;
        private javax.swing.JLabel jLabel12;
        private javax.swing.JLabel jLabel13;
        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.JLabel jLabel8;
        private javax.swing.JLabel jLabel9;
        private javax.swing.JPanel jPanel1;
        // End of variables declaration
    }
```

For AddEquipment

```
package ProjectApps;


/*
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */
```

```
/**
 *
 * @author ate
 */

import ProjectLibs.*;
import java.awt.Color;
import java.awt.Component;
import java.awt.Dimension;
import java.awt.Font;
import java.awt.Toolkit;
import java.sql.SQLException;
import java.util.ArrayList;
import java.util.logging.Level;
import java.util.logging.Logger;
import javax.swing.ImageIcon;
import javax.swing.JOptionPane;
import javax.swing.JTable;
import javax.swing.table.DefaultTableCellRenderer;
import javax.swing.table.DefaultTableModel;

public class AddEquipment extends javax.swing.JFrame {

    String tableName = "PapersOffice";
    String name, username;
    JDBCSingleton jdbc= JDBCSingleton.getInstance();
```

```
    PurchasesReport purchasesTable = new PurchasesReport();
    int count = 0, quantity = 0, price = 0, totalPrice = 0;

    /**
     * Creates new form AddEquipment
     */
    public AddEquipment() {
        initComponents();
          jTable1.getTableHeader().setFont(new Font("Century Gothic", Font.BOLD,
12));
        jTable1.getTableHeader().setOpaque(false);
        jTable1.getTableHeader().setBackground(new Color(0,0,0));
        jTable1.getTableHeader().setForeground(new Color(255, 255, 255));
        jTable1.getTableHeader().setDefaultRenderer(new HeaderColor());
        Dimension dim = Toolkit.getDefaultToolkit().getScreenSize();
                            this.setLocation(dim.width/2-this.getSize().width/2,
dim.height/2-this.getSize().height/2);
        this.setBackground(new Color(0,0,0,0));
        jPanel2.setBackground(new Color(0, 0, 0, 0));
    }

     public class HeaderColor extends DefaultTableCellRenderer {

        public HeaderColor() {
            setOpaque(true);
        }
```

```
            public Component getTableCellRendererComponent(JTable table, Object
value, boolean selected, boolean focused, int row, int column) {

                    super.getTableCellRendererComponent(table, value, selected,
focused, row, column);



           setBackground(new java.awt.Color(0,0,0));

            return this;

        }



    }







    public boolean checkInputs()

    {

        if(jTextField1.getText() == null

            || jTextField2.getText() == null

            || jTextField3.getText() == null

            || String.valueOf(jComboBox1.getSelectedIndex()) == null

            || jTextField3.getText() == null

          ){

            return false;

        }

        else{

            try{

                Float.parseFloat(jTextField3.getText());
```

```
                return true;
            }catch(Exception ex)
            {
                return false;
            }
        }
    }

                public    void    ShowEquipmentTable()    throws    SQLException,
ClassNotFoundException
    {
        ArrayList<Equipment> list = jdbc.getTableList(tableName);
        DefaultTableModel model = (DefaultTableModel)jTable1.getModel();
        // clear jtable content
        model.setRowCount(0);
        Object[] row = new Object[4];
        for(int i = 0; i < list.size(); i++)
        {
            row[0] = list.get(i).getId();
            row[1] = list.get(i).getName();
            row[2] = list.get(i).getAssetcondition();
            row[3] = list.get(i).getQuantity();

            model.addRow(row);
        }
    }
```

```
                public    void    ShowPurchasesTable()    throws    SQLException,
ClassNotFoundException

    {

        ArrayList<DamageReportDetails> list = jdbc.getPurchasesList(tableName);

                                                DefaultTableModel      model      =
(DefaultTableModel)purchasesTable.getjTable1().getModel();

        // clear jtable content

        model.setRowCount(0);

        Object[] row = new Object[5];

        for(int i = 0; i < list.size(); i++)

        {

            row[0] = list.get(i).getId();

            row[1] = list.get(i).getName();

            row[2] = list.get(i).getAssetcondition();

            row[3] = list.get(i).getQuantity();

            row[4] = list.get(i).getPrice();



            model.addRow(row);

        }

    }



    protected void updateState() {

           boolean  enabled  =  jComboBox1.getSelectedItem().equals("Lost/Disposed
equipment");

        jTextField4.setEnabled(enabled );

    }
```

```
    /**
       * 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() {


        jPanel2 = new javax.swing.JPanel();
        jLabel8 = new javax.swing.JLabel();
        txtHelp = new javax.swing.JLabel();
        jLabel1 = new javax.swing.JLabel();
        jLabel2 = new javax.swing.JLabel();
        jLabel4 = new javax.swing.JLabel();
        jLabel9 = new javax.swing.JLabel();
        jLabel14 = new javax.swing.JLabel();
        jLabel10 = new javax.swing.JLabel();
        jLabel12 = new javax.swing.JLabel();
        jLabel13 = new javax.swing.JLabel();
        jComboBox1 = new javax.swing.JComboBox<>();
        jLabel11 = new javax.swing.JLabel();
        jTextField1 = new javax.swing.JTextField();
        jTextField2 = new javax.swing.JTextField();
```

```
        jLabel6 = new javax.swing.JLabel();
        jTextField3 = new javax.swing.JTextField();
        jTextField4 = new javax.swing.JTextField();
        jLabel3 = new javax.swing.JLabel();
        jScrollPane1 = new javax.swing.JScrollPane();
        jTable1 = new javax.swing.JTable();
        jLabel7 = new javax.swing.JLabel();

        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
        setUndecorated(true);
        setOpacity(0.0F);
        addWindowListener(new java.awt.event.WindowAdapter() {
            public void windowOpened(java.awt.event.WindowEvent evt) {
                formWindowOpened(evt);
            }
        });
                                                getContentPane().setLayout(new
org.netbeans.lib.awtextra.AbsoluteLayout());

        jPanel2.setLayout(new org.netbeans.lib.awtextra.AbsoluteLayout());

        jLabel8.setFont(new java.awt.Font("Century Gothic", 2, 14)); // NOI18N
        jLabel8.setForeground(new java.awt.Color(255, 255, 255));
        jLabel8.setText("Price of the equipment");
                                                 jPanel2.add(jLabel8,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(610, 360, -1, -1));
```

```
                                                        txtHelp.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/Images/helpb.png"))); // NOI18N
        txtHelp.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));
        txtHelp.addMouseListener(new java.awt.event.MouseAdapter() {
            public void mousePressed(java.awt.event.MouseEvent evt) {
                txtHelpMousePressed(evt);
            }
        });
                                                    jPanel2.add(txtHelp,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(390, 410, -1, -1));

        jLabel1.setFont(new java.awt.Font("Century Gothic", 2, 14)); // NOI18N
        jLabel1.setForeground(new java.awt.Color(255, 255, 255));
        jLabel1.setText("Condition of the equipment");
                                                    jPanel2.add(jLabel1,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(590, 240, -1, -1));

        jLabel2.setFont(new java.awt.Font("Century Gothic", 2, 14)); // NOI18N
        jLabel2.setForeground(new java.awt.Color(255, 255, 255));
        jLabel2.setText("ID of the equipment");
                                                    jPanel2.add(jLabel2,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(610, 120, -1, -1));

        jLabel4.setFont(new java.awt.Font("Century Gothic", 2, 14)); // NOI18N
        jLabel4.setForeground(new java.awt.Color(255, 255, 255));
        jLabel4.setText("Name of the equipment");
                                                    jPanel2.add(jLabel4,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(600, 180, -1, -1));
```

```
                                                        jLabel9.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/Images/exit_button.png")));    //
NOI18N

        jLabel9.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));

        jLabel9.addMouseListener(new java.awt.event.MouseAdapter() {

            public void mousePressed(java.awt.event.MouseEvent evt) {

                jLabel9MousePressed(evt);

            }

        });

                                                    jPanel2.add(jLabel9,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(590, 470, -1, -1));



        jLabel14.setFont(new java.awt.Font("Century Gothic", 0, 18)); // NOI18N

        jLabel14.setForeground(new java.awt.Color(255, 255, 255));

        jLabel14.setText("X");

        jLabel14.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));

        jLabel14.addMouseListener(new java.awt.event.MouseAdapter() {

            public void mousePressed(java.awt.event.MouseEvent evt) {

                jLabel14MousePressed(evt);

            }

        });

                                                   jPanel2.add(jLabel14,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(800, 60, -1, -1));



                                                        jLabel10.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/Images/modifyb.png")));        //
NOI18N

        jLabel10.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));
```

```
        jLabel10.addMouseListener(new java.awt.event.MouseAdapter() {
            public void mousePressed(java.awt.event.MouseEvent evt) {
                jLabel10MousePressed(evt);
            }
        });
                                                jPanel2.add(jLabel10,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(200, 410, -1, -1));


                                                        jLabel12.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/Images/deleteb.png")));        //
NOI18N
        jLabel12.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));
        jLabel12.addMouseListener(new java.awt.event.MouseAdapter() {
            public void mousePressed(java.awt.event.MouseEvent evt) {
                jLabel12MousePressed(evt);
            }
        });
                                                jPanel2.add(jLabel12,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(300, 410, -1, -1));


                                                        jLabel13.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/Images/insertb.png")));        //
NOI18N
        jLabel13.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));
        jLabel13.addMouseListener(new java.awt.event.MouseAdapter() {
            public void mousePressed(java.awt.event.MouseEvent evt) {
                jLabel13MousePressed(evt);
            }
        });
```

```
                                                    jPanel2.add(jLabel13,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(110, 410, -1, -1));



            jComboBox1.setFont(new java.awt.Font("Century Gothic", 0, 14)); //
NOI18N

         jComboBox1.setModel(new javax.swing.DefaultComboBoxModel<>(new String[]
{  "Good  condition",  "Needs  repair",  "For  replacement",  "Lost/Disposed
equipment" }));

             jComboBox1.setBorder(javax.swing.BorderFactory.createLineBorder(new
java.awt.Color(255, 255, 255)));

        jComboBox1.setOpaque(false);

        jComboBox1.addActionListener(new java.awt.event.ActionListener() {

            public void actionPerformed(java.awt.event.ActionEvent evt) {

                jComboBox1ActionPerformed(evt);

            }

        });

                                                jPanel2.add(jComboBox1,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(570, 260, 220, 22));



                                                          jLabel11.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/Images/genb.png"))); // NOI18N

        jLabel11.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));

        jLabel11.addMouseListener(new java.awt.event.MouseAdapter() {

            public void mousePressed(java.awt.event.MouseEvent evt) {

                jLabel11MousePressed(evt);

            }

        });

                                                jPanel2.add(jLabel11,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(590, 430, -1, -1));
```

```
            jTextField1.setFont(new java.awt.Font("Century Gothic", 0, 14)); //
NOI18N

             jTextField1.setBorder(javax.swing.BorderFactory.createLineBorder(new
java.awt.Color(255, 255, 255)));

        jTextField1.setOpaque(false);

        jTextField1.addActionListener(new java.awt.event.ActionListener() {

            public void actionPerformed(java.awt.event.ActionEvent evt) {

                jTextField1ActionPerformed(evt);

            }

        });

                                                jPanel2.add(jTextField1,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(570, 140, 220, -1));



            jTextField2.setFont(new java.awt.Font("Century Gothic", 0, 14)); //
NOI18N

             jTextField2.setBorder(javax.swing.BorderFactory.createLineBorder(new
java.awt.Color(255, 255, 255)));

        jTextField2.setOpaque(false);

        jTextField2.addActionListener(new java.awt.event.ActionListener() {

            public void actionPerformed(java.awt.event.ActionEvent evt) {

                jTextField2ActionPerformed(evt);

            }

        });

                                                jPanel2.add(jTextField2,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(570, 200, 220, -1));



        jLabel6.setFont(new java.awt.Font("Century Gothic", 0, 24)); // NOI18N

        jLabel6.setForeground(new java.awt.Color(51, 0, 204));

        jLabel6.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
```

```
        jLabel6.setText("Office Name");

                                                    jPanel2.add(jLabel6,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(70, 60, 460, -1));



           jTextField3.setFont(new java.awt.Font("Century Gothic", 0, 14)); //
NOI18N

            jTextField3.setBorder(javax.swing.BorderFactory.createLineBorder(new
java.awt.Color(255, 255, 255)));

        jTextField3.setOpaque(false);

                                                jPanel2.add(jTextField3,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(580, 320, 210, -1));



           jTextField4.setFont(new java.awt.Font("Century Gothic", 0, 14)); //
NOI18N

            jTextField4.setBorder(javax.swing.BorderFactory.createLineBorder(new
java.awt.Color(255, 255, 255)));

        jTextField4.setEnabled(false);

        jTextField4.setOpaque(false);

                                                jPanel2.add(jTextField4,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(580, 380, 210, -1));



        jLabel3.setFont(new java.awt.Font("Century Gothic", 2, 14)); // NOI18N

        jLabel3.setForeground(new java.awt.Color(255, 255, 255));

        jLabel3.setText("Quantity of equipment");

                                                    jPanel2.add(jLabel3,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(610, 300, -1, -1));



        jTable1.setBackground(new java.awt.Color(0, 0, 0));

        jTable1.setFont(new java.awt.Font("Century Gothic", 0, 12)); // NOI18N

        jTable1.setForeground(new java.awt.Color(255, 255, 255));
```

```
        jTable1.setModel(new javax.swing.table.DefaultTableModel(
            new Object [][] {

            },
            new String [] {
                "ID", "Name", "Condition", "Quantity"
            }
        ));
        jTable1.setEnabled(false);
        jTable1.setGridColor(new java.awt.Color(153, 153, 153));
        jTable1.setRowHeight(40);
        jTable1.setSelectionBackground(new java.awt.Color(153, 0, 153));
        jScrollPane1.setViewportView(jTable1);

                                                jPanel2.add(jScrollPane1,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(70, 110, 460, 280));

                                                                jLabel7.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/Images/add_equip_window.png")));
// NOI18N
                                                        jPanel2.add(jLabel7,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(40, 40, -1, 510));

                                              getContentPane().add(jPanel2,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(-20, -40, 950, 580));

        pack();
        setLocationRelativeTo(null);
```

```
    }// </editor-fold>


    private void formWindowOpened(java.awt.event.WindowEvent evt) {

        try {

            jdbc.createEquipmentList(tableName);

            jdbc.createPurchasesList(tableName);

            if (tableName == "PapersOffice") {

                jLabel6.setText("Papers Office");

            }

            else if (tableName == "CommunicationsOffice") {

                jLabel6.setText("Communications Office");

            }

            else if (tableName == "HeadOffice") {

                jLabel6.setText("Head Office");

            }

            ShowEquipmentTable();

        } catch (ClassNotFoundException ex) {

                Logger.getLogger(AddEquipment.class.getName()).log(Level.SEVERE,
null, ex);

        } catch (SQLException ex) {

                Logger.getLogger(AddEquipment.class.getName()).log(Level.SEVERE,
null, ex);

        }



            for (double i = 0.0; i <= 1.0; i = i + 0.1)

        {

            String val = i + "";
```

```
            float f = Float.valueOf(val);
            this.setOpacity(f);

            try {
                Thread.sleep(30);
            }

            catch (Exception e) {
                JOptionPane.showMessageDialog(this, e.getMessage());
            }
        }

                                    ImageIcon    notifs    =    new    ImageIcon
("src/Images/icons8_wrench_64px.png");
         JOptionPane.showMessageDialog(this, "Please click HELP in order to know
how the system works.", "NOTICE", JOptionPane.INFORMATION_MESSAGE, notifs);
    }

    private void jTextField2ActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
    }

    private void jTextField1ActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
    }

    private void jLabel11MousePressed(java.awt.event.MouseEvent evt) {
```

```
        // TODO add your handling code here:
        try {
            ShowPurchasesTable();
            purchasesTable.name = name;
            purchasesTable.username = username;
            purchasesTable.setVisible(true);
            purchasesTable.tableName = tableName;
            this.dispose();
        } catch (ClassNotFoundException ex) {
                Logger.getLogger(AddEquipment.class.getName()).log(Level.SEVERE,
null, ex);
        } catch (SQLException ex) {
                Logger.getLogger(AddEquipment.class.getName()).log(Level.SEVERE,
null, ex);
        }
    }

    private void jComboBox1ActionPerformed(java.awt.event.ActionEvent evt) {
        updateState();
    }

    private void jLabel13MousePressed(java.awt.event.MouseEvent evt) {
        // TODO add your handling code here:
        // TODO add your handling code here:
        // BUTTON FOR ADDING EQUIPMENT TO THE LIST
        IFactory conditionFactory = new ConditionFactory();
```

```
                                                    ICondition      condition      =
conditionFactory.doSomething(jComboBox1.getSelectedIndex());

        int ID = 0;

        quantity = Integer.parseInt(jTextField3.getText());



        if(checkInputs())

        {

            try {

                count = jdbc.countRows(tableName);

                if (count < 5) {



                              ID = jdbc.insert(tableName, jTextField2.getText(),
condition.conditionName(), jTextField3.getText());



                            if(jComboBox1.getSelectedItem().equals("Lost/Disposed
equipment")){

                        price = Integer.parseInt(jTextField4.getText());

                        totalPrice = quantity * price;

                                                jdbc.insertPurchases(tableName,
String.valueOf(totalPrice), ID);

                    }



                                               ImageIcon   bell   =   new   ImageIcon
("src/Images/icons8_bell_64px.png");

                           JOptionPane.showMessageDialog(this, "EQUIPMENT ADDED",
"SUCCESSFUL", JOptionPane.INFORMATION_MESSAGE, bell);

                    ShowEquipmentTable();

                }

                else {
```

```
                                        ImageIcon bell = new ImageIcon
("src/Images/icons8_private_64px.png");

                        JOptionPane.showMessageDialog(this, "YOU CAN ONLY ADD 5
EQUIPMENT AT A TIME", "STOP", JOptionPane.ERROR_MESSAGE, bell);

                }

            } catch (Exception ex) {

                                        ImageIcon bell = new ImageIcon
("src/Images/icons8_unavailable_64px_1.png");

                            JOptionPane.showMessageDialog(this, "COULD NOT ADD
EQUIPMENT.", "ERROR", JOptionPane.ERROR_MESSAGE, bell);

            }

        }

        else

        {

                                        ImageIcon bell = new ImageIcon
("src/Images/icons8_private_64px.png");

                    JOptionPane.showMessageDialog(this, "YOU MUST COMPLETE ALL
THE FORMS.", "ERROR", JOptionPane.ERROR_MESSAGE, bell);

        }

    }



    private void jLabel12MousePressed(java.awt.event.MouseEvent evt) {

        // TODO add your handling code here:



        // BUTTON FOR DELETING EQUIPMENT FROM THE LIST

        if(!jTextField1.getText().equals(""))

        {

            try {
```

```
                                                    jdbc.delete(tableName,
Integer.parseInt(jTextField1.getText()));

                                        jdbc.delete(tableName  +  "_purchasesList",
Integer.parseInt(jTextField1.getText()));



                                                ImageIcon  bell  =  new  ImageIcon
("src/Images/icons8_bell_64px.png");

                            JOptionPane.showMessageDialog(this, "EQUIPMENT DELETED",
"SUCCESSFUL", JOptionPane.INFORMATION_MESSAGE, bell);



                    ShowEquipmentTable();

                } catch (SQLException ex) {


Logger.getLogger(AddEquipment.class.getName()).log(Level.SEVERE, null, ex);

                                                ImageIcon  bell  =  new  ImageIcon
("src/Images/icons8_unavailable_64px_1.png");

                              JOptionPane.showMessageDialog(this, "COULD NOT DELETE
EQUIPMENT.", "ERROR", JOptionPane.ERROR_MESSAGE, bell);

                } catch (ClassNotFoundException ex) {


Logger.getLogger(AddEquipment.class.getName()).log(Level.SEVERE, null, ex);

                }

            }else{

                                                ImageIcon  bell  =  new  ImageIcon
("src/Images/icons8_private_64px.png");

                          JOptionPane.showMessageDialog(this, "ID IS NOT SPECIFIED.",
"ERROR", JOptionPane.ERROR_MESSAGE, bell);

            }

        }



        private void jLabel10MousePressed(java.awt.event.MouseEvent evt) {
```

```
        // TODO add your handling code here:

        // TODO add your handling code here:

        // BUTTON FOR UPDATING EQUIPMENT INFORMATION

        IFactory conditionFactory = new ConditionFactory();

                                                    ICondition      condition      =
conditionFactory.doSomething(jComboBox1.getSelectedIndex());



        if(checkInputs() && jTextField1.getText() != null)

        {

            try {

                        Equipment previousRecord = jdbc.getTableRow(tableName,
Integer.parseInt(jTextField1.getText()));

                quantity = Integer.parseInt(jTextField3.getText());



                 jdbc.update(tableName, Integer.parseInt(jTextField1.getText()),
jTextField2.getText(), condition.conditionName(), jTextField3.getText());



                  if(previousRecord.getAssetcondition() != "For Replacement" &&
jComboBox1.getSelectedItem().equals("Lost/Disposed equipment")){

                    price = Integer.parseInt(jTextField4.getText());

                    totalPrice = quantity * price;

                     jdbc.insertPurchases(tableName, String.valueOf(totalPrice),
Integer.parseInt(jTextField1.getText()));

                }

                     else if(jComboBox1.getSelectedItem().equals("Lost/Disposed
equipment")){

                    price = Integer.parseInt(jTextField4.getText());

                    totalPrice = quantity * price;
```

```
                                                jdbc.updatePurchases(tableName,
Integer.parseInt(jTextField1.getText()),                    jTextField2.getText(),
condition.conditionName(), jTextField3.getText(), totalPrice);

                }

                else{

                                        jdbc.delete(tableName  +  "_purchasesList",
Integer.parseInt(jTextField1.getText()));

                }



                                            ImageIcon  bell  =  new  ImageIcon
("src/Images/icons8_bell_64px.png");

                        JOptionPane.showMessageDialog(this, "EQUIPMENT UPDATED",
"SUCCESSFUL", JOptionPane.INFORMATION_MESSAGE, bell);

                ShowEquipmentTable();

            } catch (SQLException ex) {


Logger.getLogger(AddEquipment.class.getName()).log(Level.SEVERE, null, ex);

            } catch (ClassNotFoundException ex) {


Logger.getLogger(AddEquipment.class.getName()).log(Level.SEVERE, null, ex);

            }

        } else{

                                            ImageIcon  bell  =  new  ImageIcon
("src/Images/icons8_private_64px.png");

                    JOptionPane.showMessageDialog(this, "YOU MUST COMPLETE ALL
THE FORMS.", "ERROR", JOptionPane.ERROR_MESSAGE, bell);

        }

    }



    private void jLabel9MousePressed(java.awt.event.MouseEvent evt) {
```

```
        // TODO add your handling code here:


        MenuWindow menu = new MenuWindow();

        menu.setVisible(true);

        menu.pack();

        this.dispose();

    }


    private void txtHelpMousePressed(java.awt.event.MouseEvent evt) {

        // TODO add your handling code here:

        ImageIcon help = new ImageIcon ("src/Images/icons8_help_64px.png");

         JOptionPane.showMessageDialog(this, "The system implements the INSERT, MODIFY and DELETE process in order to successfully monitor equipment."

                  + "\n - To INSERT the equipment, you are required to fill ALL the details EXCEPT for the ID before you press the button. \n ID will be automatically generated."

                  + "\n - To MODIFY the equipment, you are required to fill ALL the details INCLUDING the ID before you press the button."

                  + "\n - To DELETE the equipment, you will ONLY need to fill or specify the ID."

                 + "\n - For the PRICE, you will ONLY need to fill the values in INTEGER, do not specify DOUBLEs (e.g 60.00, 70.00)"

                  + "\n - The PRICE field is automatically disabled EXCEPT for the condition of LOST/DISPOSED."

                    + "\n - For damage report, click on GENERATE PURCHASE for LOST/DISPOSED equipment."

                + "\n - You are ONLY allowed to ADD 5 EQUIPMENT at a time."

                    + "\n NOTE: Each MODIFICATION you make, the OUTPUT will be AUTOMATICALLY generated in the table as an OVERALL report.", "HELP", JOptionPane.INFORMATION_MESSAGE, help);

    }
```

```
private void jLabel14MousePressed(java.awt.event.MouseEvent evt) {

    // TODO add your handling code here:


    this.dispose();

}


/**

 * @param args the command line arguments

 */


// Variables declaration - do not modify

private javax.swing.JComboBox<String> jComboBox1;

private javax.swing.JLabel jLabel1;

private javax.swing.JLabel jLabel10;

private javax.swing.JLabel jLabel11;

private javax.swing.JLabel jLabel12;

private javax.swing.JLabel jLabel13;

private javax.swing.JLabel jLabel14;

private javax.swing.JLabel jLabel2;

private javax.swing.JLabel jLabel3;

private javax.swing.JLabel jLabel4;

private javax.swing.JLabel jLabel6;

private javax.swing.JLabel jLabel7;

private javax.swing.JLabel jLabel8;

private javax.swing.JLabel jLabel9;
```

```
    private javax.swing.JPanel jPanel2;
    private javax.swing.JScrollPane jScrollPane1;
    private javax.swing.JTable jTable1;
    private javax.swing.JTextField jTextField1;
    private javax.swing.JTextField jTextField2;
    private javax.swing.JTextField jTextField3;
    private javax.swing.JTextField jTextField4;
    private javax.swing.JLabel txtHelp;
    // End of variables declaration
}
```

For PurchasesReport

```
/*
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */
package ProjectApps;


import ProjectApps.AddEquipment.HeaderColor;
import ProjectLibs.*;
import java.awt.Color;
import java.awt.Component;
import java.awt.Dimension;
import java.awt.Font;
import java.awt.Toolkit;
import javax.swing.ImageIcon;
```

```
import javax.swing.JOptionPane;
import javax.swing.JTable;
import javax.swing.table.DefaultTableCellRenderer;


/**
 *
 * @author Keziah
 */
public class PurchasesReport extends javax.swing.JFrame {


    String name, username;
    String tableName;
    JDBCSingleton jdbc= JDBCSingleton.getInstance();


    /**
     * Creates new form DaamgeReport
     */
    public PurchasesReport() {
        initComponents();
          jTable1.getTableHeader().setFont(new Font("Century Gothic", Font.BOLD,
15));
        jTable1.getTableHeader().setOpaque(false);
        jTable1.getTableHeader().setBackground(new Color(0,0,0));
        jTable1.getTableHeader().setForeground(new Color(255, 255, 255));
        jTable1.getTableHeader().setDefaultRenderer(new HeaderColor());
        Dimension dim = Toolkit.getDefaultToolkit().getScreenSize();
```

```
                            this.setLocation(dim.width/2-this.getSize().width/2,
dim.height/2-this.getSize().height/2);

        this.setBackground(new Color(0,0,0,0));

        jPanel1.setBackground(new Color(0, 0, 0, 0));

    }


     public class HeaderColor extends DefaultTableCellRenderer {


        public HeaderColor() {

            setOpaque(true);

        }


           public Component getTableCellRendererComponent(JTable table, Object
value, boolean selected, boolean focused, int row, int column) {

                    super.getTableCellRendererComponent(table, value, selected,
focused, row, column);


           setBackground(new java.awt.Color(0,0,0));

            return this;

        }


    }

    /**

       * 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() {

        jPanel1 = new javax.swing.JPanel();
        jLabel1 = new javax.swing.JLabel();
        jLabel3 = new javax.swing.JLabel();
        jLabel4 = new javax.swing.JLabel();
        jLabel5 = new javax.swing.JLabel();
        jScrollPane1 = new javax.swing.JScrollPane();
        jTable1 = new javax.swing.JTable();
        jLabel2 = new javax.swing.JLabel();

        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
        setUndecorated(true);
        setOpacity(0.0F);
        addWindowListener(new java.awt.event.WindowAdapter() {
            public void windowOpened(java.awt.event.WindowEvent evt) {
                formWindowOpened(evt);
            }
        });
                                                getContentPane().setLayout(new
org.netbeans.lib.awtextra.AbsoluteLayout());

        jPanel1.setLayout(new org.netbeans.lib.awtextra.AbsoluteLayout());
```

```
                                                        jLabel1.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/Images/helpb.png"))); // NOI18N
        jLabel1.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));
        jLabel1.addMouseListener(new java.awt.event.MouseAdapter() {
            public void mousePressed(java.awt.event.MouseEvent evt) {
                jLabel1MousePressed(evt);
            }
        });
                                                    jPanel1.add(jLabel1,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(30, 370, -1, -1));


                                                        jLabel3.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/Images/back.png"))); // NOI18N
        jLabel3.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));
        jLabel3.addMouseListener(new java.awt.event.MouseAdapter() {
            public void mousePressed(java.awt.event.MouseEvent evt) {
                jLabel3MousePressed(evt);
            }
        });
                                                    jPanel1.add(jLabel3,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(610, 370, -1, -1));


        jLabel4.setFont(new java.awt.Font("Century Gothic", 0, 18)); // NOI18N
        jLabel4.setForeground(new java.awt.Color(255, 255, 255));
        jLabel4.setText("X");
        jLabel4.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));
        jLabel4.addMouseListener(new java.awt.event.MouseAdapter() {
            public void mousePressed(java.awt.event.MouseEvent evt) {
```

```
                jLabel4MousePressed(evt);
            }
        });
                                                    jPanel1.add(jLabel4,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(690, 30, -1, -1));

        jLabel5.setFont(new java.awt.Font("Century Gothic", 0, 20)); // NOI18N
        jLabel5.setForeground(new java.awt.Color(153, 0, 153));
        jLabel5.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
        jLabel5.setText("Office Name");
                                                    jPanel1.add(jLabel5,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(44, 116, 660, 40));

        jTable1.setBackground(new java.awt.Color(0, 0, 0));
        jTable1.setFont(new java.awt.Font("Century Gothic", 0, 12)); // NOI18N
        jTable1.setForeground(new java.awt.Color(255, 255, 255));
        jTable1.setModel(new javax.swing.table.DefaultTableModel(
            new Object [][] {
                {null, null, null, null, null},
                {null, null, null, null, null},
                {null, null, null, null, null},
                {null, null, null, null, null},
                {null, null, null, null, null}
            },
            new String [] {
                        "ID", "Equipment Name", "Condition", "Quantity", "Damage
(Replacement) Cost"
```

```
            }

        ));

        jTable1.setRowHeight(25);

        jScrollPane1.setViewportView(jTable1);



                                                jPanel1.add(jScrollPane1,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(40, 160, 660, 200));



                                                                jLabel2.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/Images/purchase_window.png")));
// NOI18N

                                                        jPanel1.add(jLabel2,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(-10, 10, -1, 470));



                                            getContentPane().add(jPanel1,      new
org.netbeans.lib.awtextra.AbsoluteConstraints(0, 0, -1, 510));



        pack();

        setLocationRelativeTo(null);

    }// </editor-fold>



    private void formWindowOpened(java.awt.event.WindowEvent evt) {

        // TODO add your handling code here:



            if (tableName == "PapersOffice") {

                jLabel5.setText("Papers Office");

            }

            else if (tableName == "CommunicationsOffice") {
```

```
            jLabel5.setText("Communications Office");
        }
        else if (tableName == "HeadOffice") {
            jLabel5.setText("Head Office");
        }

    for (double i = 0.0; i <= 1.0; i = i + 0.1)
    {
        String val = i + "";
        float f = Float.valueOf(val);
        this.setOpacity(f);

        try {
            Thread.sleep(30);
        }

        catch (Exception e) {
            JOptionPane.showMessageDialog(this, e.getMessage());
        }
    }
}

private void jLabel4MousePressed(java.awt.event.MouseEvent evt) {
    // TODO add your handling code here:

    this.dispose();
```

```
    }

    private void jLabel3MousePressed(java.awt.event.MouseEvent evt) {
        // TODO add your handling code here:

        AddEquipment add = new AddEquipment();
        add.name = name;
        add.username = name;
        add.tableName = tableName;
        add.setVisible(true);
        add.pack();
        this.dispose();
    }

    private void jLabel1MousePressed(java.awt.event.MouseEvent evt) {
        // TODO add your handling code here:
        ImageIcon help = new ImageIcon ("src/Images/icons8_help_64px.png");
            JOptionPane.showMessageDialog(this, "The PURCHASABLE REPORT or the
DAMAGE REPORT specifies LOST/DISPOSED equipment. "
                    + "\n - REPLACEMENT COST is specified along with QUANTITY,
\n(e.g PRICE: 80, QUANTITY: 10, REPLACEMENT COST: 800.00)"
                + "\n - Only EQUIPMENT with LOST/DISPOSED condition will only
EXIST in the REPORT."
                + "\n NOTE: If you would like to make some CHANGES, please head
back to the MONITORING AREA.", "HELP", JOptionPane.INFORMATION_MESSAGE, help);
    }

    /**
```

```
     * @param args the command line arguments
     */

    // Variables declaration - do not modify
    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.JScrollPane jScrollPane1;
    private javax.swing.JTable jTable1;
    // End of variables declaration

    public JTable getjTable1() {
        return jTable1;
    }

    public void setjTable1(JTable jTable1) {
        this.jTable1 = jTable1;
    }
}
```