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dbconnection.java

```
package ReusableClasses;
import java.sql.DriverManager;
import java.sql.SQLException;
import javax.swing.JOptionPane;

public class dbconnection {
    public static final String connectionstring =
"jdbc:mysql://localhost:3306/clinic_database";
    public static final String databaseusername = "root";
    public static final String databasepassword = "kokoska12";

    public static java.sql.Connection conn= null;

    public static java.sql.Connection connection(){

        try{
            conn = DriverManager.getConnection(connectionstring,
databaseusername,databasepassword);
            //System.out.println("Connected");
            return conn;
        } catch(SQLException ex){

            JOptionPane.showMessageDialog(null, "There has been an error: " + ex);
        }
        return null;
    }
}
```

Sign_In.java

```
package csia;
import java.awt.Color;
import java.sql.*;
import java.sql.Connection;
import java.sql.ResultSet;
import javax.swing.JOptionPane;
import javax.swing.JPanel;

public class Sign_In extends javax.swing.JFrame {
    Connection conn=null;
    ResultSet rs = null;
    Statement pst=null;

    public Sign_In() {
        initComponents();
        setLocationRelativeTo(this);
    }

    public void passwordmatcher(){
        try{
            String username = txtuser.getText();
            String password = String.valueOf(txtpass.getPassword());
            String query ="SELECT * FROM clinic_database.users WHERE
(`Username` = '"+username+"')";
            conn = ReusableClasses.dbconnection.connection();
            pst = conn.prepareStatement(query);
            rs = pst.executeQuery(query);

            while(rs.next()){
                String passwordcomparison = rs.getString("Password");
                if(password.equals(passwordcomparison)){
                    this.setVisible(false);
                    new Dashboard().setVisible(true);
                    this.dispose();
                }else{
                    JOptionPane.showMessageDialog(null, "Username and password do
not match!");
                }
            }
        }catch(SQLException E){
            JOptionPane.showMessageDialog(null, "There has been an
error:" + E);
        }
        finally {
            try {
                conn.close();
            }
        }
    }
}
```

```

        pst.close();
        rs.close();
    } catch (SQLException E) {

    }
}

public int usernamechecker(){

    try{
        String username = txtuser.getText();
        String query ="SELECT * FROM clinic_database.users;";

        conn = ReusableClasses.dbconnection.connection();
        pst = conn.prepareStatement(query);
        rs = pst.executeQuery(query);

        while(rs.next()){
            String usernamecomparison = rs.getString("Username");
            if(usernamecomparison.equals(username)){
                return 1;
            }
        }
    }catch(SQLException e){
        JOptionPane.showMessageDialog(null, "There has been an
error:" + e);
    }
    return 0;

}

public void setColor(JPanel p){

    p.setBackground(new Color(185,160,160));

}

public void removeColor(JPanel p){

    p.setBackground(new Color(255,202,212));

}

@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated
Code">//GEN-BEGIN: initComponents
private void initComponents() {

    jPanel1 = new javax.swing.JPanel();
    jLabel2 = new javax.swing.JLabel();
    txtuser = new javax.swing.JTextField();
    txtpass = new javax.swing.JPasswordField();
    jButton2 = new javax.swing.JButton();
    jLabel1 = new javax.swing.JLabel();
    jLabel4 = new javax.swing.JLabel();

```

```

        jLabel6 = new javax.swing.JLabel();
        jLabel7 = new javax.swing.JLabel();
        Login = new javax.swing.JButton();
        Panell1 = new javax.swing.JPanel();
        jLabel5 = new javax.swing.JLabel();

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

        jPanel1.setBackground(new java.awt.Color(255, 202, 212));

        jLabel2.setIcon(new
javax.swing.ImageIcon("C:\\Users\\VivoBook\\Desktop\\logo -
Copy.jpg")); // NOI18N

        txtuser.setFont(new java.awt.Font("Tw Cen MT", 0, 30)); //
NOI18N
        txtuser.addActionListener(new java.awt.event.ActionListener()
{
            public void actionPerformed(java.awt.event.ActionEvent
evt) {
                txtuserActionPerformed(evt);
            }
        });

        txtpass.setFont(new java.awt.Font("Tw Cen MT", 0, 30)); //
NOI18N

        jButton2.setBackground(new java.awt.Color(255, 202, 212));
        jButton2.setFont(new java.awt.Font("Tw Cen MT", 1, 24)); //
NOI18N
        jButton2.setForeground(new java.awt.Color(255, 255, 255));
        jButton2.setText("Clear");
        jButton2.addActionListener(new
java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent
evt) {
                jButton2ActionPerformed(evt);
            }
        });

        jLabel11.setFont(new java.awt.Font("Tw Cen MT", 1, 70)); //
NOI18N
        jLabel11.setForeground(new java.awt.Color(255, 255, 255));

        jLabel11.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
        jLabel11.setText("Welcome!");

        jLabel4.setFont(new java.awt.Font("Tw Cen MT", 1, 36)); //
NOI18N
        jLabel4.setForeground(new java.awt.Color(255, 255, 255));
        jLabel4.setText("Username");

```

```

jLabel6.setFont(new java.awt.Font("Tw Cen MT", 1, 36)); //
NOI18N
jLabel6.setForeground(new java.awt.Color(255, 255, 255));
jLabel6.setText("Password");

jLabel7.setFont(new java.awt.Font("Tw Cen MT", 1, 48)); //
NOI18N
jLabel7.setForeground(new java.awt.Color(255, 255, 255));
jLabel7.setText("Sign In");

Login.setBackground(new java.awt.Color(255, 202, 212));
Login.setFont(new java.awt.Font("Tw Cen MT", 1, 24)); //
NOI18N
Login.setForeground(new java.awt.Color(255, 255, 255));
Login.setText("Enter");
Login.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent
evt) {
        LoginActionPerformed(evt);
    }
});

Panell.setBackground(new java.awt.Color(255, 202, 212));
Panell.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseEntered(java.awt.event.MouseEvent evt) {
        PanellMouseEntered(evt);
    }
    public void mouseExited(java.awt.event.MouseEvent evt) {
        PanellMouseExited(evt);
    }
});

jLabel5.setBackground(new java.awt.Color(255, 255, 255));
jLabel5.setFont(new java.awt.Font("Tw Cen MT", 1, 18)); //
NOI18N
jLabel5.setForeground(new java.awt.Color(255, 255, 255));
jLabel5.setText("Forgot password? Click here.");
jLabel5.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent evt) {
        jLabel5MouseClicked(evt);
    }
    public void mouseEntered(java.awt.event.MouseEvent evt) {
        jLabel5MouseEntered(evt);
    }
    public void mouseExited(java.awt.event.MouseEvent evt) {
        jLabel5MouseExited(evt);
    }
});

javax.swing.GroupLayout PanellLayout = new
javax.swing.GroupLayout(Panell);

```

```

        Panel1.setLayout (Panel1Layout);
        Panel1Layout.setHorizontalGroup(

Panel1Layout.createParallelGroup (javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup (javax.swing.GroupLayout.Alignment.TRAILING,
Panel1Layout.createSequentialGroup()

.addContainerGap (javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
        .addComponent (jLabel5)
        .addContainerGap ())
    );
    Panel1Layout.setVerticalGroup(

Panel1Layout.createParallelGroup (javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup (javax.swing.GroupLayout.Alignment.TRAILING,
Panel1Layout.createSequentialGroup()
        .addGap (0, 0, Short.MAX_VALUE)
        .addComponent (jLabel5))
    );

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

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

.addGroup (jPanel1Layout.createParallelGroup (javax.swing.GroupLayout.Alignment.TRAILING)
        .addGroup (jPanel1Layout.createSequentialGroup()
        .addGap (136, 136, 136)
        .addComponent (jLabel1,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
        .addGroup (jPanel1Layout.createSequentialGroup()

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

.addGroup (jPanel1Layout.createSequentialGroup()
        .addGap (34, 34, 34)
        .addComponent (jLabel2,
javax.swing.GroupLayout.PREFERRED_SIZE, 767,
javax.swing.GroupLayout.PREFERRED_SIZE))

.addGroup (jPanel1Layout.createSequentialGroup()
        .addGap (24, 24, 24)

```

```

        .addComponent(Panell1,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)))

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
133, Short.MAX_VALUE)

.addGroup(jPanell1Layout.createParallelGroup(javax.swing.GroupLayout.A
lignment.LEADING, false)
        .addComponent(jLabel7,
javax.swing.GroupLayout.Alignment.TRAILING)
        .addComponent(jLabel6,
javax.swing.GroupLayout.PREFERRED_SIZE, 205,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(txtuser,
javax.swing.GroupLayout.DEFAULT_SIZE, 388, Short.MAX_VALUE)
        .addComponent(txtpass)

.addGroup(jPanell1Layout.createSequentialGroup()
        .addComponent(Login,
javax.swing.GroupLayout.PREFERRED_SIZE, 103,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addComponent(jButton2,
javax.swing.GroupLayout.PREFERRED_SIZE, 121,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addComponent(jLabel4,
javax.swing.GroupLayout.PREFERRED_SIZE, 205,
javax.swing.GroupLayout.PREFERRED_SIZE)))
        .addContainerGap()
    );
    jPanell1Layout.setVerticalGroup(

jPanell1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.L
EADING)
        .addGroup(jPanell1Layout.createSequentialGroup()
            .addContainerGap()
            .addComponent(jLabel11,
javax.swing.GroupLayout.PREFERRED_SIZE, 54,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(27, 27, 27)

.addGroup(jPanell1Layout.createParallelGroup(javax.swing.GroupLayout.A
lignment.LEADING)
        .addGroup(jPanell1Layout.createSequentialGroup()
            .addComponent(jLabel7,
javax.swing.GroupLayout.PREFERRED_SIZE, 54,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(9, 9, 9)

```



```

        .addComponent(jLabel4)

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(txtuser,
javax.swing.GroupLayout.PREFERRED_SIZE, 54,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(36, 36, 36)
            .addComponent(jLabel6)

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(txtpass,
javax.swing.GroupLayout.PREFERRED_SIZE, 57,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(31, 31, 31)

        .addGroup(jPanell1Layout.createParallelGroup(javax.swing.GroupLayout.A
lignment.BASELINE)
            .addComponent(Login,
javax.swing.GroupLayout.PREFERRED_SIZE, 30,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(jButton2,
javax.swing.GroupLayout.PREFERRED_SIZE, 54,
javax.swing.GroupLayout.PREFERRED_SIZE)))
            .addComponent(jLabel2,
javax.swing.GroupLayout.PREFERRED_SIZE, 377,
javax.swing.GroupLayout.PREFERRED_SIZE))

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
32, Short.MAX_VALUE)
            .addComponent(Panell1,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addContainerGap())
    );

    jPanell1Layout.linkSize(javax.swing.SwingConstants.VERTICAL,
new java.awt.Component[] {Login, jButton2});

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

layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(jPanell1,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    );
    layout.setVerticalGroup(

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

```

```

        .addComponent(jPanell1,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        );

        pack();
        setLocationRelativeTo(null);
} // </editor-fold> // GEN-END: initComponents

private void jButton2ActionPerformed(java.awt.event.ActionEvent
evt) { // GEN-FIRST:event_jButton2ActionPerformed
    txtuser.setText("");
    txtpass.setText("");
} // GEN-LAST:event_jButton2ActionPerformed

private void LoginActionPerformed(java.awt.event.ActionEvent evt)
{ // GEN-FIRST:event_LoginActionPerformed
    int checker= usernamechecker();

    if(checker==1){
        passwordmatcher();

    }
    if(checker==0){
        JOptionPane.showMessageDialog(null, "Username does not exist,
please try again!");
    }
} // GEN-LAST:event_LoginActionPerformed

private void txtuserActionPerformed(java.awt.event.ActionEvent
evt) { // GEN-FIRST:event_txtuserActionPerformed
    // TODO add your handling code here:
} // GEN-LAST:event_txtuserActionPerformed

private void Panell1MouseEntered(java.awt.event.MouseEvent evt)
{ // GEN-FIRST:event_Panell1MouseEntered

} // GEN-LAST:event_Panell1MouseEntered

private void Panell1MouseExited(java.awt.event.MouseEvent evt)
{ // GEN-FIRST:event_Panell1MouseExited

} // GEN-LAST:event_Panell1MouseExited

private void jLabel5MouseClicked(java.awt.event.MouseEvent evt)
{ // GEN-FIRST:event_jLabel5MouseClicked
    this.setVisible(false);
    new Email_OTP_Checker().setVisible(true);
    this.dispose();
} // GEN-LAST:event_jLabel5MouseClicked

```

```

        private void jLabel5MouseEntered(java.awt.event.MouseEvent evt)
        { //GEN-FIRST:event_jLabel5MouseEntered
            setColor(Panell1);
        } //GEN-LAST:event_jLabel5MouseEntered

        private void jLabel5MouseExited(java.awt.event.MouseEvent evt)
        { //GEN-FIRST:event_jLabel5MouseExited
            removeColor(Panell1);
        } //GEN-LAST:event_jLabel5MouseExited
    /**
     * @param args the command line arguments
     */
    public static void main(String args[]) {

        /* Create and display the form */
        java.awt.EventQueue.invokeLater(new Runnable() {
            public void run() {
                new Sign_In().setVisible(true);
            }
        });
    }
    // Variables declaration - do not modify //GEN-BEGIN:variables
    private javax.swing.JButton Login;
    private javax.swing.JPanel Panell1;
    private javax.swing.JButton jButton2;
    private javax.swing.JLabel jLabel1;
    private javax.swing.JLabel jLabel2;
    private javax.swing.JLabel jLabel4;
    private javax.swing.JLabel jLabel5;
    private javax.swing.JLabel jLabel6;
    private javax.swing.JLabel jLabel7;
    private javax.swing.JPanel jPanel1;
    private javax.swing.JPasswordField txtpass;
    private javax.swing.JTextField txtuser;
    // End of variables declaration //GEN-END:variables
}

```

Email_OTP_Checker

```
package csia;

import java.sql.Connection;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.sql.Statement;
import java.util.Properties;
import java.util.Random;
import javax.mail.Message;
import javax.mail.MessagingException;
import javax.mail.PasswordAuthentication;
import javax.mail.Session;
import javax.mail.Transport;
import javax.mail.internet.InternetAddress;
import javax.mail.internet.MimeMessage;
import javax.swing.JOptionPane;

/**
 *
 * @author VivoBook
 */
public class Email_OTP_Checker extends javax.swing.JFrame {
    Connection conn=null;
    ResultSet rs = null;
    Statement pst=null;
    int OTP=0;
    /**
     * Creates new form OTP_password
     */
    public Email_OTP_Checker() {
        initComponents();
    }

    public void SendEmail(String to,String sub,String msg){
        //Get properties object
        String from = "dentalclinicsara@gmail.com";
        String password = "sifrazasarul2";
        Properties props = new Properties();
        props.put("mail.smtp.host", "smtp.gmail.com");
        props.put("mail.smtp.socketFactory.port", "465");
        props.put("mail.smtp.socketFactory.class",
            "javax.net.ssl.SSLSocketFactory");
        props.put("mail.smtp.auth", "true");
        props.put("mail.smtp.port", "465");
        //get Session
        Session session = Session.getDefaultInstance(props,
            new javax.mail.Authenticator() {
                protected PasswordAuthentication getPasswordAuthentication() {
                    return new PasswordAuthentication(from,password);
                }
            });
        //compose message
```

```

        try {
            MimeMessage message = new MimeMessage(session);
            message.addRecipient(Message.RecipientType.TO, new
InternetAddress(to));
            message.setSubject(sub);
            message.setText(msg);
            //send message
            Transport.send(message);

            } catch (MessagingException e) {throw new RuntimeException(e);}

        }

    /**
     * This method is called from within the constructor to initialize the
form.
     * WARNING: Do NOT modify this code. The content of this method is always
     * regenerated by the Form Editor.
     */
    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated
Code">//GEN-BEGIN: initComponents
    private void initComponents() {

        jPanel1 = new javax.swing.JPanel();
        EmailRecipient = new javax.swing.JTextField();
        jLabel1 = new javax.swing.JLabel();
        jButton1 = new javax.swing.JButton();
        jLabel2 = new javax.swing.JLabel();
        jButton2 = new javax.swing.JButton();
        OTPCheck = new javax.swing.JTextField();

        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

        jPanel1.setBackground(new java.awt.Color(255, 202, 212));

        jLabel1.setFont(new java.awt.Font("Tw Cen MT", 1, 18)); // NOI18N
        jLabel1.setForeground(new java.awt.Color(102, 102, 102));
        jLabel1.setText("Please enter your email. If your email matches the
database, you will get the message with the OTP");

        jButton1.setFont(new java.awt.Font("Tw Cen MT", 1, 18)); // NOI18N
        jButton1.setForeground(new java.awt.Color(102, 102, 102));
        jButton1.setText("Send OTP");
        jButton1.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton1ActionPerformed(evt);
            }
        });

        jLabel2.setFont(new java.awt.Font("Tw Cen MT", 1, 18)); // NOI18N
        jLabel2.setForeground(new java.awt.Color(102, 102, 102));
        jLabel2.setText("Enter email:");

```

```

        jButton2.setFont(new java.awt.Font("Tw Cen MT", 1, 18)); // NOI18N
        jButton2.setForeground(new java.awt.Color(102, 102, 102));
        jButton2.setText("Check OTP");
        jButton2.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton2ActionPerformed(evt);
            }
        });

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

jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel1Layout.createSequentialGroup()
                .addContainerGap()
                .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addComponent(jLabel1,
                        javax.swing.GroupLayout.PREFERRED_SIZE,
                        javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(OTPCheck,
                        javax.swing.GroupLayout.PREFERRED_SIZE,
                        javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addGap(72, 72, 72)
                )
            )
            .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addComponent(jButton2,
                    javax.swing.GroupLayout.Alignment.TRAILING,
                    javax.swing.GroupLayout.PREFERRED_SIZE,
                    javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jButton1,
                    javax.swing.GroupLayout.Alignment.TRAILING,

```

```

javax.swing.GroupLayout.PREFERRED_SIZE, 172,
javax.swing.GroupLayout.PREFERRED_SIZE)))
        .addGap(109, 109, 109)))
    );
    jPanel1Layout.setVerticalGroup(

jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jPanel1Layout.createSequentialGroup()
        .addGap(36, 36, 36)
        .addComponent(jLabel1)
        .addGap(36, 36, 36)
        .addComponent(jLabel2)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.B
ASELINE)
    .addComponent(emailRecipient,
javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
    .addComponent(jButton1))
    .addGap(18, 18, 18)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.B
ASELINE)
    .addComponent(jButton2)
    .addComponent(otpCheck,
javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
    .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
    );

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

layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addComponent(jPanel1, javax.swing.GroupLayout.Alignment.TRAILING,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
    );
    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> // GEN-END: initComponents

```

```

        private void jButton1ActionPerformed(java.awt.event.ActionEvent evt)
{
//GEN-FIRST:event_jButton1ActionPerformed
    OTP = new Random().nextInt(900000) + 100000;
    String EmailR = EmailRecipient.getText();
    String searchquery = "SELECT Email FROM clinic_database.users WHERE
('Email`='"+ EmailR + "');";
    try{
        conn = ReusableClasses.dbconnection.connection();
        pst = conn.prepareStatement(searchquery);
        rs = pst.executeQuery(searchquery);
        if (!rs.next()){

            JOptionPane.showMessageDialog(null, "Email not found!");

        }else{
            String email= rs.getString("Email");
            String subject = "OTP Request";
            String content = String.valueOf(OTP);
            SendEmail(email, subject, content);
        }
    }catch(SQLException e){
        JOptionPane.showMessageDialog(null, e);
    }
}
//GEN-LAST:event_jButton1ActionPerformed

        private void jButton2ActionPerformed(java.awt.event.ActionEvent evt)
{
//GEN-FIRST:event_jButton2ActionPerformed
    String otp = OTPCheck.getText();
    int i =Integer.parseInt(otp);
    if (i==OTP){
        JOptionPane.showMessageDialog(null, "OTP match!");
        this.setVisible(false);
        new Software_User_Update().setVisible(true);
        this.dispose();

    }else{
        JOptionPane.showMessageDialog(null, "OTP does not match! Please try
again.");
    }
}
//GEN-LAST:event_jButton2ActionPerformed

/**
 * @param args the command line arguments
 */
public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    //<editor-fold defaultstate="collapsed" desc=" Look and feel setting
code (optional) ">
    /* If Nimbus (introduced in Java SE 6) is not available, stay with the
default look and feel.
    * For details see
http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html

```



```

        */
        try {
            for (javax.swing.UIManager.LookAndFeelInfo info :
                javax.swing.UIManager.getInstalledLookAndFeels()) {
                if ("Nimbus".equals(info.getName())) {
                    javax.swing.UIManager.setLookAndFeel(info.getClassName());
                    break;
                }
            }
        } catch (ClassNotFoundException ex) {

        java.util.logging.Logger.getLogger(Email_OTP_Checker.class.getName()).log(java.
            util.logging.Level.SEVERE, null, ex);
        } catch (InstantiationException ex) {

        java.util.logging.Logger.getLogger(Email_OTP_Checker.class.getName()).log(java.
            util.logging.Level.SEVERE, null, ex);
        } catch (IllegalAccessException ex) {

        java.util.logging.Logger.getLogger(Email_OTP_Checker.class.getName()).log(java.
            util.logging.Level.SEVERE, null, ex);
        } catch (javax.swing.UnsupportedLookAndFeelException ex) {

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

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

    // Variables declaration - do not modify//GEN-BEGIN:variables
    public static javax.swing.JTextField EmailRecipient;
    private javax.swing.JTextField OTPCheck;
    private javax.swing.JButton jButton1;
    private javax.swing.JButton jButton2;
    private javax.swing.JLabel jLabel1;
    private javax.swing.JLabel jLabel2;
    private javax.swing.JPanel jPanel1;
    // End of variables declaration//GEN-END:variables
}

```

Software User Update.java

/*

* 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 csia;
```

```
import java.sql.Connection;
```

```
import java.sql.PreparedStatement;
```

```
import java.sql.ResultSet;
```

```
import java.sql.SQLException;
```

```
import javax.swing.JFrame;
```

```
import javax.swing.JOptionPane;
```

```
/**
```

```
 *
```

```
 * @author VivoBook
```

```
 */
```

```
public class Software_User_Update extends javax.swing.JFrame {
```

```
    public Connection conn=null;
```

```
    public ResultSet rs = null;
```

```
    public PreparedStatement pst=null;
```

```
    /**
```

```
     * Creates new form Edit_Users
```

```
     */
```

```
    public Software_User_Update() {
```

```
        initComponents();
```

```
        displayuser();
```

```
    }
```

```
    public final String fetchemail(){
```

```
        String budalica =
```

```
Email_OTP_Checker.EmailRecipient.getText();
```

```
        return budalica;
```

```
    }
```

```
    public final void displayuser(){
```

```
        try{
```

```

        String getdata = "SELECT * FROM
`clinic_database`.`users` WHERE (Email = '" + fetchemail() +
"');";
        conn = ReusableClasses.dbconnection.connection();
        pst = conn.prepareStatement(getdata,
ResultSet.TYPE_SCROLL_INSENSITIVE, ResultSet.CONCUR_READ_ONLY);
        rs = pst.executeQuery(getdata);
        rs.first();
        EmailTF.setText(rs.getString("Email"));
        UsernameTF.setText(rs.getString("Username"));
        PasswordTF.setText(rs.getString("Password"));
        rs.close();
        conn.close();
    }catch(SQLException e){
        JFrame f = new JFrame();
        JOptionPane.showMessageDialog(f,e);
    }
}

```

```

//ResultSet.TYPE_SCROLL_INSENSITIVE,
/**
 * This method is called from within the constructor to
initialize the form.
 * WARNING: Do NOT modify this code. The content of this
method is always
 * regenerated by the Form Editor.
 */
@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated
Code">//GEN-BEGIN: initComponents
private void initComponents() {

```

```

    jPanel1 = new javax.swing.JPanel();
    PasswordTF = new javax.swing.JTextField();
    Username = new javax.swing.JLabel();
    jLabel2 = new javax.swing.JLabel();
    jButton1 = new javax.swing.JButton();
    EmailTF = new javax.swing.JTextField();
    jLabel1 = new javax.swing.JLabel();
    UsernameTF = new javax.swing.JTextField();

```

```

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

jPanell1.setBackground(new java.awt.Color(255, 202,
212));

Username.setFont(new java.awt.Font("Tw Cen MT", 1, 18));
// NOI18N
Username.setForeground(new java.awt.Color(102, 102,
102));
Username.setText("Username");

jLabel2.setFont(new java.awt.Font("Tw Cen MT", 1, 18));
// NOI18N
jLabel2.setForeground(new java.awt.Color(102, 102,
102));
jLabel2.setText("Password");

jButton1.setFont(new java.awt.Font("Tw Cen MT", 1, 18));
// NOI18N
jButton1.setForeground(new java.awt.Color(102, 102,
102));
jButton1.setText("Update");
jButton1.addActionListener(new
java.awt.event.ActionListener() {
    public void
actionPerformed(java.awt.event.ActionEvent evt) {
        jButton1ActionPerformed(evt);
    }
});

jLabel1.setFont(new java.awt.Font("Tw Cen MT", 1, 18));
// NOI18N
jLabel1.setForeground(new java.awt.Color(102, 102,
102));
jLabel1.setText("Email");

javax.swing.GroupLayout jPanell1Layout = new
javax.swing.GroupLayout(jPanell1);
jPanell1.setLayout(jPanell1Layout);
jPanell1Layout.setHorizontalGroup(

```

```

jPanell1Layout.createParallelGroup(javax.swing.GroupLayout.Alignm
ent.LEADING)
    .addGroup(jPanell1Layout.createSequentialGroup()
        .addGap(21, 21, 21)

    .addGroup(jPanell1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(jLabel2)

    .addGroup(jPanell1Layout.createSequentialGroup())

    .addGroup(jPanell1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
        .addComponent(Username)
        .addComponent(UsernameTF,
javax.swing.GroupLayout.DEFAULT_SIZE, 226, Short.MAX_VALUE)
        .addComponent>PasswordTF))
        .addGap(105, 105, 105)

    .addGroup(jPanell1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
        .addComponent>EmailTF)
        .addComponent(jButton1,
javax.swing.GroupLayout.DEFAULT_SIZE, 222, Short.MAX_VALUE)
        .addComponent(jLabel1,
javax.swing.GroupLayout.PREFERRED_SIZE, 57,
javax.swing.GroupLayout.PREFERRED_SIZE)))

    .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
    );
    jPanell1Layout.setVerticalGroup(

jPanell1Layout.createParallelGroup(javax.swing.GroupLayout.Alignm
ent.LEADING)
    .addGroup(jPanell1Layout.createSequentialGroup()
        .addGap(45, 45, 45)

    .addGroup(jPanell1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(Username)
        .addComponent(jLabel1))

```

```
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRE  
LATED)
```

```
.addGroup(jPanell1Layout.createParallelGroup(javax.swing.GroupLay  
out.Alignment.BASELINE)  
    .addComponent(UsernameTF,  
javax.swing.GroupLayout.PREFERRED_SIZE, 44,  
javax.swing.GroupLayout.PREFERRED_SIZE)  
    .addComponent(EmailTF,  
javax.swing.GroupLayout.PREFERRED_SIZE, 44,  
javax.swing.GroupLayout.PREFERRED_SIZE))  
    .addGap(20, 20, 20)  
    .addComponent(jLabel2)  
    .addGap(18, 18, 18)
```

```
.addGroup(jPanell1Layout.createParallelGroup(javax.swing.GroupLay  
out.Alignment.LEADING, false)  
    .addComponent(jButton1,  
javax.swing.GroupLayout.DEFAULT_SIZE,  
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)  
    .addComponent>PasswordTF,  
javax.swing.GroupLayout.PREFERRED_SIZE, 46,  
javax.swing.GroupLayout.PREFERRED_SIZE))  
    .addContainerGap(33, Short.MAX_VALUE))  
);
```

```
javax.swing.GroupLayout layout = new  
javax.swing.GroupLayout(getContentPane());  
getContentPane().setLayout(layout);  
layout.setHorizontalGroup(
```

```
layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEA  
DING)
```

```
    .addGroup(layout.createSequentialGroup()  
        .addComponent(jPanell1,  
javax.swing.GroupLayout.PREFERRED_SIZE,  
javax.swing.GroupLayout.DEFAULT_SIZE,  
javax.swing.GroupLayout.PREFERRED_SIZE)  
        .addGap(0, 0, Short.MAX_VALUE))  
    );  
layout.setVerticalGroup(
```

```

layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addComponent(jPanel1,
javax.swing.GroupLayout.Alignment.TRAILING,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    );

    pack();
    setLocationRelativeTo(null);
} // </editor-fold> // GEN-END: initComponents

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

        String updatequery= "UPDATE
`clinic_database`.`users` SET `Username` =
'" + UsernameTF.getText() + "', "
            + " `Password` = '" + PasswordTF.getText() + "', "
            + " `Email` = '" + EmailTF.getText() + "'" WHERE
(`Email` = '" + fetchemail() + "')";
        conn = ReusableClasses.dbconnection.connection();
        pst = conn.prepareStatement(updatequery);
        //pst.setString(1, UsernameTF.getText());
        //pst.setString(2, PasswordTF.getText());
        //pst.setString(3, EmailTF.getText());
        pst.executeUpdate(updatequery);
        JFrame f = new JFrame();
        JOptionPane.showMessageDialog(f, "Change made
succesfully");

    } catch (SQLException e) {
        JFrame f = new JFrame();
        JOptionPane.showMessageDialog(f, e);
    }
    int f=0;
    int dialogButton = JOptionPane.YES_NO_OPTION;
    JOptionPane.showConfirmDialog (null, "Proceed to
login?", null, dialogButton);
    if (dialogButton == JOptionPane.YES_OPTION) {
        Sign_In a = new Sign_In();
    }
}

```

```

        a.setVisible(true);
        this.setVisible(false);
        this.dispose();
        if(dialogButton == JOptionPane.NO_OPTION) {
            this.setVisible(false);
            this.dispose();
        }
    }
}

//GEN-LAST:event_jButton1ActionPerformed

/**
 * @param args the command line arguments
 */
public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    //

```



```

        } catch (javax.swing.UnsupportedLookAndFeelException ex)
    {

java.util.logging.Logger.getLogger(Software_User_Update.class.ge
tName()).log(java.util.logging.Level.SEVERE, null, ex);
    }
    //</editor-fold>
    //</editor-fold>

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

        }
    });
}

    // Variables declaration - do not
modify//GEN-BEGIN:variables
    private volatile javax.swing.JTextField EmailTF;
    private volatile javax.swing.JTextField PasswordTF;
    private javax.swing.JLabel Username;
    private javax.swing.JTextField UsernameTF;
    private javax.swing.JButton jButton1;
    private javax.swing.JLabel jLabel1;
    private javax.swing.JLabel jLabel2;
    private javax.swing.JPanel jPanel1;
    // End of variables declaration//GEN-END:variables
}

```

Dashboard.java

```
/*
 * 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 csia;

import java.awt.Color;
import java.text.DateFormat;
import java.text.SimpleDateFormat;
import java.util.Date;
import javax.swing.JOptionPane;
import javax.swing.JPanel;

/**
 *
 * @author VivoBook
 */
public class Dashboard extends javax.swing.JFrame {

    /**
     * Creates new form Dashboard
     */
    public Dashboard() {
        initComponents();
        time();
    }

    public void time(){
        Thread t;
        t = new Thread(){
            public void run(){
                while(true){
                    DateFormat dateFormat1 = new
SimpleDateFormat("dd:MM:yyyy");
                    DateFormat dateFormat2 = new
SimpleDateFormat("HH:mm:ss");
                    Date date1 = new Date();
                    Date date2 = new Date();
                    String formatteddate1=
dateFormat1.format(date1);

```

```

        String formatteddate2=
dateFormat2.format(date2);

        jLabel5.setText("Date: " + formatteddate1);
        jLabel6.setText("Time: " + formatteddate2);
        try{sleep(1000);
        }catch(InterruptedException e){
            JOptionPane.showMessageDialog(null,
"There has been an error:" + e);
        }
    }
}

t.start();
}

/**
 * This method is called from within the constructor to
initialize the form.
 * WARNING: Do NOT modify this code. The content of this
method is always
 * regenerated by the Form Editor.
 */
@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated
Code">//GEN-BEGIN:initComponents
private void initComponents() {

    Panel2 = new javax.swing.JPanel();
    jPanel5 = new javax.swing.JPanel();
    DashboardLabel = new javax.swing.JLabel();
    jPanel11 = new javax.swing.JPanel();
    UpdateDatabasejFrame = new javax.swing.JLabel();
    jPanel2 = new javax.swing.JPanel();
    ViewPatientDatabasejFrame = new javax.swing.JLabel();
    jPanel3 = new javax.swing.JPanel();
    InvoiceCreatorjFrame = new javax.swing.JLabel();
    jPanel4 = new javax.swing.JPanel();
    AppointmentCreatorjFrame = new javax.swing.JLabel();
    jPanel6 = new javax.swing.JPanel();
    jLabel6 = new javax.swing.JLabel();
    jLabel5 = new javax.swing.JLabel();

```

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

```
    Panel2.setBackground(new java.awt.Color(255, 202, 212));  
    Panel2.setLayout(new  
org.netbeans.lib.awtextra.AbsoluteLayout());
```

```
    jPanel5.setBackground(new java.awt.Color(157, 129,  
139));
```

```
    DashboardLabel.setBackground(new java.awt.Color(157,  
129, 139));  
    DashboardLabel.setFont(new java.awt.Font("Tw Cen MT", 1,  
60)); // NOI18N  
    DashboardLabel.setForeground(new java.awt.Color(255,  
255, 255));
```

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

```
    DashboardLabel.setText("Dashboard");
```

```
    jPanel1.setBackground(new java.awt.Color(244, 172,  
183));
```

```
    UpdateDatabaseJFrame.setFont(new java.awt.Font("Tw Cen  
MT", 1, 36)); // NOI18N
```

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

```
UpdateDatabaseJFrame.setHorizontalAlignment(javax.swing.SwingCon  
stants.CENTER);
```

```
    UpdateDatabaseJFrame.setIcon(new  
javax.swing.ImageIcon(getClass().getResource("/Icons/icons8_data  
base_administrator_26px.png"))); // NOI18N
```

```
    UpdateDatabaseJFrame.setText("Update patient database");
```

```
    UpdateDatabaseJFrame.addMouseListener(new  
java.awt.event.MouseAdapter() {  
        public void mouseClicked(java.awt.event.MouseEvent  
evt) {
```

```
            UpdateDatabaseJFrameMouseClicked(evt);
```

```
        }
```

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

```

        UpdateDatabasejFrameMouseEntered(evt);
    }
    public void mouseExited(java.awt.event.MouseEvent
evt) {
        UpdateDatabasejFrameMouseExited(evt);
    }
    public void mousePressed(java.awt.event.MouseEvent
evt) {
        UpdateDatabasejFrameMousePressed(evt);
    }
    });
    UpdateDatabasejFrame.addKeyListener(new
java.awt.event.KeyAdapter() {
        public void keyPressed(java.awt.event.KeyEvent evt)
{
            UpdateDatabasejFrameKeyPressed(evt);
        }
    });

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

jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignm
ent.LEADING)
        .addGroup(jPanel1Layout.createSequentialGroup()
            .addComponent(UpdateDatabasejFrame,
javax.swing.GroupLayout.PREFERRED_SIZE, 686,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(0, 0, Short.MAX_VALUE))
        );
    jPanel1Layout.setVerticalGroup(

jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignm
ent.LEADING)
        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanel1Layout.createSequentialGroup()
            .addContainerGap()
            .addComponent(UpdateDatabasejFrame,
javax.swing.GroupLayout.DEFAULT_SIZE, 72, Short.MAX_VALUE))
        );

```

```

jPanel2.setBackground(new java.awt.Color(244, 172,
183));

ViewPatientDatabasejFrame.setBackground(new
java.awt.Color(244, 172, 183));
ViewPatientDatabasejFrame.setFont(new java.awt.Font("Tw
Cen MT", 1, 36)); // NOI18N
ViewPatientDatabasejFrame.setForeground(new
java.awt.Color(255, 255, 255));

ViewPatientDatabasejFrame.setHorizontalAlignment(javax.swing.Swi
ngConstants.CENTER);
ViewPatientDatabasejFrame.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/Icons/icons8_data
base_26px.png"))); // NOI18N
ViewPatientDatabasejFrame.setText("View patient
database");
ViewPatientDatabasejFrame.addMouseListener(new
java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent
evt) {
        ViewPatientDatabasejFrameMouseClicked(evt);
    }
    public void mouseEntered(java.awt.event.MouseEvent
evt) {
        ViewPatientDatabasejFrameMouseEntered(evt);
    }
    public void mouseExited(java.awt.event.MouseEvent
evt) {
        ViewPatientDatabasejFrameMouseExited(evt);
    }
});

javax.swing.GroupLayout jPanel2Layout = new
javax.swing.GroupLayout(jPanel2);
jPanel2.setLayout(jPanel2Layout);
jPanel2Layout.setHorizontalGroup(

jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignm
ent.LEADING)
    .addGroup(jPanel2Layout.createSequentialGroup()
        .addComponent(ViewPatientDatabasejFrame,
javax.swing.GroupLayout.PREFERRED_SIZE, 651,
javax.swing.GroupLayout.PREFERRED_SIZE)

```

```

        .addGap(0, 0, Short.MAX_VALUE))
    );
    JPanel2Layout.setVerticalGroup(

jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignm
ent.LEADING)
        .addComponent(ViewPatientDatabasejFrame,
javax.swing.GroupLayout.DEFAULT_SIZE, 80, Short.MAX_VALUE)
    );

    JPanel3.setBackground(new java.awt.Color(244, 172,
183));

    InvoiceCreatorjFrame.setFont(new java.awt.Font("Tw Cen
MT", 1, 36)); // NOI18N
    InvoiceCreatorjFrame.setForeground(new
java.awt.Color(255, 255, 255));

InvoiceCreatorjFrame.setHorizontalAlignment(javax.swing.SwingCon
stants.CENTER);
    InvoiceCreatorjFrame.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/Icons/icons8_bill
_26px.png"))); // NOI18N
    InvoiceCreatorjFrame.setText("Invoice creator");
    InvoiceCreatorjFrame.addMouseListener(new
java.awt.event.MouseAdapter() {
        public void mouseClicked(java.awt.event.MouseEvent
evt) {
            InvoiceCreatorjFrameMouseClicked(evt);
        }
        public void mouseEntered(java.awt.event.MouseEvent
evt) {
            InvoiceCreatorjFrameMouseEntered(evt);
        }
        public void mouseExited(java.awt.event.MouseEvent
evt) {
            InvoiceCreatorjFrameMouseExited(evt);
        }
    });

    javax.swing.GroupLayout jPanel3Layout = new
javax.swing.GroupLayout(jPanel3);
    jPanel3.setLayout(jPanel3Layout);
    jPanel3Layout.setHorizontalGroup(

```

```

jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignm
ent.LEADING)
        .addComponent(InvoiceCreatorjFrame,
javax.swing.GroupLayout.Alignment.TRAILING,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        );
jPanel3Layout.setVerticalGroup(

jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignm
ent.LEADING)
        .addComponent(InvoiceCreatorjFrame,
javax.swing.GroupLayout.Alignment.TRAILING,
javax.swing.GroupLayout.DEFAULT_SIZE, 80, Short.MAX_VALUE)
        );

jPanel4.setBackground(new java.awt.Color(244, 172,
183));

AppointmentCreatorjFrame.setFont(new java.awt.Font("Tw
Cen MT", 1, 36)); // NOI18N
AppointmentCreatorjFrame.setForeground(new
java.awt.Color(255, 255, 255));

AppointmentCreatorjFrame.setHorizontalAlignment(javax.swing.Swin
gConstants.CENTER);
AppointmentCreatorjFrame.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/Icons/icons8_plan
ner_26px.png"))); // NOI18N
AppointmentCreatorjFrame.setText("Appointment creator");
AppointmentCreatorjFrame.addMouseListener(new
java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent
evt) {
        AppointmentCreatorjFrameMouseClicked(evt);
    }
    public void mouseEntered(java.awt.event.MouseEvent
evt) {
        AppointmentCreatorjFrameMouseEntered(evt);
    }
    public void mouseExited(java.awt.event.MouseEvent
evt) {
        AppointmentCreatorjFrameMouseExited(evt);
    }

```



```

        }
    });

    javax.swing.GroupLayout jPanel4Layout = new
javax.swing.GroupLayout(jPanel4);
    jPanel4.setLayout(jPanel4Layout);
    jPanel4Layout.setHorizontalGroup(

jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignm
ent.LEADING)
        .addComponent(AppointmentCreatorJFrame,
javax.swing.GroupLayout.Alignment.TRAILING,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    );
    jPanel4Layout.setVerticalGroup(

jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignm
ent.LEADING)
        .addComponent(AppointmentCreatorJFrame,
javax.swing.GroupLayout.DEFAULT_SIZE, 80, Short.MAX_VALUE)
    );

    jPanel6.setBackground(new java.awt.Color(157, 129,
139));

    jLabel6.setFont(new java.awt.Font("Tw Cen MT", 1, 24));
// NOI18N
    jLabel6.setForeground(new java.awt.Color(255, 255,
255));

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

    jLabel6.setVerticalAlignment(javax.swing.SwingConstants.TOP);

    jLabel5.setFont(new java.awt.Font("Tw Cen MT", 1, 24));
// NOI18N
    jLabel5.setForeground(new java.awt.Color(255, 255,
255));

    jLabel5.setHorizontalAlignment(javax.swing.SwingConstants.CENTER
);

```

```

jLabel5.setVerticalAlignment(javax.swing.SwingConstants.BOTTOM);

        javax.swing.GroupLayout jPanel6Layout = new
javax.swing.GroupLayout(jPanel6);
        jPanel6.setLayout(jPanel6Layout);
        jPanel6Layout.setHorizontalGroup(

jPanel6Layout.createParallelGroup(javax.swing.GroupLayout.Alignm
ent.LEADING)
                .addGroup(jPanel6Layout.createSequentialGroup()
                        .addContainerGap()

.addGroup(jPanel6Layout.createParallelGroup(javax.swing.GroupLay
out.Alignment.LEADING)
                        .addComponent(jLabel6,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                        .addComponent(jLabel5,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)))
                );
        jPanel6Layout.setVerticalGroup(

jPanel6Layout.createParallelGroup(javax.swing.GroupLayout.Alignm
ent.LEADING)

.addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanel6Layout.createSequentialGroup()
                .addComponent(jLabel5,
javax.swing.GroupLayout.PREFERRED_SIZE, 60,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRE
LATED)
                .addComponent(jLabel6,
javax.swing.GroupLayout.PREFERRED_SIZE, 43,
javax.swing.GroupLayout.PREFERRED_SIZE)
                );

        javax.swing.GroupLayout jPanel5Layout = new
javax.swing.GroupLayout(jPanel5);
        jPanel5.setLayout(jPanel5Layout);
        jPanel5Layout.setHorizontalGroup(

```

```

jPanel5Layout.createParallelGroup(javax.swing.GroupLayout.Alignm
ent.LEADING)
        .addGroup(jPanel5Layout.createSequentialGroup())

        .addGroup(jPanel5Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING, false)

        .addGroup(javax.swing.GroupLayout.Alignment.LEADING,
jPanel5Layout.createSequentialGroup()
                .addGap(201, 201, 201)
                .addComponent(DashboardLabel,
javax.swing.GroupLayout.PREFERRED_SIZE, 277,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(18, 18, 18)
                .addComponent(jPanel6,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
                .addComponent(jPanel1,
javax.swing.GroupLayout.Alignment.LEADING,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                .addComponent(jPanel2,
javax.swing.GroupLayout.Alignment.LEADING,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                .addComponent(jPanel3,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                .addComponent(jPanel4,
javax.swing.GroupLayout.Alignment.LEADING,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
                .addGap(0, 0, Short.MAX_VALUE))
        );
jPanel5Layout.setVerticalGroup(

jPanel5Layout.createParallelGroup(javax.swing.GroupLayout.Alignm
ent.LEADING)
        .addGroup(jPanel5Layout.createSequentialGroup())

        .addGroup(jPanel5Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)

```

```

        .addComponent(DashboardLabel,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addComponent(jPanel6,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELA
TED)

        .addComponent(jPanel11,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(18, 18, 18)
        .addComponent(jPanel12,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(18, 18, 18)
        .addComponent(jPanel13,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(18, 18, 18)
        .addComponent(jPanel14,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)

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

    Panel2.add(jPanel5, new
org.netbeans.lib.awtextra.AbsoluteConstraints(0, 0, -1, -1));

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

layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEA
DING)

```

```

        .addComponent (Panel2,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
    );
    layout.setVerticalGroup(

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

        .addGroup(layout.createSequentialGroup()
            .addComponent (Panel2,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(0, 0, Short.MAX_VALUE))
        );

    pack();
    setLocationRelativeTo(null);
} // </editor-fold> // GEN-END: initComponents
public void setColor(JPanel p){

    p.setBackground(new Color(255,218,220));

}
public void removeColor(JPanel p){

    p.setBackground(new Color(244,172,183));
}
private void
UpdateDatabaseJFrameMouseEntered(java.awt.event.MouseEvent evt)
{ // GEN-FIRST:event_UpdateDatabaseJFrameMouseEntered
    setColor(jPanel1);
} // GEN-LAST:event_UpdateDatabaseJFrameMouseEntered

private void
UpdateDatabaseJFrameMouseExited(java.awt.event.MouseEvent evt)
{ // GEN-FIRST:event_UpdateDatabaseJFrameMouseExited
    removeColor(jPanel1);
} // GEN-LAST:event_UpdateDatabaseJFrameMouseExited

private void
ViewPatientDatabaseJFrameMouseEntered(java.awt.event.MouseEvent
evt) { // GEN-FIRST:event_ViewPatientDatabaseJFrameMouseEntered

```

```

        setColor(jPanel2);
    } //GEN-LAST:event_ViewPatientDatabasejFrameMouseEntered

    private void
ViewPatientDatabasejFrameMouseExited(java.awt.event.MouseEvent
evt) { //GEN-FIRST:event_ViewPatientDatabasejFrameMouseExited
    removeColor(jPanel2);
    } //GEN-LAST:event_ViewPatientDatabasejFrameMouseExited

    private void
InvoiceCreatorjFrameMouseEntered(java.awt.event.MouseEvent evt)
{ //GEN-FIRST:event_InvoiceCreatorjFrameMouseEntered
    setColor(jPanel3);
    } //GEN-LAST:event_InvoiceCreatorjFrameMouseEntered

    private void
InvoiceCreatorjFrameMouseExited(java.awt.event.MouseEvent evt)
{ //GEN-FIRST:event_InvoiceCreatorjFrameMouseExited
    removeColor(jPanel3);
    } //GEN-LAST:event_InvoiceCreatorjFrameMouseExited

    private void
AppointmentCreatorjFrameMouseEntered(java.awt.event.MouseEvent
evt) { //GEN-FIRST:event_AppointmentCreatorjFrameMouseEntered
    setColor(jPanel4);
    } //GEN-LAST:event_AppointmentCreatorjFrameMouseEntered

    private void
AppointmentCreatorjFrameMouseExited(java.awt.event.MouseEvent
evt) { //GEN-FIRST:event_AppointmentCreatorjFrameMouseExited
    removeColor(jPanel4);
    } //GEN-LAST:event_AppointmentCreatorjFrameMouseExited

    private void
UpdateDatabasejFrameKeyPressed(java.awt.event.KeyEvent evt)
{ //GEN-FIRST:event_UpdateDatabasejFrameKeyPressed
    // TODO add your handling code here:
    } //GEN-LAST:event_UpdateDatabasejFrameKeyPressed

    private void
UpdateDatabasejFrameMouseClicked(java.awt.event.MouseEvent evt)
{ //GEN-FIRST:event_UpdateDatabasejFrameMouseClicked

    } //GEN-LAST:event_UpdateDatabasejFrameMouseClicked

```

```

        private void
ViewPatientDatabasejFrameMouseClicked(java.awt.event.MouseEvent
evt) { //GEN-FIRST:event_ViewPatientDatabasejFrameMouseClicked
        Access_Patient_Database edit= new
Access_Patient_Database ();
        edit.setVisible(true);
        this.setVisible(false);
        this.dispose();
    } //GEN-LAST:event_ViewPatientDatabasejFrameMouseClicked

```

```

        private void
InvoiceCreatorjFrameMouseClicked(java.awt.event.MouseEvent evt)
{ //GEN-FIRST:event_InvoiceCreatorjFrameMouseClicked
        Invoice_Manager a= new Invoice_Manager();
        a.setVisible(true);
        this.setVisible(false);
    } //GEN-LAST:event_InvoiceCreatorjFrameMouseClicked

```

```

        private void
UpdateDatabasejFrameMousePressed(java.awt.event.MouseEvent evt)
{ //GEN-FIRST:event_UpdateDatabasejFrameMousePressed
        Modify_Patient_Database a= new
Modify_Patient_Database();
        a.setVisible(true);
        this.setVisible(false);
        this.dispose();
    } //GEN-LAST:event_UpdateDatabasejFrameMousePressed

```

```

        private void
AppointmentCreatorjFrameMouseClicked(java.awt.event.MouseEvent
evt) { //GEN-FIRST:event_AppointmentCreatorjFrameMouseClicked
        Appointment_Database a= new Appointment_Database();
        a.setVisible(true);
        this.setVisible(false);
    } //GEN-LAST:event_AppointmentCreatorjFrameMouseClicked

```

```

/**
 * @param args the command line arguments
 */
public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    //<editor-fold defaultstate="collapsed" desc=" Look and
feel setting code (optional) ">

```

```

        /* If Nimbus (introduced in Java SE 6) is not available,
        stay with the default look and feel.
        * For details see
        http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
        */
        try {
            for (javax.swing.UIManager.LookAndFeelInfo info :
                javax.swing.UIManager.getInstalledLookAndFeels()) {
                if ("Nimbus".equals(info.getName())) {

                    javax.swing.UIManager.setLookAndFeel(info.getClassName());
                    break;

                }
            }
        } catch (ClassNotFoundException ex) {

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

        } catch (InstantiationException ex) {

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

        } catch (IllegalAccessException ex) {

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

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

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

    /* Create and display the form */
    java.awt.EventQueue.invokeLater(() -> {
        new Dashboard().setVisible(true);
    });
}

// Variables declaration - do not
modify//GEN-BEGIN:variables
private javax.swing.JLabel AppointmentCreatorJFrame;

```



```
private javax.swing.JLabel DashboardLabel;
private javax.swing.JLabel InvoiceCreatorjFrame;
private javax.swing.JPanel Panel2;
private javax.swing.JLabel UpdateDatabasejFrame;
private javax.swing.JLabel ViewPatientDatabasejFrame;
private javax.swing.JLabel jLabel5;
private javax.swing.JLabel jLabel6;
private javax.swing.JPanel jPanel1;
private javax.swing.JPanel jPanel2;
private javax.swing.JPanel jPanel3;
private javax.swing.JPanel jPanel4;
private javax.swing.JPanel jPanel5;
private javax.swing.JPanel jPanel6;
// End of variables declaration//GEN-END:variables
}
```

Modify_Patient_Database.java

```
package csia;
import java.awt.HeadlessException;
import java.io.File;
import java.sql.*;
import java.util.Random;
import javax.swing.JFileChooser;
import javax.swing.JOptionPane;
import javax.swing.table.DefaultTableModel;
import net.proteanit.sql.DbUtils;

public class Modify_Patient_Database extends javax.swing.JFrame {

    public Connection conn=null;
    public ResultSet rs = null;
    public PreparedStatement pst=null;

    public final void ShowTableData(){
        try{
            conn = ReusableClasses.dbconnection.connection();
            String populatedatabase = "SELECT * FROM clinic_database.patients;";
            pst = conn.prepareStatement(populatedatabase);
            rs = pst.executeQuery();
            jTable1.setModel(DbUtils.resultSetToTableModel(rs));

            jTable1.getColumnModel().getColumn(8).setMinWidth(0);
            jTable1.getColumnModel().getColumn(8).setMaxWidth(0);

        } catch(SQLException e){
        }
    }

    public Modify_Patient_Database() {
        initComponents();
        ShowTableData();
    }

    public void search(){

        String SearchID = ID.getText();
        String searchquerry="Select * FROM `clinic_database`.`patients` WHERE (`ID`
= '" + SearchID + "')";
        try{
            pst = conn.prepareStatement(searchquerry);
            rs = pst.executeQuery();
            jTable1.setModel(DbUtils.resultSetToTableModel(rs));
            jTable1.getColumnModel().getColumn(8).setMinWidth(0);
```

```

jTable1.getColumnModel().getColumn(8).setMaxWidth(0);

}catch(SQLException E){
JOptionPane.showMessageDialog(null, "There has been an error: " + E);
}

}

/**
 * This method is called from within the constructor to initialize the
form.
 * WARNING: Do NOT modify this code. The content of this method is always
 * regenerated by the Form Editor.
 */
@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated
Code">
GEN-BEGIN: initComponents
private void initComponents() {

    jPanel1 = new javax.swing.JPanel();
    jLabel2 = new javax.swing.JLabel();
    jLabel3 = new javax.swing.JLabel();
    ID = new javax.swing.JTextField();
    fname = new javax.swing.JTextField();
    email = new javax.swing.JTextField();
    phonenumber = new javax.swing.JTextField();
    jLabel4 = new javax.swing.JLabel();
    AddIntoDatabase = new javax.swing.JButton();
    UpdateDatabase = new javax.swing.JButton();
    DeleteFromDatabase = new javax.swing.JButton();
    jScrollPane1 = new javax.swing.JScrollPane();
    jTable1 = new javax.swing.JTable();
    jLabel5 = new javax.swing.JLabel();
    gender = new javax.swing.JComboBox<>();
    jLabel6 = new javax.swing.JLabel();
    jLabel7 = new javax.swing.JLabel();
    jLabel8 = new javax.swing.JLabel();
    address = new javax.swing.JTextField();
    designateddoctor = new javax.swing.JComboBox<>();
    age = new javax.swing.JTextField();
    jButton4 = new javax.swing.JButton();
    dentalscanpath = new javax.swing.JTextField();
    verify_attachment = new javax.swing.JLabel();
    jButton1 = new javax.swing.JButton();
    ResetTable = new javax.swing.JButton();
    ExitButton = new javax.swing.JButton();
    jLabel9 = new javax.swing.JLabel();
    lname = new javax.swing.JTextField();
    Clear = new javax.swing.JButton();

    setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

```

```

jPanel1.setBackground(new java.awt.Color(255, 202, 212));

jLabel2.setFont(new java.awt.Font("Tw Cen MT", 0, 22)); // NOI18N
jLabel2.setForeground(new java.awt.Color(102, 102, 102));
jLabel2.setText("First Name");

jLabel3.setFont(new java.awt.Font("Tw Cen MT", 0, 22)); // NOI18N
jLabel3.setForeground(new java.awt.Color(102, 102, 102));
jLabel3.setText("Last Name");

ID.setFont(new java.awt.Font("Tw Cen MT", 0, 22)); // NOI18N
ID.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        IDActionPerformed(evt);
    }
});
ID.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyReleased(java.awt.event.KeyEvent evt) {
        IDKeyReleased(evt);
    }
});

fname.setFont(new java.awt.Font("Tw Cen MT", 0, 22)); // NOI18N
fname.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        fnameActionPerformed(evt);
    }
});

email.setFont(new java.awt.Font("Tw Cen MT", 0, 22)); // NOI18N
email.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        emailActionPerformed(evt);
    }
});

phonenumber.setFont(new java.awt.Font("Tw Cen MT", 0, 22)); // NOI18N
phonenumber.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        phonenumberActionPerformed(evt);
    }
});

jLabel4.setFont(new java.awt.Font("Tw Cen MT", 0, 22)); // NOI18N
jLabel4.setForeground(new java.awt.Color(102, 102, 102));
jLabel4.setText("Age");

AddIntoDatabase.setFont(new java.awt.Font("Tw Cen MT", 1, 24)); //
NOI18N
AddIntoDatabase.setForeground(new java.awt.Color(102, 102, 102));
AddIntoDatabase.setText("Add patient");
AddIntoDatabase.addActionListener(new java.awt.event.ActionListener() {

```

```

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

UpdateDatabase.setFont(new java.awt.Font("Tw Cen MT", 1, 24)); //
NOI18N
UpdateDatabase.setForeground(new java.awt.Color(102, 102, 102));
UpdateDatabase.setText("Update");
UpdateDatabase.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        UpdateDatabaseActionPerformed(evt);
    }
});

DeleteFromDatabase.setFont(new java.awt.Font("Tw Cen MT", 1, 24)); //
NOI18N
DeleteFromDatabase.setForeground(new java.awt.Color(102, 102, 102));
DeleteFromDatabase.setText("Delete");
DeleteFromDatabase.addActionListener(new
java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        DeleteFromDatabaseActionPerformed(evt);
    }
});

jTable1.setAutoCreateRowSorter(true);
jTable1.setBackground(new java.awt.Color(204, 204, 204));
jTable1.setFont(new java.awt.Font("Tw Cen MT", 0, 20)); // NOI18N
jTable1.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {

        },
    new String [] {

    }
));
jTable1.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent evt) {
        jTable1MouseClicked(evt);
    }
    public void mouseReleased(java.awt.event.MouseEvent evt) {
        jTable1MouseReleased(evt);
    }
});
jScrollPane1.setViewportViewView(jTable1);

jLabel5.setFont(new java.awt.Font("Tw Cen MT", 0, 22)); // NOI18N
jLabel5.setForeground(new java.awt.Color(102, 102, 102));
jLabel5.setText("Sex");

gender.setFont(new java.awt.Font("Tw Cen MT", 0, 22)); // NOI18N
gender.setForeground(new java.awt.Color(102, 102, 102));

```

```

        gender.setModel(new javax.swing.DefaultComboBoxModel<>(new String[] {
"Male", "Female", "Prefer not to state" }));
        gender.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                genderActionPerformed(evt);
            }
        });

        jLabel6.setFont(new java.awt.Font("Tw Cen MT", 0, 22)); // NOI18N
        jLabel6.setForeground(new java.awt.Color(102, 102, 102));
        jLabel6.setText("Phone number");

        jLabel7.setFont(new java.awt.Font("Tw Cen MT", 0, 22)); // NOI18N
        jLabel7.setForeground(new java.awt.Color(102, 102, 102));
        jLabel7.setText("Address");

        jLabel8.setFont(new java.awt.Font("Tw Cen MT", 0, 22)); // NOI18N
        jLabel8.setForeground(new java.awt.Color(102, 102, 102));
        jLabel8.setText("Designated doctor");

        address.setFont(new java.awt.Font("Tw Cen MT", 0, 22)); // NOI18N
        address.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                addressActionPerformed(evt);
            }
        });

        designateddoctor.setFont(new java.awt.Font("Tw Cen MT", 0, 22)); //
NOI18N
        designateddoctor.setForeground(new java.awt.Color(102, 102, 102));
        designateddoctor.setModel(new javax.swing.DefaultComboBoxModel<>(new
String[] { "Dr Sara", "Dr Ema", "Dr Anita" }));

        age.setFont(new java.awt.Font("Tw Cen MT", 0, 22)); // NOI18N

        jButton4.setFont(new java.awt.Font("Tw Cen MT", 0, 22)); // NOI18N
        jButton4.setForeground(new java.awt.Color(102, 102, 102));
        jButton4.setText("Attach a dental scan");
        jButton4.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton4ActionPerformed(evt);
            }
        });

        dentalscanpath.setFont(new java.awt.Font("Tw Cen MT", 0, 22)); //
NOI18N
        dentalscanpath.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                dentalscanpathActionPerformed(evt);
            }
        });

        verify_attachment.setBackground(new java.awt.Color(255, 255, 255));

```

```

verify_attachment.setFont(new java.awt.Font("Tw Cen MT", 0, 18)); //
NOI18N

jButton1.setFont(new java.awt.Font("Tw Cen MT", 0, 22)); // NOI18N
jButton1.setForeground(new java.awt.Color(102, 102, 102));
jButton1.setText("Search by ID");
jButton1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton1ActionPerformed(evt);
    }
});

ResetTable.setFont(new java.awt.Font("Tw Cen MT", 1, 24)); // NOI18N
ResetTable.setForeground(new java.awt.Color(102, 102, 102));
ResetTable.setText("Show all patients");
ResetTable.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        ResetTableActionPerformed(evt);
    }
});

ExitButton.setFont(new java.awt.Font("Tw Cen MT", 1, 24)); // NOI18N
ExitButton.setForeground(new java.awt.Color(102, 102, 102));
ExitButton.setText("Exit");
ExitButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        ExitButtonActionPerformed(evt);
    }
});

jLabel9.setFont(new java.awt.Font("Tw Cen MT", 0, 22)); // NOI18N
jLabel9.setForeground(new java.awt.Color(102, 102, 102));
jLabel9.setText("Email");

lname.setFont(new java.awt.Font("Tw Cen MT", 0, 22)); // NOI18N
lname.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        lnameActionPerformed(evt);
    }
});

Clear.setFont(new java.awt.Font("Tw Cen MT", 1, 24)); // NOI18N
Clear.setForeground(new java.awt.Color(102, 102, 102));
Clear.setText("Clear");
Clear.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        ClearActionPerformed(evt);
    }
});

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

```

```

jPanellLayout.setHorizontalGroup(

jPanellLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jPanellLayout.createSequentialGroup()
        .addGap(12, 12, 12)

.addGroup(jPanellLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.L
EADING)
    .addGroup(jPanellLayout.createSequentialGroup()
        .addComponent(jScrollPane1,
javax.swing.GroupLayout.PREFERRED_SIZE, 1059,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(18, 18, 18)

.addGroup(jPanellLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.L
EADING)
    .addComponent(DeleteFromDatabase,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
    .addComponent(AddIntoDatabase,
javax.swing.GroupLayout.PREFERRED_SIZE, 215,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addGroup(jPanellLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.T
RAILING, false)
    .addComponent(ResetTable,
javax.swing.GroupLayout.Alignment.LEADING,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
    .addComponent(Clear,
javax.swing.GroupLayout.Alignment.LEADING,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
    .addComponent(UpdateDatabase,
javax.swing.GroupLayout.PREFERRED_SIZE, 190,
javax.swing.GroupLayout.PREFERRED_SIZE)
    .addComponent(ExitButton,
javax.swing.GroupLayout.PREFERRED_SIZE, 215,
javax.swing.GroupLayout.PREFERRED_SIZE))
    .addContainerGap()
    .addGroup(jPanellLayout.createSequentialGroup()
        .addGap(10, 10, 10)

.addGroup(jPanellLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.T
RAILING)
    .addGroup(jPanellLayout.createSequentialGroup()
        .addComponent(jButton1)
        .addGap(18, 18, 18)
        .addComponent(ID,
javax.swing.GroupLayout.PREFERRED_SIZE, 143,
javax.swing.GroupLayout.PREFERRED_SIZE))
    .addGroup(jPanellLayout.createSequentialGroup()

```



```

.addGroup(jPanellLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)

                                .addComponent(jLabel3)
                                .addComponent(jLabel2))
.addGap(29, 29, 29)

.addGroup(jPanellLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)

                                .addComponent(fname,
javax.swing.GroupLayout.PREFERRED_SIZE, 142,
javax.swing.GroupLayout.PREFERRED_SIZE)
                                .addComponent(lname,
javax.swing.GroupLayout.PREFERRED_SIZE, 142,
javax.swing.GroupLayout.PREFERRED_SIZE)))
.addGap(38, 38, 38)

.addGroup(jPanellLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

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

                                .addComponent(jLabel4)
                                .addGap(20, 20, 20)
                                .addComponent(age,
javax.swing.GroupLayout.PREFERRED_SIZE, 142,
javax.swing.GroupLayout.PREFERRED_SIZE))

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

                                .addComponent(jLabel6)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

                                .addComponent(phonenummer,
javax.swing.GroupLayout.PREFERRED_SIZE, 142,
javax.swing.GroupLayout.PREFERRED_SIZE))

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

                                .addComponent(jLabel5)
                                .addGap(18, 18, 18)
                                .addComponent(gender,
javax.swing.GroupLayout.PREFERRED_SIZE, 142,
javax.swing.GroupLayout.PREFERRED_SIZE))

.addGroup(jPanellLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

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

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

```

```

.addGroup(jPanellLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)

.addGroup(jPanellLayout.createSequentialGroup()
            .addComponent(jButton4)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(dentalscanpath,
javax.swing.GroupLayout.PREFERRED_SIZE, 140,
javax.swing.GroupLayout.PREFERRED_SIZE))

.addGroup(jPanellLayout.createSequentialGroup()
            .addComponent(jLabel7)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
            .addComponent(address,
javax.swing.GroupLayout.PREFERRED_SIZE, 140,
javax.swing.GroupLayout.PREFERRED_SIZE)))
            .addGroup(jPanellLayout.createSequentialGroup()
                .addGap(78, 78, 78)
                .addComponent(jLabel8)
                .addGap(13, 13, 13)
                .addComponent(designateddoctor,
javax.swing.GroupLayout.PREFERRED_SIZE, 140,
javax.swing.GroupLayout.PREFERRED_SIZE)))
                .addGap(282, 282, 282)
                .addComponent(verify_attachment,
javax.swing.GroupLayout.PREFERRED_SIZE, 279,
javax.swing.GroupLayout.PREFERRED_SIZE)))
                .addGroup(jPanellLayout.createSequentialGroup()
                    .addGap(443, 443, 443)
                    .addComponent(jLabel9)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
            .addComponent(email, javax.swing.GroupLayout.PREFERRED_SIZE,
319, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(0, 0, Short.MAX_VALUE)

        );

        jPanellLayout.linkSize(javax.swing.SwingConstants.HORIZONTAL, new
java.awt.Component[] {address, age, dentalscanpath, designateddoctor, fname,
gender, phonenumber});

        jPanellLayout.linkSize(javax.swing.SwingConstants.HORIZONTAL, new
java.awt.Component[] {AddIntoDatabase, DeleteFromDatabase, ResetTable,
UpdateDatabase});

        jPanellLayout.setVerticalGroup(

jPanellLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanellLayout.createSequentialGroup()
                .addGap(13, 13, 13)

```

```

.addGroup(jPanell1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
        .addComponent(jScrollPane1,
javax.swing.GroupLayout.PREFERRED_SIZE, 409,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGroup(jPanell1Layout.createSequentialGroup()
            .addComponent(AddIntoDatabase)
            .addGap(33, 33, 33)
            .addComponent(UpdateDatabase)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
            .addComponent(DeleteFromDatabase)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
            .addComponent(ResetTable)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
            .addComponent(ExitButton)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
            .addComponent(Clear)))

.addGroup(jPanell1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanell1Layout.createSequentialGroup()
            .addGap(18, 18, 18)
            .addComponent(verify_attachment,
javax.swing.GroupLayout.PREFERRED_SIZE, 18,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
        .addGroup(jPanell1Layout.createSequentialGroup()

.addGroup(jPanell1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanell1Layout.createSequentialGroup()
            .addGap(17, 17, 17)

.addGroup(jPanell1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(ID,
javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(jButton1,
javax.swing.GroupLayout.PREFERRED_SIZE, 32,
javax.swing.GroupLayout.PREFERRED_SIZE)))
        .addGroup(jPanell1Layout.createSequentialGroup()
            .addGap(13, 13, 13)

```

```

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.B
ASELINE)
                                .addComponent(gender,
javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
                                .addComponent(jLabel5)))
.addGroup(jPanel1Layout.createSequentialGroup())
.addGap(13, 13, 13)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.B
ASELINE)
                                .addComponent(address,
javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
                                .addComponent(jLabel7,
javax.swing.GroupLayout.PREFERRED_SIZE, 31,
javax.swing.GroupLayout.PREFERRED_SIZE)))
.addGap(18, 18, Short.MAX_VALUE)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.L
EADING)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.B
ASELINE)
                                .addComponent(fname,
javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
                                .addComponent(jLabel2))
.addComponent(jLabel4)
.addComponent(age,
javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
.addComponent(jLabel8)
.addComponent(designeddoctor,
javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.L
EADING)
.addComponent(jLabel3)
.addComponent(jButton4)
.addComponent(dentalscanpath,
javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.B
ASELINE)
.addComponent(jLabel6)

```

```

        .addComponent(lname,
javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(phonenummer,
javax.swing.GroupLayout.PREFERRED_SIZE, 25,
javax.swing.GroupLayout.PREFERRED_SIZE)))
        .addGap(18, 18, 18)

.addGroup(jPanellLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.B
ASELINE)
        .addComponent(jLabel9)
        .addComponent(email,
javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(4, 4, 4)))
);

jPanellLayout.linkSize(javax.swing.SwingConstants.VERTICAL, new
java.awt.Component[] {ID, address, age, dentalscanpath, designateddoctor,
email, fname, gender, phonenummer});

jPanellLayout.linkSize(javax.swing.SwingConstants.VERTICAL, new
java.awt.Component[] {AddIntoDatabase, DeleteFromDatabase, ResetTable,
UpdateDatabase});

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

layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(jPanell, javax.swing.GroupLayout.PREFERRED_SIZE,
1306, javax.swing.GroupLayout.PREFERRED_SIZE)
);
layout.setVerticalGroup(

layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(jPanell, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
);

pack();
setLocationRelativeTo(null);
} // </editor-fold> // GEN-END: initComponents

private void addressActionPerformed(java.awt.event.ActionEvent evt)
{ // GEN-FIRST:event_addressActionPerformed
    // TODO add your handling code here:
} // GEN-LAST:event_addressActionPerformed

private void genderActionPerformed(java.awt.event.ActionEvent evt)
{ // GEN-FIRST:event_genderActionPerformed
    // TODO add your handling code here:
}

```

```

    }//GEN-LAST:event_genderActionPerformed

    private void jTable1MouseClicked(java.awt.event.MouseEvent evt)
    { //GEN-FIRST:event_jTable1MouseClicked

        }//GEN-LAST:event_jTable1MouseClicked

        private void DeleteFromDatabaseActionPerformed(java.awt.event.ActionEvent
        evt) { //GEN-FIRST:event_DeleteFromDatabaseActionPerformed
            try{
                DefaultTableModel model = (DefaultTableModel)jTable1.getModel();
                int rownumber = jTable1.getSelectedRow();
                String temporaryidentity= model.getValueAt(rownumber,
0).toString();
                int finalidentity = Integer.parseInt(temporaryidentity);
                String deletequery="DELETE FROM `clinic_database`.`patients` WHERE
(`ID` = '" + finalidentity + "')";
                conn = ReusableClasses.dbconnection.connection();
                pst = conn.prepareStatement(deletequery);
                pst.executeUpdate();

                ShowTableData();

            } catch (NumberFormatException | SQLException e){
                JOptionPane.showMessageDialog(null,e);
            }
        } //GEN-LAST:event_DeleteFromDatabaseActionPerformed

        private void UpdateDatabaseActionPerformed(java.awt.event.ActionEvent evt)
        { //GEN-FIRST:event_UpdateDatabaseActionPerformed
            try{
                DefaultTableModel model = (DefaultTableModel)jTable1.getModel();
                int identity = jTable1.getSelectedRow();
                String temporaryID= model.getValueAt(identity, 0).toString();
                int ID = Integer.parseInt(temporaryID);
                String insertquery= "UPDATE `clinic_database`.`patients` SET
`First name` = ?, `Last name` = ?, `Sex` = ?, `Age` = ?, `Phone number` = ?,
`Address` = ?, `Dentist` = ?, `Email` = ? WHERE (`ID` =" +ID + " );";
                conn = ReusableClasses.dbconnection.connection();
                pst = conn.prepareStatement(insertquery);
                pst.setString(1, fname.getText());
                pst.setString(2, lname.getText());
                pst.setString(3, gender.getSelectedItem().toString());
                pst.setString(4, age.getText());
                pst.setString(5, phonenumber.getText());
                pst.setString(6, address.getText());
                pst.setString(7, designateddoctor.getSelectedItem().toString());
                pst.setString(8, email.getText());

                if(dentalscanpath.getText().isEmpty()){

                }else{

```

```

        String attachmentqueryry= "UPDATE `clinic_database`.`patients` SET
`Dental scan` = ? WHERE (`ID` =" +ID + " );";
        conn = ReusableClasses.dbconnection.connection();
        pst = conn.prepareStatement(attachmentqueryry);
        pst.setString(1,dentalscanpath.getText());
        pst.executeUpdate();
    }

    pst.executeUpdate();

    ShowTableData();

    } catch(SQLException e){
        JOptionPane.showMessageDialog(null,"There has been an error: " +e);
    }
}
//GEN-LAST:event_UpdateDatabaseActionPerformed

private void AddIntoDatabaseActionPerformed(java.awt.event.ActionEvent evt)
{//GEN-FIRST:event_AddIntoDatabaseActionPerformed
    try{
        String insertqueryry= "INSERT INTO `clinic_database`.`patients`
(`ID`, `First name`, `Last name`, `Sex`, `Age`, `Phone number`, `Address`,`"
        " `Dentist`, `Dental scan`, `Email` ) VALUES (?, ?, ?, ?, ?, ?, ?, ?,
?, ?, ?);" ;
        conn = ReusableClasses.dbconnection.connection();
        pst = conn.prepareStatement(insertqueryry);
        int i = new Random().nextInt(90000) + 1000;
        String str = String.valueOf(i);
        pst.setString(1, str);
        pst.setString(2, fname.getText());
        pst.setString(3, lname.getText());
        pst.setString(4, gender.getSelectedItem().toString());
        pst.setString(5, age.getText());
        pst.setString(6, phonenumber.getText());

        pst.setString(7, address.getText());
        pst.setString(8, designateddoctor.getSelectedItem().toString());
        pst.setString(9, dentalscanpath.getText());
        pst.setString(10, email.getText());
        pst.executeUpdate();
        ShowTableData();
        if(dentalscanpath.getText().isEmpty()){
        }else{
            verify_attachment.setText("Image succesfully inserted!");
        } catch(SQLException e){
            JOptionPane.showMessageDialog(null,e);
        }
    }
}
//GEN-LAST:event_AddIntoDatabaseActionPerformed

private void phonenumberActionPerformed(java.awt.event.ActionEvent evt)
{//GEN-FIRST:event_phonenumberActionPerformed
    // TODO add your handling code here:

```

```

        } //GEN-LAST:event_phonenumberActionPerformed

        private void emailActionPerformed(java.awt.event.ActionEvent evt)
        { //GEN-FIRST:event_emailActionPerformed
            // TODO add your handling code here:
        } //GEN-LAST:event_emailActionPerformed

        private void fnameActionPerformed(java.awt.event.ActionEvent evt)
        { //GEN-FIRST:event_fnameActionPerformed
            // TODO add your handling code here:
        } //GEN-LAST:event_fnameActionPerformed

        private void IDActionPerformed(java.awt.event.ActionEvent evt)
        { //GEN-FIRST:event_IDActionPerformed
            // TODO add your handling code here:
        } //GEN-LAST:event_IDActionPerformed

        private void IDKeyReleased(java.awt.event.KeyEvent evt)
        { //GEN-FIRST:event_IDKeyReleased

        } //GEN-LAST:event_IDKeyReleased

        private void jTable1MouseReleased(java.awt.event.MouseEvent evt)
        { //GEN-FIRST:event_jTable1MouseReleased

            DefaultTableModel model = (DefaultTableModel) jTable1.getModel();
            int selectedRowIndex = jTable1.getSelectedRow();
            fname.setText(model.getValueAt(selectedRowIndex, 1).toString());
            lname.setText(model.getValueAt(selectedRowIndex, 2).toString());
            email.setText(model.getValueAt(selectedRowIndex, 9).toString());
            String genders = model.getValueAt(selectedRowIndex, 3).toString();
            switch(genders) {
                case "Male":
                    gender.setSelectedIndex(0);
                    break;
                case "Female":
                    gender.setSelectedIndex(1);
                    break;
            }
            age.setText(model.getValueAt(selectedRowIndex, 4).toString());
            phonenumber.setText(model.getValueAt(selectedRowIndex, 5).toString());
            address.setText(model.getValueAt(selectedRowIndex, 6).toString());
            String doctor = model.getValueAt(selectedRowIndex, 7).toString();
            switch(doctor) {
                case "Dr Sara":
                    designateddoctor.setSelectedIndex(0);
                    break;
                case "Dr Ema":
                    designateddoctor.setSelectedIndex(1);
                    break;
                case "Dr Anita":
                    designateddoctor.setSelectedIndex(2);
                    break;
            }
        } //GEN-LAST:event_jTable1MouseReleased
    }
}

```



```

    }
    }//GEN-LAST:event_jTable1MouseReleased

    private void dentalscanpathActionPerformed(java.awt.event.ActionEvent evt)
    {
        //GEN-FIRST:event_dentalscanpathActionPerformed
        // TODO add your handling code here:
        }//GEN-LAST:event_dentalscanpathActionPerformed

    private void jButton4ActionPerformed(java.awt.event.ActionEvent evt)
    {
        //GEN-FIRST:event_jButton4ActionPerformed
        try{
            JFileChooser chooser = new JFileChooser();
            chooser.showOpenDialog(null);
            File dentalscan = chooser.getSelectedFile();
            String dentalscanfilename = dentalscan.getAbsolutePath();
            dentalscanpath.setText(dentalscanfilename);
        } catch (HeadlessException e){
            JOptionPane.showMessageDialog(null, "Failed to attach the image, try
again");
        }

        }//GEN-LAST:event_jButton4ActionPerformed

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

    private void ResetTableActionPerformed(java.awt.event.ActionEvent evt)
    {
        //GEN-FIRST:event_ResetTableActionPerformed
        ShowTableData();
        }//GEN-LAST:event_ResetTableActionPerformed

    private void ExitButtonActionPerformed(java.awt.event.ActionEvent evt)
    {
        //GEN-FIRST:event_ExitButtonActionPerformed
        Dashboard Dash= new Dashboard ();
        Dash.setVisible(true);
        this.setVisible(false);
        this.dispose();
        }//GEN-LAST:event_ExitButtonActionPerformed

    private void lnameActionPerformed(java.awt.event.ActionEvent evt)
    {
        //GEN-FIRST:event_lnameActionPerformed
        // TODO add your handling code here:
        }//GEN-LAST:event_lnameActionPerformed

    private void ClearActionPerformed(java.awt.event.ActionEvent evt)
    {
        //GEN-FIRST:event_ClearActionPerformed
        fname.setText("");
        lname.setText("");
        age.setText("");
        phonenumber.setText("");
    }

```

[illegible]

```

//</editor-fold>
//</editor-fold>
//</editor-fold>
//</editor-fold>

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

// Variables declaration - do not modify//GEN-BEGIN:variables
private javax.swing.JButton AddIntoDatabase;
private javax.swing.JButton Clear;
private javax.swing.JButton DeleteFromDatabase;
private javax.swing.JButton ExitButton;
private javax.swing.JTextField ID;
private javax.swing.JButton ResetTable;
private javax.swing.JButton UpdateDatabase;
private javax.swing.JTextField address;
private javax.swing.JTextField age;
private javax.swing.JTextField dentalscanpath;
private javax.swing.JComboBox<String> designateddoctor;
private javax.swing.JTextField email;
private javax.swing.JTextField fname;
private javax.swing.JComboBox<String> gender;
private javax.swing.JButton jButton1;
private javax.swing.JButton jButton4;
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.JScrollPane jScrollPane1;
private javax.swing.JTable jTable1;
private javax.swing.JTextField lname;
private javax.swing.JTextField phonenummer;
private javax.swing.JLabel verify_attachment;
// End of variables declaration//GEN-END:variables
}

```

Access Patient Database.java

```
/*
 * 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 csia;

import java.sql.*;
import java.sql.Connection;
```

```

import java.sql.ResultSet;
import javax.swing.JFrame;
import javax.swing.table.DefaultTableModel;
import net.proteanit.sql.DbUtils;
/**
 *
 * @author VivoBook
 */
public class Access_Patient_Database extends javax.swing.JFrame {
    public Connection conn=null;
    public ResultSet rs = null;
    public PreparedStatement pst=null;

    public final void ShowTableData(){
        try{
            conn = ReusableClasses.dbconnection.connection();
            String populatedatabase = "SELECT * FROM `clinic_database`.patients;";
            pst = conn.prepareStatement(populatedatabase);
            rs = pst.executeQuery();
            jTable1.setModel(DbUtils.resultSetToTableModel(rs));
            jTable1.getColumnModel().getColumn(3).setMinWidth(0);
            jTable1.getColumnModel().getColumn(3).setMaxWidth(0);
            jTable1.getColumnModel().getColumn(5).setMinWidth(0);
            jTable1.getColumnModel().getColumn(5).setMaxWidth(0);
            jTable1.getColumnModel().getColumn(6).setMinWidth(0);
            jTable1.getColumnModel().getColumn(6).setMaxWidth(0);
            jTable1.getColumnModel().getColumn(7).setMinWidth(0);
            jTable1.getColumnModel().getColumn(7).setMaxWidth(0);
            jTable1.getColumnModel().getColumn(8).setMinWidth(0);
            jTable1.getColumnModel().getColumn(8).setMaxWidth(0);
            jTable1.getColumnModel().getColumn(9).setMinWidth(0);
            jTable1.getColumnModel().getColumn(9).setMaxWidth(0);
        } catch (SQLException e){

        }
    }

    Patient_Data SelectedData = new Patient_Data();

    public Access_Patient_Database()
    {
        initComponents();
        ShowTableData();
    }

    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated
Code">
    private void initComponents() {

        jMenuItem1 = new javax.swing.JMenuItem();
        jPanel1 = new javax.swing.JPanel();
        jScrollPane1 = new javax.swing.JScrollPane();
        jTable1 = new javax.swing.JTable();
        jLabel1 = new javax.swing.JLabel();
        jButton1 = new javax.swing.JButton();
        ID = new javax.swing.JTextField();

```

```

jButton2 = new javax.swing.JButton();
jButton3 = new javax.swing.JButton();

jMenuItem1.setText("jMenuItem1");

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

jPanel1.setBackground(new java.awt.Color(255, 202, 212));

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

        },
    new String [] {
        "ID", "First name", "Last name", "Gender", "Age", "Phone
number", "Address", "Designated doctor"
    }
));
jTable1.setColumnSelectionAllowed(true);
jTable1.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent evt) {
        jTable1MouseClicked(evt);
    }
    public void mouseReleased(java.awt.event.MouseEvent evt) {
        jTable1MouseReleased(evt);
    }
});
jTable1.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyReleased(java.awt.event.KeyEvent evt) {
        jTable1KeyReleased(evt);
    }
});
jScrollPane1.setViewportViewView(jTable1);

jTable1.getColumnModel().getSelectionModel().setSelectionMode(javax.swing.ListS
electionModel.SINGLE_SELECTION);

jLabel1.setFont(new java.awt.Font("Tw Cen MT", 1, 36)); // NOI18N
jLabel1.setForeground(new java.awt.Color(102, 102, 102));
jLabel1.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
jLabel1.setText("Select patient");
jLabel1.setHorizontalTextPosition(javax.swing.SwingConstants.CENTER);

jButton1.setFont(new java.awt.Font("Tw Cen MT", 1, 24)); // NOI18N
jButton1.setForeground(new java.awt.Color(102, 102, 102));
jButton1.setText("Search by ID");
jButton1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton1ActionPerformed(evt);
    }
});

ID.setFont(new java.awt.Font("Tahoma", 0, 24)); // NOI18N

jButton2.setFont(new java.awt.Font("Tw Cen MT", 1, 24)); // NOI18N
jButton2.setForeground(new java.awt.Color(102, 102, 102));
jButton2.setText("Show all");

```

```

        jButton2.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton2ActionPerformed(evt);
            }
        });

        jButton3.setFont(new java.awt.Font("Tw Cen MT", 1, 24)); // NOI18N
        jButton3.setForeground(new java.awt.Color(102, 102, 102));
        jButton3.setText("Exit");
        jButton3.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton3ActionPerformed(evt);
            }
        });

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

        jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel1Layout.createSequentialGroup()
                .addContainerGap()
                .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addGroup(jPanel1Layout.createSequentialGroup()
                        .addGap(436, 436, 436)
                        .addComponent(jLabel1,
        javax.swing.GroupLayout.PREFERRED_SIZE, 301,
        javax.swing.GroupLayout.PREFERRED_SIZE))
                    .addGroup(jPanel1Layout.createSequentialGroup()
                        .addGap(21, 21, 21)

        .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
            .addGroup(jPanel1Layout.createSequentialGroup()
                .addGap(44, 44, 44)
                .addComponent(ID,
        javax.swing.GroupLayout.PREFERRED_SIZE, 302,
        javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(139, 139, 139)
                .addComponent(jButton2,
        javax.swing.GroupLayout.PREFERRED_SIZE, 201,
        javax.swing.GroupLayout.PREFERRED_SIZE))
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
        javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                .addComponent(jButton3,
        javax.swing.GroupLayout.PREFERRED_SIZE, 194,
        javax.swing.GroupLayout.PREFERRED_SIZE))
            .addComponent(jScrollPane1,
        javax.swing.GroupLayout.PREFERRED_SIZE, 1122,
        javax.swing.GroupLayout.PREFERRED_SIZE)))
            .addContainerGap(29, Short.MAX_VALUE))

```

```

    );
    jPanel1Layout.setVerticalGroup(

jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jPanel1Layout.createSequentialGroup()
        .addContainerGap()
        .addComponent(jLabel1)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
    .addComponent(jScrollPane1,
javax.swing.GroupLayout.PREFERRED_SIZE, 506,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 25,
Short.MAX_VALUE)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.L
EADING)
    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
    .addComponent(jButton1,
javax.swing.GroupLayout.PREFERRED_SIZE, 47,
javax.swing.GroupLayout.PREFERRED_SIZE)
    .addComponent(ID,
javax.swing.GroupLayout.PREFERRED_SIZE, 47,
javax.swing.GroupLayout.PREFERRED_SIZE)
    .addComponent(jButton2,
javax.swing.GroupLayout.PREFERRED_SIZE, 47,
javax.swing.GroupLayout.PREFERRED_SIZE))
    .addComponent(jButton3,
javax.swing.GroupLayout.Alignment.TRAILING,
javax.swing.GroupLayout.PREFERRED_SIZE, 49,
javax.swing.GroupLayout.PREFERRED_SIZE))
    .addGap(37, 37, 37))
    );

    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.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    );
    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> // GEN-END: initComponents

```



```

        private void jTable1KeyReleased(java.awt.event.KeyEvent evt)
        { //GEN-FIRST:event_jTable1KeyReleased

            //GEN-LAST:event_jTable1KeyReleased

            private void jTable1MouseReleased(java.awt.event.MouseEvent evt)
            { //GEN-FIRST:event_jTable1MouseReleased

                //GEN-LAST:event_jTable1MouseReleased

                private void jTable1MouseClicked(java.awt.event.MouseEvent evt)
                { //GEN-FIRST:event_jTable1MouseClicked

                    try{
                        int selectedRowIndex = jTable1.getSelectedRow();
                        DefaultTableModel model = (DefaultTableModel)jTable1.getModel();
                        String ID = model.getValueAt(selectedRowIndex, 0).toString();
                        String firstname = model.getValueAt(selectedRowIndex, 1).toString();
                        String lastname = model.getValueAt(selectedRowIndex, 2).toString();
                        String genders= model.getValueAt(selectedRowIndex, 3).toString();
                        String age = model.getValueAt(selectedRowIndex, 4).toString();
                        String phonenumber = model.getValueAt(selectedRowIndex, 5).toString();
                        String address = model.getValueAt(selectedRowIndex, 6).toString();
                        String doctor =model.getValueAt(selectedRowIndex, 7).toString();
                        String filep = model.getValueAt(selectedRowIndex, 8).toString();

                        Patient_Data dataframe = new Patient_Data ();
                        dataframe.setVisible(true);
                        SelectedData.pack();
                        SelectedData.setLocationRelativeTo(null);
                        SelectedData.setDefaultCloseOperation(JFrame.DISPOSE_ON_CLOSE);
                        Patient_Data.IDdat.setText(ID);
                        Patient_Data.fnamedata.setText(firstname);
                        Patient_Data.lnamedata.setText(lastname);
                        Patient_Data.agedata.setText(age);

                        switch(genders){
                            case "Male":
                                Patient_Data.genderdata.setText("Male");
                                break;
                            case "Female":
                                Patient_Data.genderdata.setText("Female");
                                break;
                        }

                        Patient_Data.phonenumberdata.setText(phonenumber);
                        Patient_Data.addressdata.setText(address);
                        switch(doctor){
                            case "Dr Sara":
                                Patient_Data.designateddoctordata.setText("Dr Sara");
                                break;
                            case "Dr Ema":
                                Patient_Data.designateddoctordata.setText("Dr Ema");
                                break;
                            case "Dr Anita":
                                Patient_Data.designateddoctordata.setText("Dr Anita");

```

```

        break;
    }
    Patient_Data.filepathdata.setText(filep);
} catch (Exception e) {
    System.out.println(e);
}

}

} //GEN-LAST:event_jTable1MouseClicked

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt)
{ //GEN-FIRST:event_jButton1ActionPerformed
    String SearchID = ID.getText();
    String searchquery="SELECT * FROM `clinic_database`.`patients` WHERE
(`ID` = '" + SearchID + "')";

    try{
        pst = conn.prepareStatement(searchquery);
        rs = pst.executeQuery();
        jTable1.setModel(DbUtils.resultSetToTableModel(rs));
        jTable1.getColumnModel().getColumn(3).setMinWidth(0);
        jTable1.getColumnModel().getColumn(3).setMaxWidth(0);
        jTable1.getColumnModel().getColumn(5).setMinWidth(0);
        jTable1.getColumnModel().getColumn(5).setMaxWidth(0);
        jTable1.getColumnModel().getColumn(6).setMinWidth(0);
        jTable1.getColumnModel().getColumn(6).setMaxWidth(0);
        jTable1.getColumnModel().getColumn(7).setMinWidth(0);
        jTable1.getColumnModel().getColumn(7).setMaxWidth(0);
        jTable1.getColumnModel().getColumn(8).setMinWidth(0);
        jTable1.getColumnModel().getColumn(8).setMaxWidth(0);
        jTable1.getColumnModel().getColumn(9).setMinWidth(0);
        jTable1.getColumnModel().getColumn(9).setMaxWidth(0);
    } catch (SQLException E) {
        System.out.println(E);
    }
} //GEN-LAST:event_jButton1ActionPerformed

private void jButton2ActionPerformed(java.awt.event.ActionEvent evt)
{ //GEN-FIRST:event_jButton2ActionPerformed
    try{
        conn = ReusableClasses.dbconnection.connection();
        String populatedatabase = "SELECT * FROM clinic_database.patients;";

        pst = conn.prepareStatement(populatedatabase);
        rs = pst.executeQuery();
        jTable1.setModel(DbUtils.resultSetToTableModel(rs));
        jTable1.getColumnModel().getColumn(3).setMinWidth(0);
        jTable1.getColumnModel().getColumn(3).setMaxWidth(0);
        jTable1.getColumnModel().getColumn(5).setMinWidth(0);
        jTable1.getColumnModel().getColumn(5).setMaxWidth(0);
        jTable1.getColumnModel().getColumn(6).setMinWidth(0);
        jTable1.getColumnModel().getColumn(6).setMaxWidth(0);
        jTable1.getColumnModel().getColumn(7).setMinWidth(0);
        jTable1.getColumnModel().getColumn(7).setMaxWidth(0);
        jTable1.getColumnModel().getColumn(8).setMinWidth(0);
        jTable1.getColumnModel().getColumn(8).setMaxWidth(0);
        jTable1.getColumnModel().getColumn(9).setMinWidth(0);
    }
} //GEN-LAST:event_jButton2ActionPerformed

```

```

        jTable1.getColumnModel().getColumn(9).setMaxWidth(0);
        jTable1.getColumnModel().getColumn(8).setMinWidth(0);
        jTable1.getColumnModel().getColumn(8).setMaxWidth(0);

    } catch (SQLException e) {
    }
} //GEN-LAST:event_jButton2ActionPerformed

private void jButton3ActionPerformed(java.awt.event.ActionEvent evt)
{ //GEN-FIRST:event_jButton3ActionPerformed
    Dashboard Dash= new Dashboard ();
    Dash.setVisible(true);
    this.setVisible(false);
    this.dispose();
} //GEN-LAST:event_jButton3ActionPerformed

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

java.util.logging.Logger.getLogger(Access_Patient_Database.class.getName()).log
(java.util.logging.Level.SEVERE, null, ex);
    } catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(Access_Patient_Database.class.getName()).log
(java.util.logging.Level.SEVERE, null, ex);
    } catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(Access_Patient_Database.class.getName()).log
(java.util.logging.Level.SEVERE, null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {

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

```

```

//</editor-fold>
//</editor-fold>
//</editor-fold>
//</editor-fold>

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

// Variables declaration - do not modify//GEN-BEGIN:variables
private javax.swing.JTextField ID;
private javax.swing.JButton jButton1;
private javax.swing.JButton jButton2;
private javax.swing.JButton jButton3;
private javax.swing.JLabel jLabel1;
private javax.swing.JMenuItem jMenuItem1;
private javax.swing.JPanel jPanel1;
private javax.swing.JScrollPane jScrollPane1;
private javax.swing.JTable jTable1;
// End of variables declaration//GEN-END:variables
}

```

Patient_Data.java

```

/*
 * 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 csia;

import java.io.IOException;
import java.sql.Connection;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.sql.SQLException;

```

```

import java.util.logging.Level;
import java.util.logging.Logger;
import net.proteanit.sql.DbUtils;

/**
 *
 * @author VivoBook
 */
public class Patient_Data extends javax.swing.JFrame {
    String filepath;
    public Connection conn=null;
    public ResultSet rs = null;
    public PreparedStatement pst=null;
    /**
     * Creates new form PatientData
     */
    public Patient_Data() {
        initComponents();
    }

    void ShowTableData(String s){
        try{

            conn = ReusableClasses.dbconnection.connection();
            pst = conn.prepareStatement(s);
            rs = pst.executeQuery();
            jTable1.setModel(DbUtils.resultSetToTableModel(rs));

        }catch(SQLException e){
            System.out.println(e);
        }
    }

    /**
     * This method is called from within the constructor to initialize the
form.
     * WARNING: Do NOT modify this code. The content of this method is always
     * regenerated by the Form Editor.
     */
    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated
Code">
    //GEN-BEGIN: initComponents
    private void initComponents() {

        jPanel1 = new javax.swing.JPanel();
        jLabel3 = new javax.swing.JLabel();
        jLabel8 = new javax.swing.JLabel();
        jLabel6 = new javax.swing.JLabel();
        jLabel2 = new javax.swing.JLabel();
        jLabel7 = new javax.swing.JLabel();
        jLabel4 = new javax.swing.JLabel();

```

```

jLabel5 = new javax.swing.JLabel();
jLabel11 = new javax.swing.JLabel();
Exit = new javax.swing.JButton();
jButton1 = new javax.swing.JButton();
IDdat = new javax.swing.JTextField();
fnamedata = new javax.swing.JTextField();
lnamedata = new javax.swing.JTextField();
genderdata = new javax.swing.JTextField();
agedata = new javax.swing.JTextField();
phonenumberdata = new javax.swing.JTextField();
addressdata = new javax.swing.JTextField();
designateddoctordata = new javax.swing.JTextField();
filepathdata = new javax.swing.JLabel();
jButton2 = new javax.swing.JButton();
jScrollPane2 = new javax.swing.JScrollPane();
jTable1 = new javax.swing.JTable();
jButton3 = new javax.swing.JButton();
jButton4 = new javax.swing.JButton();
jScrollPane1 = new javax.swing.JScrollPane();
area = new javax.swing.JTextArea();

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

jPanel1.setBackground(new java.awt.Color(255, 202, 212));

jLabel3.setBackground(new java.awt.Color(0, 0, 0));
jLabel3.setFont(new java.awt.Font("Tw Cen MT", 1, 24)); // NOI18N
jLabel3.setForeground(new java.awt.Color(102, 102, 102));
jLabel3.setText("Last name:");

jLabel8.setBackground(new java.awt.Color(0, 0, 0));
jLabel8.setFont(new java.awt.Font("Tw Cen MT", 1, 24)); // NOI18N
jLabel8.setForeground(new java.awt.Color(102, 102, 102));
jLabel8.setText("Designated doctor:");

jLabel6.setBackground(new java.awt.Color(0, 0, 0));
jLabel6.setFont(new java.awt.Font("Tw Cen MT", 1, 24)); // NOI18N
jLabel6.setForeground(new java.awt.Color(102, 102, 102));
jLabel6.setText("Phone number:");

jLabel2.setBackground(new java.awt.Color(0, 0, 0));
jLabel2.setFont(new java.awt.Font("Tw Cen MT", 1, 24)); // NOI18N
jLabel2.setForeground(new java.awt.Color(102, 102, 102));
jLabel2.setText("First name:");

jLabel7.setBackground(new java.awt.Color(0, 0, 0));
jLabel7.setFont(new java.awt.Font("Tw Cen MT", 1, 24)); // NOI18N
jLabel7.setForeground(new java.awt.Color(102, 102, 102));
jLabel7.setText("Address:");

jLabel4.setBackground(new java.awt.Color(0, 0, 0));
jLabel4.setFont(new java.awt.Font("Tw Cen MT", 1, 24)); // NOI18N
jLabel4.setForeground(new java.awt.Color(102, 102, 102));
jLabel4.setText("Sex:");

jLabel5.setBackground(new java.awt.Color(0, 0, 0));
jLabel5.setFont(new java.awt.Font("Tw Cen MT", 1, 24)); // NOI18N

```

```

jLabel5.setForeground(new java.awt.Color(102, 102, 102));
jLabel5.setText("Age:");

jLabel1.setBackground(new java.awt.Color(0, 0, 0));
jLabel1.setFont(new java.awt.Font("Tw Cen MT", 1, 24)); // NOI18N
jLabel1.setForeground(new java.awt.Color(102, 102, 102));
jLabel1.setText("ID:");

Exit.setFont(new java.awt.Font("Tw Cen MT", 1, 24)); // NOI18N
Exit.setForeground(new java.awt.Color(102, 102, 102));
Exit.setText("Exit");
Exit.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        ExitActionPerformed(evt);
    }
});

jButton1.setFont(new java.awt.Font("Tw Cen MT", 1, 24)); // NOI18N
jButton1.setForeground(new java.awt.Color(102, 102, 102));
jButton1.setText("Show dental scan");
jButton1.setBorder(null);
jButton1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton1ActionPerformed(evt);
    }
});

fnamedata.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        fnamedataActionPerformed(evt);
    }
});

lnamedata.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        lnamedataActionPerformed(evt);
    }
});

agedata.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        agedataActionPerformed(evt);
    }
});

phonenumberdata.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        phonenumberdataActionPerformed(evt);
    }
});

addressdata.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        addressdataActionPerformed(evt);
    }
});

```

```

filepathdata.setForeground(new java.awt.Color(255, 202, 212));
filepathdata.setText("ewqwgewqewqe");

jButton2.setFont(new java.awt.Font("Tw Cen MT", 1, 24)); // NOI18N
jButton2.setForeground(new java.awt.Color(102, 102, 102));
jButton2.setText("Print patient data");
jButton2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton2ActionPerformed(evt);
    }
});

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

    },
    new String [] {

    }
));
jScrollPane2.setViewportViewView(jTable1);

jButton3.setFont(new java.awt.Font("Tw Cen MT", 1, 18)); // NOI18N
jButton3.setForeground(new java.awt.Color(102, 102, 102));
jButton3.setText("Check upcoming appointments");
jButton3.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton3ActionPerformed(evt);
    }
});

jButton4.setFont(new java.awt.Font("Tw Cen MT", 1, 18)); // NOI18N
jButton4.setForeground(new java.awt.Color(102, 102, 102));
jButton4.setText("Check invoices");
jButton4.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton4ActionPerformed(evt);
    }
});

area.setColumns(20);
area.setRows(5);
jScrollPane1.setViewportViewView(area);

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

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

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
    .addGroup(jPanel1Layout.createSequentialGroup()
        .addGroup(javax.swing.GroupLayout.Alignment.LEADING,
jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jPanel1Layout.createSequentialGroup()
        .addGap(74, 74, 74)

```



```

        .addComponent(filepathdata,
javax.swing.GroupLayout.PREFERRED_SIZE, 133,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGroup(javax.swing.GroupLayout.Alignment.LEADING,
jPanell1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
        .addGroup(javax.swing.GroupLayout.Alignment.LEADING,
jPanell1Layout.createSequentialGroup())
        .addGap(508, 508, 508)
        .addComponent(jButton3,
javax.swing.GroupLayout.PREFERRED_SIZE, 281,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(37, 37, 37)
        .addComponent(jButton4,
javax.swing.GroupLayout.PREFERRED_SIZE, 197,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGroup(jPanell1Layout.createSequentialGroup())
        .addGap(55, 55, 55)

.addGroup(jPanell1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.T
RAILING)
        .addGroup(jPanell1Layout.createSequentialGroup())
        .addComponent(Exit,
javax.swing.GroupLayout.PREFERRED_SIZE, 203,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(126, 126, 126)
        .addComponent(jButton1,
javax.swing.GroupLayout.PREFERRED_SIZE, 214,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(127, 127, 127)
        .addComponent(jButton2,
javax.swing.GroupLayout.PREFERRED_SIZE, 152,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGroup(jPanell1Layout.createSequentialGroup())

.addGroup(jPanell1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.T
RAILING)
        .addComponent(jLabel2)
        .addComponent(jLabel8)
        .addComponent(jLabel7)
        .addComponent(jLabel6)
        .addComponent(jLabel3)
        .addComponent(jLabel4)
        .addComponent(jLabel5)
        .addComponent(jLabel11))

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

.addGroup(jPanell1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.L
EADING)
        .addComponent(IDdat,
javax.swing.GroupLayout.PREFERRED_SIZE, 211,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(fnamedata)
        .addComponent(lnamedata)
        .addComponent(addressdata)
        .addComponent(genderdata)
        .addComponent(agedata)

```

```

                .addComponent(phonenumberdata)
                .addComponent(designateddoctordata))
            .addGap(43, 43, 43)
            .addComponent(jScrollPane2,
javax.swing.GroupLayout.PREFERRED_SIZE, 514,
javax.swing.GroupLayout.PREFERRED_SIZE))))))
            .addContainerGap(54, Short.MAX_VALUE))
            .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanell1Layout.createSequentialGroup())
            .addGap(0, 0, Short.MAX_VALUE)
            .addComponent(jScrollPane1,
javax.swing.GroupLayout.PREFERRED_SIZE, 405,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(72, 72, 72))
        );

        jPanell1Layout.linkSize(javax.swing.SwingConstants.HORIZONTAL, new
java.awt.Component[] {IDdat, addressdata, agedata, designateddoctordata,
fnamedata, genderdata, lnamedata, phonenumberdata});

        jPanell1Layout.linkSize(javax.swing.SwingConstants.HORIZONTAL, new
java.awt.Component[] {Exit, jButton1, jButton2});

        jPanell1Layout.setVerticalGroup(

jPanell1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanell1Layout.createSequentialGroup())
            .addGap(52, 52, 52)

.addGroup(jPanell1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.L
EADING)
            .addGroup(jPanell1Layout.createSequentialGroup())

.addGroup(jPanell1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.B
ASELINE)
            .addComponent(jLabel1,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
            .addComponent(IDdat,
javax.swing.GroupLayout.PREFERRED_SIZE, 27,
javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGap(25, 25, 25)

.addGroup(jPanell1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.T
RAILING)
            .addGroup(jPanell1Layout.createSequentialGroup())

.addGroup(jPanell1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.B
ASELINE)
            .addComponent(jLabel2)
            .addComponent(fnamedata,
javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGap(25, 25, 25)
            .addComponent(jLabel3))

```

```

        .addComponent(lnamedata,
javax.swing.GroupLayout.PREFERRED_SIZE, 32,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(25, 25, 25)

.addGroup(jPanellLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.B
ASELINE)

        .addComponent(jLabel4)
        .addComponent(genderdata,
javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(25, 25, 25)

.addGroup(jPanellLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.B
ASELINE)

        .addComponent(jLabel5)
        .addComponent(agedata,
javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(25, 25, 25)

.addGroup(jPanellLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.B
ASELINE)

        .addComponent(jLabel6)
        .addComponent(phonenumberdata,
javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(25, 25, 25)

.addGroup(jPanellLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.B
ASELINE)

        .addComponent(jLabel7)
        .addComponent(addressdata,
javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(25, 25, 25)

.addGroup(jPanellLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.B
ASELINE)

        .addComponent(designateddoctordata,
javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(jLabel8)))
        .addComponent(jScrollPane2,
javax.swing.GroupLayout.PREFERRED_SIZE, 0, Short.MAX_VALUE))
        .addGap(18, 18, 18)

.addGroup(jPanellLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.B
ASELINE)

        .addComponent(jButton4,
javax.swing.GroupLayout.PREFERRED_SIZE, 23,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(jButton3,
javax.swing.GroupLayout.PREFERRED_SIZE, 25,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(15, 15, 15)

```

```

        .addComponent(jScrollPane1,
javax.swing.GroupLayout.PREFERRED_SIZE, 0,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(18, 18, 18)

.addGroup(jPanellLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.B
ASELINE)
        .addComponent(Exit, javax.swing.GroupLayout.PREFERRED_SIZE,
44, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(jButton1,
javax.swing.GroupLayout.PREFERRED_SIZE, 44,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(jButton2,
javax.swing.GroupLayout.PREFERRED_SIZE, 42,
javax.swing.GroupLayout.PREFERRED_SIZE))

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
        .addComponent(filepathdata,
javax.swing.GroupLayout.PREFERRED_SIZE, 34,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(9, 9, 9))
    );

    jPanellLayout.linkSize(javax.swing.SwingConstants.VERTICAL, new
java.awt.Component[] {addressdata, agedata, designateddoctordata,
phonenumberdata});

    jPanellLayout.linkSize(javax.swing.SwingConstants.VERTICAL, new
java.awt.Component[] {Exit, jButton1, jButton2});

    jPanellLayout.linkSize(javax.swing.SwingConstants.VERTICAL, new
java.awt.Component[] {jButton3, jButton4});

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

layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(jPanell, javax.swing.GroupLayout.Alignment.TRAILING,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
    );
    layout.setVerticalGroup(

layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addComponent(jPanell, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(0, 0, Short.MAX_VALUE)
        );

    pack();
    setLocationRelativeTo(null);
} // </editor-fold> // GEN-END: initComponents

```

```

        private void ExitActionPerformed(java.awt.event.ActionEvent evt)
{
//GEN-FIRST:event_ExitActionPerformed
        this.setVisible(false);
        this.dispose();
//GEN-LAST:event_ExitActionPerformed

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

                String path = filepathdata.getText();
                String expr = "rundll32 \"C:\\Program Files (x86)\\Windows Photo
Viewer\\PhotoViewer.dll\", ImageView_Fullscreen " + path;
                try {
                        Runtime.getRuntime().exec(expr);
                } catch (IOException ex) {
                        Logger.getLogger(Patient_Data.class.getName()).log(Level.SEVERE, null,
ex);
                }
//GEN-LAST:event_jButton1ActionPerformed

        private void jTextField1ActionPerformed(java.awt.event.ActionEvent evt)
{
//GEN-FIRST:event_jTextField1ActionPerformed
        // TODO add your handling code here:
//GEN-LAST:event_jTextField1ActionPerformed

        private void agedataActionPerformed(java.awt.event.ActionEvent evt)
{
//GEN-FIRST:event_agedataActionPerformed
        // TODO add your handling code here:
//GEN-LAST:event_agedataActionPerformed

        private void phonenumberdataActionPerformed(java.awt.event.ActionEvent evt)
{
//GEN-FIRST:event_phonenumberdataActionPerformed
        // TODO add your handling code here:
//GEN-LAST:event_phonenumberdataActionPerformed

        private void addressdataActionPerformed(java.awt.event.ActionEvent evt)
{
//GEN-FIRST:event_addressdataActionPerformed
        // TODO add your handling code here:
//GEN-LAST:event_addressdataActionPerformed

        private void fnamedataActionPerformed(java.awt.event.ActionEvent evt)
{
//GEN-FIRST:event_fnamedataActionPerformed
        // TODO add your handling code here:
//GEN-LAST:event_fnamedataActionPerformed

        private void lnamedataActionPerformed(java.awt.event.ActionEvent evt)
{
//GEN-FIRST:event_lnamedataActionPerformed
        // TODO add your handling code here:
//GEN-LAST:event_lnamedataActionPerformed

        private void jButton2ActionPerformed(java.awt.event.ActionEvent evt)
{
//GEN-FIRST:event_jButton2ActionPerformed
                area.setText(area.getText()+"First name:\t\t\t"+ fnamedata.getText() +
"\n\n" );
                area.setText(area.getText()+"Last name:\t\t\t"+ lnamedata.getText() +
"\n\n" );
                area.setText(area.getText()+"Age:\t\t\t"+ agedata.getText() + "\n\n");

```

```

        area.setText(area.getText()+"Sex:\t\t\t"+ genderdata.getText() + "\n\n"
);
        area.setText(area.getText()+"Phone number:\t\t\t"+
phonenumberdata.getText() + "\n\n");
        area.setText(area.getText()+"Address:\t\t\t"+ addressdata.getText() +
"\n\n");
        area.setText(area.getText()+"Designated doctor:\t\t\t"+
designateddoctordata.getText() + "\n\n");

        try{
            area.print();
        }catch(Exception e){
        }
    }
} //GEN-LAST:event_jButton2ActionPerformed

private void jButton3ActionPerformed(java.awt.event.ActionEvent evt)
{//GEN-FIRST:event_jButton3ActionPerformed
    String populatedatabase = "SELECT `Doctor`, `Chair`, `Time slot`, `Date`
FROM clinic_database.appointments WHERE (`Patient ID` = '" + IDdat.getText()
+ "')";
    ShowTableData(populatedatabase);
} //GEN-LAST:event_jButton3ActionPerformed

private void jButton4ActionPerformed(java.awt.event.ActionEvent evt)
{//GEN-FIRST:event_jButton4ActionPerformed
    String populatedatabase2 = "SELECT `Price`, `Date` FROM
clinic_database.invoicetable WHERE (`PatientID` = '" + IDdat.getText() + "')";
    ShowTableData(populatedatabase2);
} //GEN-LAST:event_jButton4ActionPerformed

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

java.util.logging.Logger.getLogger(Patient_Data.class.getName()).log(java.util.
logging.Level.SEVERE, null, ex);
    } catch (InstantiationException ex) {

```

```

java.util.logging.Logger.getLogger(Patient_Data.class.getName()).log(java.util.
logging.Level.SEVERE, null, ex);
    } catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(Patient_Data.class.getName()).log(java.util.
logging.Level.SEVERE, null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {

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

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

// Variables declaration - do not modify//GEN-BEGIN:variables
private javax.swing.JButton Exit;
public static javax.swing.JTextField IDdat;
public static javax.swing.JTextField addressdata;
public static javax.swing.JTextField agedata;
private javax.swing.JTextArea area;
public static javax.swing.JTextField designateddoctordata;
public static javax.swing.JLabel filepathdata;
public static javax.swing.JTextField fnamedata;
public static javax.swing.JTextField genderdata;
private javax.swing.JButton jButton1;
private javax.swing.JButton jButton2;
private javax.swing.JButton jButton3;
private javax.swing.JButton jButton4;
private javax.swing.JLabel jLabel1;
private javax.swing.JLabel jLabel2;
private javax.swing.JLabel jLabel3;
private javax.swing.JLabel jLabel4;
private javax.swing.JLabel jLabel5;
private javax.swing.JLabel jLabel6;
private javax.swing.JLabel jLabel7;
private javax.swing.JLabel jLabel8;
private javax.swing.JPanel jPanel1;
private javax.swing.JScrollPane jScrollPane1;
private javax.swing.JScrollPane jScrollPane2;
private javax.swing.JTable jTable1;
public static javax.swing.JTextField lnamedata;
public static javax.swing.JTextField phonenumberdata;

```

```
    // End of variables declaration//GEN-END:variables  
}
```

Invoice Manager.java

```
/*  
 * 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 csia;  
  
import java.awt.Color;  
import java.awt.print.PrinterException;  
import java.sql.Connection;  
import java.sql.PreparedStatement;  
import java.sql.ResultSet;  
import java.sql.SQLException;  
import java.text.SimpleDateFormat;  
import java.util.Date;  
import java.util.Random;  
import javax.swing.JFrame;  
import javax.swing.JOptionPane;  
import javax.swing.JPanel;  
import javax.swing.table.DefaultTableModel;
```



```

import net.proteanit.sql.DbUtils;
import java.util.ArrayList;
import java.util.Iterator;

/**
 *
 * @author VivoBook
 */
public class Invoice_Manager extends javax.swing.JFrame {
    public Connection conn=null;
    public ResultSet rs = null;
    public PreparedStatement pst=null;

    //    public void ShowTableData(){
    //        try{
    //            conn = ReusableClasses.dbconnection.connection();
    //            String populatedatabase = "SELECT * FROM clinic_database.patients;";
    //            pst = conn.prepareStatement(populatedatabase);
    //            rs = pst.executeQuery();
    //            jTable1.setModel(DbUtils.resultSetToTableModel(rs));
    //            jTable1.getColumnModel().getColumn(3).setMinWidth(0);
    //            jTable1.getColumnModel().getColumn(3).setMaxWidth(0);
    //            jTable1.getColumnModel().getColumn(5).setMinWidth(0);
    //            jTable1.getColumnModel().getColumn(5).setMaxWidth(0);
    //            jTable1.getColumnModel().getColumn(6).setMinWidth(0);
    //            jTable1.getColumnModel().getColumn(6).setMaxWidth(0);
    //            jTable1.getColumnModel().getColumn(7).setMinWidth(0);
    //            jTable1.getColumnModel().getColumn(7).setMaxWidth(0);
    //            jTable1.getColumnModel().getColumn(8).setMinWidth(0);
    //            jTable1.getColumnModel().getColumn(8).setMaxWidth(0);
    //        } catch(SQLException e){
    //        }
    //    }

    public void ShowTableData(){
        try{
            conn = ReusableClasses.dbconnection.connection();
            String populatedatabase = "SELECT * FROM clinic_database.invoicetable;";
            pst = conn.prepareStatement(populatedatabase);
            rs = pst.executeQuery();
            jTable1.setModel(DbUtils.resultSetToTableModel(rs));

        } catch(SQLException e){
        }
    }

    Invoice_Viewer SelectedData = new Invoice_Viewer();

```

```

    public Invoice_Manager(){
        initComponents();
    //        ShowTableData();
        ShowTableData();

    }

    /**
     * This method is called from within the constructor to initialize the
form.
     * WARNING: Do NOT modify this code. The content of this method is always
     * regenerated by the Form Editor.
     */
    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated
Code">
    //GEN-BEGIN: initComponents
    private void initComponents() {

        MainPanelReceipt = new javax.swing.JPanel();
        OptionsPanel = new javax.swing.JPanel();
        InvoicePanelColorChange1 = new javax.swing.JPanel();
        jLabel110 = new javax.swing.JLabel();
        InvoicePanelColorChange2 = new javax.swing.JPanel();
        jLabel111 = new javax.swing.JLabel();
        jLabel112 = new javax.swing.JLabel();
        InvoicePanelColorChange3 = new javax.swing.JPanel();
        jLabel113 = new javax.swing.JLabel();
        jPanel15 = new javax.swing.JPanel();
        jLabel19 = new javax.swing.JLabel();
        jTabbedPane1 = new javax.swing.JTabbedPane();
        jPanel3 = new javax.swing.JPanel();
        jLabel11 = new javax.swing.JLabel();
        ExaminationCheckbox = new javax.swing.JCheckBox();
        jLabel13 = new javax.swing.JLabel();
        HeliofillCheckbox = new javax.swing.JCheckBox();
        jLabel12 = new javax.swing.JLabel();
        receiptage = new javax.swing.JTextField();
        jLabel14 = new javax.swing.JLabel();
        Dentalcheckbox = new javax.swing.JCheckBox();
        receiptlastname = new javax.swing.JTextField();
        TartarCheckbox = new javax.swing.JCheckBox();
        receiptname = new javax.swing.JTextField();
        jScrollPane1 = new javax.swing.JScrollPane();
        area = new javax.swing.JTextArea();
        receiptID = new javax.swing.JTextField();
        jButton1 = new javax.swing.JButton();
        jLabel17 = new javax.swing.JLabel();
        NumberCheck = new javax.swing.JLabel();
        jButton2 = new javax.swing.JButton();
        receiptadditionalprocedure = new javax.swing.JTextField();
        receiptadditionalprice = new javax.swing.JTextField();
        jLabel16 = new javax.swing.JLabel();
        jButton3 = new javax.swing.JButton();
        jButton7 = new javax.swing.JButton();
        jPanel4 = new javax.swing.JPanel();
        jScrollPane3 = new javax.swing.JScrollPane();

```

```

jTable1 = new javax.swing.JTable();
jButton4 = new javax.swing.JButton();
jButton5 = new javax.swing.JButton();
ID = new javax.swing.JTextField();
jButton6 = new javax.swing.JButton();

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

MainPanelReceipt.setBackground(new java.awt.Color(255, 202, 212));
MainPanelReceipt.setLayout(new
org.netbeans.lib.awtextra.AbsoluteLayout());

OptionsPanel.setBackground(new java.awt.Color(229, 152, 155));

InvoicePanelColorChangel.setBackground(new java.awt.Color(181, 131,
141));

jLabel10.setFont(new java.awt.Font("Tw Cen MT", 1, 24)); // NOI18N
jLabel10.setForeground(new java.awt.Color(255, 255, 255));
jLabel10.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
jLabel10.setText("Create an invoice");
jLabel10.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent evt) {
        jLabel10MouseClicked(evt);
    }
    public void mouseEntered(java.awt.event.MouseEvent evt) {
        jLabel10MouseEntered(evt);
    }
    public void mouseExited(java.awt.event.MouseEvent evt) {
        jLabel10MouseExited(evt);
    }
});

javax.swing.GroupLayout InvoicePanelColorChangelLayout = new
javax.swing.GroupLayout(InvoicePanelColorChangel);
InvoicePanelColorChangel.setLayout(InvoicePanelColorChangelLayout);
InvoicePanelColorChangelLayout.setHorizontalGroup(

InvoicePanelColorChangelLayout.createParallelGroup(javax.swing.GroupLayout.Align
nment.LEADING)
    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
InvoicePanelColorChangelLayout.createSequentialGroup()
    .addContainerGap(21, Short.MAX_VALUE)
    .addComponent(jLabel10, javax.swing.GroupLayout.PREFERRED_SIZE,
198, javax.swing.GroupLayout.PREFERRED_SIZE)
    .addGap(21, 21, 21))
);
InvoicePanelColorChangelLayout.setVerticalGroup(

InvoicePanelColorChangelLayout.createParallelGroup(javax.swing.GroupLayout.Align
nment.LEADING)
    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
InvoicePanelColorChangelLayout.createSequentialGroup()
    .addGap(0, 0, Short.MAX_VALUE)
    .addComponent(jLabel10, javax.swing.GroupLayout.PREFERRED_SIZE,
53, javax.swing.GroupLayout.PREFERRED_SIZE)
);

```

```

InvoicePanelColorChange2.setBackground(new java.awt.Color(181, 131,
141));

jLabel11.setFont(new java.awt.Font("Tw Cen MT", 1, 24)); // NOI18N
jLabel11.setForeground(new java.awt.Color(255, 255, 255));
jLabel11.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
jLabel11.setText("View invoices");
jLabel11.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent evt) {
        jLabel11MouseClicked(evt);
    }
    public void mouseEntered(java.awt.event.MouseEvent evt) {
        jLabel11MouseEntered(evt);
    }
    public void mouseExited(java.awt.event.MouseEvent evt) {
        jLabel11MouseExited(evt);
    }
});

javax.swing.GroupLayout InvoicePanelColorChange2Layout = new
javax.swing.GroupLayout(InvoicePanelColorChange2);
InvoicePanelColorChange2.setLayout(InvoicePanelColorChange2Layout);
InvoicePanelColorChange2Layout.setHorizontalGroup(

InvoicePanelColorChange2Layout.createParallelGroup(javax.swing.GroupLayout.Align
ment.LEADING)
    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
InvoicePanelColorChange2Layout.createSequentialGroup()
        .addComponent(jLabel11, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addContainerGap())
    );
InvoicePanelColorChange2Layout.setVerticalGroup(

InvoicePanelColorChange2Layout.createParallelGroup(javax.swing.GroupLayout.Align
ment.LEADING)
    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
InvoicePanelColorChange2Layout.createSequentialGroup()
        .addGap(0, 0, Short.MAX_VALUE)
        .addComponent(jLabel11, javax.swing.GroupLayout.PREFERRED_SIZE,
53, javax.swing.GroupLayout.PREFERRED_SIZE))
    );

jLabel12.setFont(new java.awt.Font("Tw Cen MT", 1, 36)); // NOI18N
jLabel12.setForeground(new java.awt.Color(255, 255, 255));
jLabel12.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
jLabel12.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/Icons/icons8_settings_26px.png")
)); // NOI18N
jLabel12.setText("Options");

InvoicePanelColorChange3.setBackground(new java.awt.Color(181, 131,
141));

jLabel13.setFont(new java.awt.Font("Tw Cen MT", 1, 24)); // NOI18N
jLabel13.setForeground(new java.awt.Color(255, 255, 255));

```

```

jLabel13.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
jLabel13.setText("Exit");
jLabel13.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent evt) {
        jLabel13MouseClicked(evt);
    }
    public void mouseEntered(java.awt.event.MouseEvent evt) {
        jLabel13MouseEntered(evt);
    }
    public void mouseExited(java.awt.event.MouseEvent evt) {
        jLabel13MouseExited(evt);
    }
});

javax.swing.GroupLayout InvoicePanelColorChange3Layout = new
javax.swing.GroupLayout(InvoicePanelColorChange3);
InvoicePanelColorChange3.setLayout(InvoicePanelColorChange3Layout);
InvoicePanelColorChange3Layout.setHorizontalGroup(

InvoicePanelColorChange3Layout.createParallelGroup(javax.swing.GroupLayout.Align
ment.LEADING)
    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
InvoicePanelColorChange3Layout.createSequentialGroup()
        .addComponent(jLabel13, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addContainerGap())
    );
InvoicePanelColorChange3Layout.setVerticalGroup(

InvoicePanelColorChange3Layout.createParallelGroup(javax.swing.GroupLayout.Align
ment.LEADING)
    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
InvoicePanelColorChange3Layout.createSequentialGroup()
        .addGap(0, 0, Short.MAX_VALUE)
        .addComponent(jLabel13, javax.swing.GroupLayout.PREFERRED_SIZE,
53, javax.swing.GroupLayout.PREFERRED_SIZE))
    );

javax.swing.GroupLayout OptionsPanelLayout = new
javax.swing.GroupLayout(OptionsPanel);
OptionsPanel.setLayout(OptionsPanelLayout);
OptionsPanelLayout.setHorizontalGroup(

OptionsPanelLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addComponent(InvoicePanelColorChange1,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
    .addComponent(jLabel12, javax.swing.GroupLayout.Alignment.TRAILING,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
    .addComponent(InvoicePanelColorChange2,
javax.swing.GroupLayout.Alignment.TRAILING,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)

```

```

        .addComponent(InvoicePanelColorChange3,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
    );
    OptionsPanelLayout.setVerticalGroup(

OptionsPanelLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    )
        .addGroup(OptionsPanelLayout.createSequentialGroup()
            .addGap(111, 111, 111)
            .addComponent(jLabel12, javax.swing.GroupLayout.PREFERRED_SIZE,
91, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(33, 33, 33)
            .addComponent(InvoicePanelColorChange1,
javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(64, 64, 64)
            .addComponent(InvoicePanelColorChange2,
javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(54, 54, 54)
            .addComponent(InvoicePanelColorChange3,
javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addContainerGap(138, Short.MAX_VALUE))
        );

    MainPanelReceipt.add(OptionsPanel, new
org.netbeans.lib.awtextra.AbsoluteConstraints(0, 0, 240, 650));

    jPanel5.setBackground(new java.awt.Color(255, 202, 212));

    jLabel9.setBackground(new java.awt.Color(255, 255, 255));
    jLabel9.setFont(new java.awt.Font("Tw Cen MT", 1, 52)); // NOI18N
    jLabel9.setForeground(new java.awt.Color(102, 102, 102));
    jLabel9.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
    jLabel9.setText("Invoice manager");

    javax.swing.GroupLayout jPanel5Layout = new
javax.swing.GroupLayout(jPanel5);
    jPanel5.setLayout(jPanel5Layout);
    jPanel5Layout.setHorizontalGroup(

jPanel5Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanel5Layout.createSequentialGroup()
        .addContainerGap(30, Short.MAX_VALUE)
        .addComponent(jLabel9, javax.swing.GroupLayout.PREFERRED_SIZE,
1088, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addContainerGap())
    );
    jPanel5Layout.setVerticalGroup(

jPanel5Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jPanel5Layout.createSequentialGroup()
        .addContainerGap()

```

```

        .addComponent(jLabel9, javax.swing.GroupLayout.PREFERRED_SIZE,
76, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addContainerGap(61, Short.MAX_VALUE))
    );

    MainPanelReceipt.add(jPanel5, new
org.netbeans.lib.awtextra.AbsoluteConstraints(226, -1, 1130, 150));

    jPanel3.setBackground(new java.awt.Color(255, 202, 212));
    jPanel3.setLayout(new org.netbeans.lib.awtextra.AbsoluteLayout());

    jLabel11.setFont(new java.awt.Font("Tw Cen MT", 1, 20)); // NOI18N
    jLabel11.setForeground(new java.awt.Color(102, 102, 102));
    jLabel11.setText("ID");
    jPanel3.add(jLabel11, new
org.netbeans.lib.awtextra.AbsoluteConstraints(64, 21, 96, 22));

    ExaminationCheckbox.setBackground(new java.awt.Color(255, 202, 212));
    ExaminationCheckbox.setFont(new java.awt.Font("Tw Cen MT", 1, 20)); //
NOI18N
    ExaminationCheckbox.setForeground(new java.awt.Color(102, 102, 102));
    ExaminationCheckbox.setText("Examination");
    ExaminationCheckbox.addActionListener(new
java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            ExaminationCheckboxActionPerformed(evt);
        }
    });
    jPanel3.add(ExaminationCheckbox, new
org.netbeans.lib.awtextra.AbsoluteConstraints(64, 201, -1, -1));

    jLabel3.setFont(new java.awt.Font("Tw Cen MT", 1, 20)); // NOI18N
    jLabel3.setForeground(new java.awt.Color(102, 102, 102));
    jLabel3.setText("Last name");
    jPanel3.add(jLabel3, new
org.netbeans.lib.awtextra.AbsoluteConstraints(64, 112, 96, -1));

    HeliofillCheckbox.setBackground(new java.awt.Color(255, 202, 212));
    HeliofillCheckbox.setFont(new java.awt.Font("Tw Cen MT", 1, 20)); //
NOI18N
    HeliofillCheckbox.setForeground(new java.awt.Color(102, 102, 102));
    HeliofillCheckbox.setText("Helio fill");
    HeliofillCheckbox.addActionListener(new java.awt.event.ActionListener()
{
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            HeliofillCheckboxActionPerformed(evt);
        }
    });
    jPanel3.add(HeliofillCheckbox, new
org.netbeans.lib.awtextra.AbsoluteConstraints(243, 201, 125, -1));

    jLabel2.setFont(new java.awt.Font("Tw Cen MT", 1, 20)); // NOI18N
    jLabel2.setForeground(new java.awt.Color(102, 102, 102));
    jLabel2.setText("First name");
    jPanel3.add(jLabel2, new
org.netbeans.lib.awtextra.AbsoluteConstraints(64, 66, 96, 25));

```

```

        receiptage.setFont(new java.awt.Font("Tw Cen MT", 0, 18)); // NOI18N
        jPanel3.add(receiptage, new
org.netbeans.lib.awtextra.AbsoluteConstraints(165, 159, 176, -1));

        jLabel4.setFont(new java.awt.Font("Tw Cen MT", 1, 20)); // NOI18N
        jLabel4.setForeground(new java.awt.Color(102, 102, 102));
        jLabel4.setText("Age");
        jPanel3.add(jLabel4, new
org.netbeans.lib.awtextra.AbsoluteConstraints(64, 160, 96, -1));

        Dentalcheckbox.setBackground(new java.awt.Color(255, 202, 212));
        Dentalcheckbox.setFont(new java.awt.Font("Tw Cen MT", 1, 20)); //
NOI18N
        Dentalcheckbox.setForeground(new java.awt.Color(102, 102, 102));
        Dentalcheckbox.setText("Dental treatment");
        Dentalcheckbox.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                DentalcheckboxActionPerformed(evt);
            }
        });
        jPanel3.add(Dentalcheckbox, new
org.netbeans.lib.awtextra.AbsoluteConstraints(243, 264, -1, -1));

        receiptlastname.setFont(new java.awt.Font("Tw Cen MT", 0, 18)); //
NOI18N
        receiptlastname.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                receiptlastnameActionPerformed(evt);
            }
        });
        jPanel3.add(receiptlastname, new
org.netbeans.lib.awtextra.AbsoluteConstraints(165, 111, 176, -1));

        Tartarcheckbox.setBackground(new java.awt.Color(255, 202, 212));
        Tartarcheckbox.setFont(new java.awt.Font("Tw Cen MT", 1, 20)); //
NOI18N
        Tartarcheckbox.setForeground(new java.awt.Color(102, 102, 102));
        Tartarcheckbox.setText("Tartar removal");
        Tartarcheckbox.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                TartarcheckboxActionPerformed(evt);
            }
        });
        jPanel3.add(Tartarcheckbox, new
org.netbeans.lib.awtextra.AbsoluteConstraints(64, 264, -1, -1));

        receiptname.setFont(new java.awt.Font("Tw Cen MT", 0, 18)); // NOI18N
        jPanel3.add(receiptname, new
org.netbeans.lib.awtextra.AbsoluteConstraints(165, 66, 176, -1));

        area.setColumns(20);
        area.setRows(5);
        jScrollPane1.setViewportView(area);

        jPanel3.add(jScrollPane1, new
org.netbeans.lib.awtextra.AbsoluteConstraints(483, 0, 523, 414));

```



```

        receiptID.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                receiptIDActionPerformed(evt);
            }
        });
        receiptID.addKeyListener(new java.awt.event.KeyAdapter() {
            public void keyReleased(java.awt.event.KeyEvent evt) {
                receiptIDKeyReleased(evt);
            }
        });
        jPanel3.add(receiptID, new
org.netbeans.lib.awtextra.AbsoluteConstraints(165, 21, 176, 27));

        jButton1.setFont(new java.awt.Font("Tw Cen MT", 1, 20)); // NOI18N
        jButton1.setForeground(new java.awt.Color(102, 102, 102));
        jButton1.setText("Generate invoice");
        jButton1.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton1ActionPerformed(evt);
            }
        });
        jPanel3.add(jButton1, new
org.netbeans.lib.awtextra.AbsoluteConstraints(197, 455, -1, 41));

        jLabel7.setFont(new java.awt.Font("Tw Cen MT", 1, 20)); // NOI18N
        jLabel7.setForeground(new java.awt.Color(102, 102, 102));
        jLabel7.setText("Pricing");
        jPanel3.add(jLabel7, new
org.netbeans.lib.awtextra.AbsoluteConstraints(243, 347, 63, -1));

        NumberCheck.setFont(new java.awt.Font("Tw Cen MT", 0, 20)); // NOI18N
        NumberCheck.setForeground(new java.awt.Color(102, 102, 102));
        jPanel3.add(NumberCheck, new
org.netbeans.lib.awtextra.AbsoluteConstraints(472, 421, 405, 26));

        jButton2.setFont(new java.awt.Font("Tw Cen MT", 1, 20)); // NOI18N
        jButton2.setForeground(new java.awt.Color(102, 102, 102));
        jButton2.setText("Print invoice");
        jButton2.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton2ActionPerformed(evt);
            }
        });
        jPanel3.add(jButton2, new
org.netbeans.lib.awtextra.AbsoluteConstraints(527, 454, 175, 41));

        receiptadditionalprocedure.setFont(new java.awt.Font("Tw Cen MT", 0,
18)); // NOI18N
        jPanel3.add(receiptadditionalprocedure, new
org.netbeans.lib.awtextra.AbsoluteConstraints(64, 313, 115, -1));

        receiptadditionalprice.setFont(new java.awt.Font("Tw Cen MT", 0, 18));
// NOI18N
        receiptadditionalprice.addActionListener(new
java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                receiptadditionalpriceActionPerformed(evt);
            }
        });

```

```

    }
});
receiptadditionalprice.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyTyped(java.awt.event.KeyEvent evt) {
        receiptadditionalpriceKeyTyped(evt);
    }
});
jPanel3.add(receiptadditionalprice, new
org.netbeans.lib.awtextra.AbsoluteConstraints(243, 313, 123, -1));

jLabel6.setFont(new java.awt.Font("Tw Cen MT", 1, 20)); // NOI18N
jLabel6.setForeground(new java.awt.Color(102, 102, 102));
jLabel6.setText("Procedure");
jPanel3.add(jLabel6, new
org.netbeans.lib.awtextra.AbsoluteConstraints(64, 347, -1, -1));

jButton3.setFont(new java.awt.Font("Tw Cen MT", 1, 16)); // NOI18N
jButton3.setForeground(new java.awt.Color(102, 102, 102));
jButton3.setText("Search by ID");
jButton3.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton3ActionPerformed(evt);
    }
});
jPanel3.add(jButton3, new
org.netbeans.lib.awtextra.AbsoluteConstraints(348, 21, -1, -1));

jButton7.setFont(new java.awt.Font("Tw Cen MT", 1, 20)); // NOI18N
jButton7.setForeground(new java.awt.Color(102, 102, 102));
jButton7.setText("Clear");
jButton7.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton7ActionPerformed(evt);
    }
});
jPanel3.add(jButton7, new
org.netbeans.lib.awtextra.AbsoluteConstraints(832, 454, 175, 41));

jTabbedPane1.addTab("tab1", jPanel3);

jPanel4.setBackground(new java.awt.Color(255, 202, 212));

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

    },
    new String [] {

    }
));
jTable1.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent evt) {
        jTable1MouseClicked(evt);
    }
});
jScrollPane3.setViewportView(jTable1);

```

```

jButton4.setFont(new java.awt.Font("Tw Cen MT", 1, 20)); // NOI18N
jButton4.setForeground(new java.awt.Color(102, 102, 102));
jButton4.setText("Print Table");
jButton4.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton4ActionPerformed(evt);
    }
});

jButton5.setFont(new java.awt.Font("Tw Cen MT", 1, 20)); // NOI18N
jButton5.setForeground(new java.awt.Color(102, 102, 102));
jButton5.setText("Search by User ID");
jButton5.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton5ActionPerformed(evt);
    }
});

jButton6.setFont(new java.awt.Font("Tw Cen MT", 1, 20)); // NOI18N
jButton6.setForeground(new java.awt.Color(102, 102, 102));
jButton6.setText("Show all");
jButton6.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton6ActionPerformed(evt);
    }
});

javax.swing.GroupLayout jPanel4Layout = new
javax.swing.GroupLayout(jPanel4);
jPanel4.setLayout(jPanel4Layout);
jPanel4Layout.setHorizontalGroup(

jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanel4Layout.createSequentialGroup()
        .addGap(113, Short.MAX_VALUE)

.addGroup(jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.T
RAILING, false)
    .addGroup(jPanel4Layout.createSequentialGroup()
        .addComponent(ID,
javax.swing.GroupLayout.PREFERRED_SIZE, 164,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
        .addComponent(jButton5)
        .addGap(45, 45, 45)
        .addComponent(jButton6,
javax.swing.GroupLayout.PREFERRED_SIZE, 161,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addComponent(jButton4,
javax.swing.GroupLayout.PREFERRED_SIZE, 197,
javax.swing.GroupLayout.PREFERRED_SIZE))

```

```

        .addComponent(jScrollPane3,
javax.swing.GroupLayout.PREFERRED_SIZE, 858,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(54, 54, 54))
    );

    jPanel4Layout.linkSize(javax.swing.SwingConstants.HORIZONTAL, new
java.awt.Component[] {jButton4, jButton5, jButton6});

    jPanel4Layout.setVerticalGroup(

jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jPanel4Layout.createSequentialGroup()
        .addGap(7, 7, 7)
        .addComponent(jScrollPane3,
javax.swing.GroupLayout.PREFERRED_SIZE, 431,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

.addGroup(jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.L
EADING)
        .addComponent(jButton4,
javax.swing.GroupLayout.Alignment.TRAILING,
javax.swing.GroupLayout.PREFERRED_SIZE, 56,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addGroup(jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.B
ASELINE)
        .addComponent(jButton5,
javax.swing.GroupLayout.PREFERRED_SIZE, 56,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(jButton6,
javax.swing.GroupLayout.PREFERRED_SIZE, 56,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addComponent(ID))
        .addContainerGap())
    );

    jPanel4Layout.linkSize(javax.swing.SwingConstants.VERTICAL, new
java.awt.Component[] {jButton4, jButton5, jButton6});

    jTabbedPane1.addTab("tab2", jPanel4);

    MainPanelReceipt.add(jTabbedPane1, new
org.netbeans.lib.awtextra.AbsoluteConstraints(230, 110, 1030, 540));

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

layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(MainPanelReceipt,
javax.swing.GroupLayout.PREFERRED_SIZE, 1256,
javax.swing.GroupLayout.PREFERRED_SIZE)
    );

```

```

        layout.setVerticalGroup(

layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(MainPanelReceipt,
javax.swing.GroupLayout.PREFERRED_SIZE, 649,
javax.swing.GroupLayout.PREFERRED_SIZE)
        );

        pack();
        setLocationRelativeTo(null);
    }// </editor-fold>//GEN-END: initComponents
public void setColor(JPanel p){

        p.setBackground(new Color(185,148,155));

    }
    public void removeColor(JPanel p){

        p.setBackground(new Color(181,131,141));
    }
    private void receiptlastnameActionPerformed(java.awt.event.ActionEvent evt)
{ //GEN-FIRST:event_receiptlastnameActionPerformed
        // TODO add your handling code here:
    } //GEN-LAST:event_receiptlastnameActionPerformed

    private void HeliofillCheckboxActionPerformed(java.awt.event.ActionEvent
evt) { //GEN-FIRST:event_HeliofillCheckboxActionPerformed
        // TODO add your handling code here:
    } //GEN-LAST:event_HeliofillCheckboxActionPerformed

    private void DentalcheckboxActionPerformed(java.awt.event.ActionEvent evt)
{ //GEN-FIRST:event_DentalcheckboxActionPerformed
        // TODO add your handling code here:
    } //GEN-LAST:event_DentalcheckboxActionPerformed

    private void jButton1ActionPerformed(java.awt.event.ActionEvent evt)
{ //GEN-FIRST:event_jButton1ActionPerformed
        if(receiptname.getText().isEmpty() || receiptID.getText().isEmpty() ||
receiptlastname.getText().isEmpty() || receiptage.getText().isEmpty()){
            JOptionPane.showMessageDialog(null,"There are empty fields, please try
again!");
        }
    } //GEN-LAST:event_jButton1ActionPerformed

    }else{

        int f=0;
        int i = new Random().nextInt(1000000) + 100000;
        Date obj= new Date();
        SimpleDateFormat formatter = new SimpleDateFormat("yyyy/MM/dd");
        String date= obj.toString();
        String strDate= formatter.format(obj);

        area.setText(area.getText()+ date);
        int finalPrice=0;
        if(ExaminationCheckbox.isSelected()){
            finalPrice= finalPrice+ 10;
        }
    }
}

```

```

    }
    if(HeliofillCheckbox.isSelected()){
        finalPrice= finalPrice+ 25;
    }
    if(TartarCheckbox.isSelected()){
        finalPrice= finalPrice+ 35;
    }
    if(Dentalcheckbox.isSelected()){
        finalPrice= finalPrice+ 20;
    }
    String templ = receiptadditionalprice.getText();

    if(templ.isEmpty()){
    }
    else{
        int additionalprice = Integer.parseInt(templ);
        finalPrice = finalPrice+additionalprice;
    }
    area.setText(
"\n=====
====\n" );
        area.setText(area.getText()+"Date:\t\t\t "+ date + "\n\n" );
        area.setText(area.getText()+"Invoice ID:\t\t\t "+ i + "\n\n" );
        area.setText(area.getText()+"Patient ID:\t\t\t "+ receiptID.getText() +
"\n\n" );
        area.setText(area.getText()+"First name:\t\t\t "+ receiptname.getText()
+ "\n\n" );
        area.setText(area.getText()+"Last name :\t\t\t "+
receiptlastname.getText() + "\n\n");
        area.setText(area.getText()+"Age:\t\t\t "+ receiptage.getText() + "\n\n"
);
        if(receiptadditionalprocedure.getText().isEmpty()){
            area.setText(area.getText()+"Additional procedure:\t\t "+ "No additional
procedures" + "\n\n");
        }
        else{
            area.setText(area.getText()+"Additional procedure:\t\t "+
receiptadditionalprocedure.getText() + "\n\n");
        }
        area.setText(area.getText()+"Final price:\t\t\t "+ finalPrice + "€" +
"\n\n");
        area.setText(area.getText()+"Procedures done:");
        if(ExaminationCheckbox.isSelected()){
            area.setText(area.getText() + "\t\t\t" + "Examination" + "\n\n");
        }
        if(HeliofillCheckbox.isSelected()){
            area.setText(area.getText() + "\t\t\t\t" + "Heliofill" + "\n\n");
        }
        if(TartarCheckbox.isSelected()){
            area.setText(area.getText() + "\t\t\t\t" + "Tartar removal" + "\n\n");
        }
        if(Dentalcheckbox.isSelected()){
            area.setText(area.getText() + "\t\t\t\t" + "Dental treatment" + "\n\n");
        }
        area.setText(area.getText() + "\t\t\t\t" +
receiptadditionalprocedure.getText() + "\n\n");
        SimpleDateFormat receiptdateobject = new SimpleDateFormat("dd/MM/yyyy");

```

```

        int dialogButton = JOptionPane.YES_NO_OPTION;
        JOptionPane.showConfirmDialog (null, "Are you sure?", "WARNING",
dialogButton);
        if(dialogButton == JOptionPane.YES_OPTION) {
            f=1;
            if(dialogButton == JOptionPane.NO_OPTION) {
                f=0;
            }
        }

        if(f==1){
            try{
                conn = ReusableClasses.dbconnection.connection();
                String insertquerry= "INSERT INTO `clinic_database`.`invoicetable`
(`InvoiceID`, `First Name`, `Last Name`, `PatientID`, `Price`, `Date`,
`Procedure` ) VALUES (?, ?, ?, ?, ?, ?, ?);" ;
                String receiptdate = receiptdateobject.format(obj);
                pst = conn.prepareStatement(insertquerry);
                int invoiceid = new Random().nextInt(90000) + 100000;

                String str = String.valueOf(invoiceid);
                pst.setString(1, str);
                pst.setString(2, receiptname.getText());
                pst.setString(3, receiptlastname.getText());
                pst.setString(4, receiptID.getText());
                String finalprice = Integer.toString(finalPrice) + "€";
                pst.setString(5, finalprice);
                pst.setString(6, strDate);
                ArrayList<String> procedure = new ArrayList<>();
                if(ExaminationCheckbox.isSelected()){
                    String examination = "Examination";

                    procedure.add(examination);
                }

                if(HeliofillCheckbox.isSelected()){
                    String helio = "Heliofill";
                    procedure.add(helio);
                }
                if(TartarCheckbox.isSelected()){
                    String tartar = "Tartar";
                    procedure.add(tartar);
                }
                if(Dentalcheckbox.isSelected()){
                    String dental = "Dental Treatment";
                    procedure.add(dental);
                }
                String additional = receiptadditionalprocedure.getText();
                if(additional.isEmpty()){
                }else{

                    procedure.add(additional);
                }
                StringBuilder sb = new StringBuilder();
                for (String s : procedure) {
                    sb.append(s);

```

```

        sb.append(", ");
    }
    pst.setString(7, sb.toString());
    pst.executeUpdate();
} catch (SQLException e) {
    System.out.println(e);
}

ShowTableData();
}
} //GEN-LAST:event_jButton1ActionPerformed

private void ExaminationCheckboxActionPerformed(java.awt.event.ActionEvent
evt) { //GEN-FIRST:event_ExaminationCheckboxActionPerformed
    // TODO add your handling code here:
} //GEN-LAST:event_ExaminationCheckboxActionPerformed

private void jButton2ActionPerformed(java.awt.event.ActionEvent evt)
{ //GEN-FIRST:event_jButton2ActionPerformed
    try {
        area.print();
    } catch (PrinterException e) {
    }
} //GEN-LAST:event_jButton2ActionPerformed

private void
receiptadditionalpriceActionPerformed(java.awt.event.ActionEvent evt)
{ //GEN-FIRST:event_receiptadditionalpriceActionPerformed
    // TODO add your handling code here:
} //GEN-LAST:event_receiptadditionalpriceActionPerformed

private void TartarCheckboxActionPerformed(java.awt.event.ActionEvent evt)
{ //GEN-FIRST:event_TartarCheckboxActionPerformed
    // TODO add your handling code here:
} //GEN-LAST:event_TartarCheckboxActionPerformed

private void receiptadditionalpriceKeyTyped(java.awt.event.KeyEvent evt)
{ //GEN-FIRST:event_receiptadditionalpriceKeyTyped
    try {
        int check = Integer.parseInt(receiptadditionalprice.getText());
        NumberCheck.setText("");
    } catch (NumberFormatException e) {
        NumberCheck.setText("Please enter a number");
    }
    if (receiptadditionalprice.getText().isEmpty()) {

        NumberCheck.setText("");
    }
} //GEN-LAST:event_receiptadditionalpriceKeyTyped

private void receiptIDKeyReleased(java.awt.event.KeyEvent evt)
{ //GEN-FIRST:event_receiptIDKeyReleased

} //GEN-LAST:event_receiptIDKeyReleased

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

```



```

        // TODO add your handling code here:
    } //GEN-LAST:event_receiptIDActionPerformed

    private void jLabel10MouseClicked(java.awt.event.MouseEvent evt)
    { //GEN-FIRST:event_jLabel10MouseClicked
        jTabbedPanel.setSelectedIndex(0);
    } //GEN-LAST:event_jLabel10MouseClicked

    private void jLabel11MouseClicked(java.awt.event.MouseEvent evt)
    { //GEN-FIRST:event_jLabel11MouseClicked
        jTabbedPanel.setSelectedIndex(1);
    } //GEN-LAST:event_jLabel11MouseClicked

    private void jLabel10MouseEntered(java.awt.event.MouseEvent evt)
    { //GEN-FIRST:event_jLabel10MouseEntered
        setColor(InvoicePanelColorChange1);
    } //GEN-LAST:event_jLabel10MouseEntered

    private void jLabel10MouseExited(java.awt.event.MouseEvent evt)
    { //GEN-FIRST:event_jLabel10MouseExited
        removeColor(InvoicePanelColorChange1);
    } //GEN-LAST:event_jLabel10MouseExited

    private void jLabel11MouseEntered(java.awt.event.MouseEvent evt)
    { //GEN-FIRST:event_jLabel11MouseEntered
        setColor(InvoicePanelColorChange2);
    } //GEN-LAST:event_jLabel11MouseEntered

    private void jLabel11MouseExited(java.awt.event.MouseEvent evt)
    { //GEN-FIRST:event_jLabel11MouseExited
        removeColor(InvoicePanelColorChange2);
    } //GEN-LAST:event_jLabel11MouseExited

    private void jButton3ActionPerformed(java.awt.event.ActionEvent evt)
    { //GEN-FIRST:event_jButton3ActionPerformed
        String SearchID = receiptID.getText();
        String searchquerry="Select * FROM `clinic_database`.`patients` WHERE
(`ID` = '" + SearchID + "')";
        try{
            pst = conn.prepareStatement(searchquerry);
            rs = pst.executeQuery();

            if(rs.next()){

                String firstname = rs.getString("First name");
                String lastname = rs.getString("Last name");
                String age = rs.getString("Age");
                receiptname.setText(firstname);
                receiptlastname.setText(lastname);
                receiptage.setText(age);
            }else{
                JOptionPane.showMessageDialog(null, "ID has not been found, please try
again!");
            }
        }
    }

```

```

    }catch(Exception E){

    }
}

//GEN-LAST:event_jButton3ActionPerformed

private void jButton4ActionPerformed(java.awt.event.ActionEvent evt)
{//GEN-FIRST:event_jButton4ActionPerformed

    try{jTable1.print();}catch(Exception s){
        System.out.println(s);
    }
}

//GEN-LAST:event_jButton4ActionPerformed

private void jLabel13MouseClicked(java.awt.event.MouseEvent evt)
{//GEN-FIRST:event_jLabel13MouseClicked
    Dashboard Dash= new Dashboard ();
    Dash.setVisible(true);
    this.setVisible(false);
    this.dispose();
}

//GEN-LAST:event_jLabel13MouseClicked

private void jLabel13MouseEntered(java.awt.event.MouseEvent evt)
{//GEN-FIRST:event_jLabel13MouseEntered
    setColor(InvoicePanelColorChange3);
}

//GEN-LAST:event_jLabel13MouseEntered

private void jLabel13MouseExited(java.awt.event.MouseEvent evt)
{//GEN-FIRST:event_jLabel13MouseExited
    removeColor(InvoicePanelColorChange3);
}

//GEN-LAST:event_jLabel13MouseExited

private void jTable1MouseClicked(java.awt.event.MouseEvent evt)
{//GEN-FIRST:event_jTable1MouseClicked
    try{
        int selectedRowIndex = jTable1.getSelectedRow();
        DefaultTableModel modell = (DefaultTableModel)jTable1.getModel();

        String InvoiceID = modell.getValueAt(selectedRowIndex, 0).toString();

        String FirstName = modell.getValueAt(selectedRowIndex, 1).toString();

        String LastName = modell.getValueAt(selectedRowIndex, 2).toString();

        String PatientID= modell.getValueAt(selectedRowIndex, 3).toString();

        String Price = modell.getValueAt(selectedRowIndex, 4).toString();

        String Date = modell.getValueAt(selectedRowIndex, 5).toString();

        String Procedure = modell.getValueAt(selectedRowIndex, 6).toString();

        Invoice_Viewer ReceiptData = new Invoice_Viewer();
        ReceiptData.setVisible(true);
        ReceiptData.pack();
    }
}
}

```

```

        ReceiptData.setLocationRelativeTo(null);
        ReceiptData.setDefaultCloseOperation(JFrame.DISPOSE_ON_CLOSE);

        Invoice_Viewer.ReceiptArea.setText(
"\n=====
=====\n" );

Invoice_Viewer.ReceiptArea.setText(Invoice_Viewer.ReceiptArea.getText()+"Date:\t\t\t\t"+ Date + "\n\n" );

Invoice_Viewer.ReceiptArea.setText(Invoice_Viewer.ReceiptArea.getText()+"Invoice ID:\t\t\t\t"+ InvoiceID + "\n\n" );

Invoice_Viewer.ReceiptArea.setText(Invoice_Viewer.ReceiptArea.getText()+"Patient ID:\t\t\t\t"+ PatientID + "\n\n" );

Invoice_Viewer.ReceiptArea.setText(Invoice_Viewer.ReceiptArea.getText()+"First name:\t\t\t\t"+ FirstName + "\n\n" );

Invoice_Viewer.ReceiptArea.setText(Invoice_Viewer.ReceiptArea.getText()+"Last name:\t\t\t\t"+ LastName + "\n\n");

Invoice_Viewer.ReceiptArea.setText(Invoice_Viewer.ReceiptArea.getText()+"Procedures done:\t\t\t\t"+ Procedure + "\n\n");

Invoice_Viewer.ReceiptArea.setText(Invoice_Viewer.ReceiptArea.getText()+"Price:\t\t\t\t"+ Price + "\n\n" );

        }catch(Exception e){

        }

    }
} //GEN-LAST:event_jTable1MouseClicked

private void jButton6ActionPerformed(java.awt.event.ActionEvent evt)
{ //GEN-FIRST:event_jButton6ActionPerformed
    String searchquery="Select * FROM `clinic_database`.`invoicetable`";
    try{
        pst = conn.prepareStatement(searchquery);
        rs = pst.executeQuery();
        jTable1.setModel(DbUtils.resultSetToTableModel(rs));

    }catch(SQLException E){

    }

} //GEN-LAST:event_jButton6ActionPerformed

private void jButton5ActionPerformed(java.awt.event.ActionEvent evt)
{ //GEN-FIRST:event_jButton5ActionPerformed
    String SearchID = ID.getText();
    String searchquery="Select * FROM `clinic_database`.`invoicetable` WHERE (`PatientID` = '" + SearchID + "')";
    try{
        pst = conn.prepareStatement(searchquery);
        rs = pst.executeQuery();
        jTable1.setModel(DbUtils.resultSetToTableModel(rs));
    }
}

```

```

    }catch(SQLException E){

    }
} //GEN-LAST:event_jButton5ActionPerformed

private void jButton7ActionPerformed(java.awt.event.ActionEvent evt)
{//GEN-FIRST:event_jButton7ActionPerformed
    area.setText("");
} //GEN-LAST:event_jButton7ActionPerformed

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

java.util.logging.Logger.getLogger(Invoice_Manager.class.getName()).log(java.ut
il.logging.Level.SEVERE, null, ex);
    } catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(Invoice_Manager.class.getName()).log(java.ut
il.logging.Level.SEVERE, null, ex);
    } catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(Invoice_Manager.class.getName()).log(java.ut
il.logging.Level.SEVERE, null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(Invoice_Manager.class.getName()).log(java.ut
il.logging.Level.SEVERE, null, ex);
    }
    //</editor-fold>
    //</editor-fold>
    //</editor-fold>
    //</editor-fold>

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

```

```

    }
});
}
// Variables declaration - do not modify//GEN-BEGIN:variables
private javax.swing.JCheckBox Dentalcheckbox;
private javax.swing.JCheckBox ExaminationCheckbox;
private javax.swing.JCheckBox HeliofillCheckbox;
private javax.swing.JTextField ID;
private javax.swing.JPanel InvoicePanelColorChangel;
private javax.swing.JPanel InvoicePanelColorChange2;
private javax.swing.JPanel InvoicePanelColorChange3;
private javax.swing.JPanel MainPanelReceipt;
private javax.swing.JLabel NumberCheck;
private javax.swing.JPanel OptionsPanel;
private javax.swing.JCheckBox TartarCheckbox;
private javax.swing.JTextArea area;
private javax.swing.JButton jButton1;
private javax.swing.JButton jButton2;
private javax.swing.JButton jButton3;
private javax.swing.JButton jButton4;
private javax.swing.JButton jButton5;
private javax.swing.JButton jButton6;
private javax.swing.JButton jButton7;
private javax.swing.JLabel jLabel1;
private javax.swing.JLabel 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 jLabel6;
private javax.swing.JLabel jLabel7;
private javax.swing.JLabel jLabel9;
private javax.swing.JPanel jPanel3;
private javax.swing.JPanel jPanel4;
private javax.swing.JPanel jPanel5;
private javax.swing.JScrollPane jScrollPane1;
private javax.swing.JScrollPane jScrollPane3;
private javax.swing.JTabbedPane jTabbedPane1;
public static javax.swing.JTable jTable1;
private javax.swing.JTextField receiptID;
private javax.swing.JTextField receiptadditionalprice;
private javax.swing.JTextField receiptadditionalprocedure;
private javax.swing.JTextField receipttage;
private javax.swing.JTextField receiptlastname;
private javax.swing.JTextField receiptname;
// End of variables declaration//GEN-END:variables
}

```

Invoice_Viewer.java

```
/*
 * 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 csia;

import java.awt.print.PrinterException;

/**
 *
 * @author VivoBook
 */
public class Invoice_Viewer extends javax.swing.JFrame {

    /**
     * Creates new form Receipt
     */
    public Invoice_Viewer() {
        initComponents();
    }

    /**
     * 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();
        jScrollPane1 = new javax.swing.JScrollPane();
        ReceiptArea = new javax.swing.JTextArea();
        jButton2 = new javax.swing.JButton();
    }
}
```

```

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

jPanell1.setBackground(new java.awt.Color(255, 202, 212));

ReceiptArea.setColumns(20);
ReceiptArea.setRows(5);
jScrollPane1.setViewportViewView(ReceiptArea);

jButton2.setFont(new java.awt.Font("Tw Cen MT", 1, 24)); // NOI18N
jButton2.setForeground(new java.awt.Color(102, 102, 102));
jButton2.setText("Print");
jButton2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton2ActionPerformed(evt);
    }
});

javax.swing.GroupLayout jPanell1Layout = new
javax.swing.GroupLayout(jPanell1);
jPanell1.setLayout(jPanell1Layout);
jPanell1Layout.setHorizontalGroup(

jPanell1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jPanell1Layout.createSequentialGroup()
        .add(jPanell1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .add(jScrollPane1,
                javax.swing.GroupLayout.PREFERRED_SIZE, 617,
                javax.swing.GroupLayout.PREFERRED_SIZE)
            .add(jButton2,
                javax.swing.GroupLayout.PREFERRED_SIZE, 265,
                javax.swing.GroupLayout.PREFERRED_SIZE)
        )
        .addContainerGap(184, true)
    );

jPanell1Layout.setVerticalGroup(

jPanell1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jPanell1Layout.createSequentialGroup()
        .add(jScrollPane1,
            javax.swing.GroupLayout.DEFAULT_SIZE, 332, Short.MAX_VALUE)
        .add(jButton2)
        .addContainerGap(17, true)
    );

javax.swing.GroupLayout layout = new
javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

```

```

        .addComponent(jPanell1, javax.swing.GroupLayout.Alignment.TRAILING,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
    );
    layout.setVerticalGroup(

layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(jPanell1, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    );

    pack();
} // </editor-fold> // GEN-END: initComponents

private void jButton2ActionPerformed(java.awt.event.ActionEvent evt)
{ // GEN-FIRST: event_jButton2ActionPerformed
try {
    ReceiptArea.print();
} catch (PrinterException e) {
}
} // GEN-LAST: event_jButton2ActionPerformed

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

java.util.logging.Logger.getLogger(Invoice_Viewer.class.getName()).log(java.util
l.logging.Level.SEVERE, null, ex);
    } catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(Invoice_Viewer.class.getName()).log(java.util
l.logging.Level.SEVERE, null, ex);
    } catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(Invoice_Viewer.class.getName()).log(java.util
l.logging.Level.SEVERE, null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {

```



```

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

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

// Variables declaration - do not modify//GEN-BEGIN:variables
public static javax.swing.JTextArea ReceiptArea;
private javax.swing.JButton jButton2;
private javax.swing.JPanel jPanel1;
private javax.swing.JScrollPane jScrollPane1;
// End of variables declaration//GEN-END:variables
}

```

Appointment_Database.java

```
/*
 * 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 csia;

import java.sql.Connection;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.sql.Statement;
import java.util.Properties;
import javax.mail.*;
import javax.mail.internet.*;
import java.text.SimpleDateFormat;
import java.util.Date;
import net.proteanit.sql.DbUtils;
import java.util.Locale;
import java.util.Random;
import javax.swing.JOptionPane;
import javax.swing.table.DefaultTableModel;

/**
 *
 * @author VivoBook
 */
public class Appointment_Database extends javax.swing.JFrame {
    public Connection conn=null;
    public ResultSet rs = null;
    public PreparedStatement pst=null;
    public final void ShowTableData(){
        try{

            conn = ReusableClasses.dbconnection.connection();
            String populatedatabase = "SELECT * FROM clinic_database.appointments
ORDER BY `Date`, `Time slot` DESC ";
            pst = conn.prepareStatement(populatedatabase);
```

```

        rs = pst.executeQuery();

        jTable1.setModel(DbUtils.resultSetToTableModel(rs));

    }catch(SQLException e){
        System.out.println(e);
    }
}

public void printtodaysschedule(){
    Date date = new Date();
    SimpleDateFormat DateFor = new SimpleDateFormat("yyyy-MM-dd");
    String stringDate= DateFor.format(date);

    try{
        String selectqueryry ="SELECT * FROM `clinic_database`.`appointments`
WHERE (`Date`='"+ stringDate + "')";
        pst = conn.prepareStatement(selectqueryry);
        rs = pst.executeQuery();
        jTable1.setModel(DbUtils.resultSetToTableModel(rs));
        jTable1.print();
        ShowTableData();
    }catch(Exception e){

    }

}

    public void printtomorrowsschedule(){
        SimpleDateFormat formatfunction = new SimpleDateFormat("yyyy-MM-dd",
Locale.getDefault());
        String formatteddateeeee =
formatfunction.format(jDateChooser2.getDate());
        try{
            conn = ReusableClasses.dbconnection.connection();
            String selectqueryry ="SELECT * FROM `clinic_database`.`appointments`
WHERE (`Date`='"+ formatteddateeeee + "')";
            pst = conn.prepareStatement(selectqueryry);
            rs = pst.executeQuery(selectqueryry);
            jTable1.setModel(DbUtils.resultSetToTableModel(rs));
            jTable1.print();
            ShowTableData();

        }catch(Exception e){

        }

    }

    public void deletepassedappointments(){

        Date date = new Date();
        SimpleDateFormat DateFor = new SimpleDateFormat("yyyy-MM-dd");
        String stringDate= DateFor.format(date);
        System.out.println(stringDate);
    }

```

```

        try{
            conn = ReusableClasses.dbconnection.connection();
            String selectquery = "SELECT * FROM
`clinic_database`.`appointments`";
            pst = conn.prepareStatement(selectquery);
            rs = pst.executeQuery(selectquery);
            while (rs.next()){
                String deletepastdatequery = "DELETE FROM clinic_database.appointments
WHERE (`Date` < '" + stringDate + "')";
                pst = conn.prepareStatement(deletepastdatequery);
                pst.executeUpdate();
            }
            ShowTableData();
        } catch (SQLException e) {

        }
    }

    void approvedappointment() {
        String query = "INSERT INTO `clinic_database`.`appointments` (`First name`,
`Last name`, `Patient ID`, `Doctor`, `Chair`, `Time slot`, `Date`, `ID`) VALUES
(?, ?, ?, ?, ?, ?, ?, ?)";
        SimpleDateFormat formatfunction = new SimpleDateFormat("yyyy-MM-dd",
Locale.getDefault());
        String formatteddate = formatfunction.format(jDateChooser1.getDate());
        int i = new Random().nextInt(90000) + 1000;
        String str = String.valueOf(i);
        try {
            conn = ReusableClasses.dbconnection.connection();
            pst = conn.prepareStatement(query);

            pst.setString(1, fname.getText());
            pst.setString(2, lname.getText());
            pst.setString(3, PatientID.getText());
            pst.setString(4, doctor.getSelectedItem().toString());
            pst.setString(5, chair.getSelectedItem().toString());
            pst.setString(6, timeslot.getSelectedItem().toString());
            pst.setString(7, formatteddate);
            pst.setString(8, str);
            pst.executeUpdate();

        } catch (SQLException e) {
            System.out.println(e);
        }
    }

    public void SendEmail(String to, String sub, String msg) {
        //Get properties object
        String from = "dentalclinicsara@gmail.com";
        String password = "sifrazasarul2";
        Properties props = new Properties();
        props.put("mail.smtp.host", "smtp.gmail.com");
    }

```

```

        props.put("mail.smtp.socketFactory.port", "465");
        props.put("mail.smtp.socketFactory.class",
            "javax.net.ssl.SSLSocketFactory");
        props.put("mail.smtp.auth", "true");
        props.put("mail.smtp.port", "465");
        //get Session
        Session session = Session.getDefaultInstance(props,
            new javax.mail.Authenticator() {
                protected PasswordAuthentication getPasswordAuthentication() {
                    return new PasswordAuthentication(from,password);
                }
            });
        //compose message
        try {
            MimeMessage message = new MimeMessage(session);
            message.addRecipient(Message.RecipientType.TO,new
InternetAddress(to));
            message.setSubject(sub);
            message.setText(msg);
            //send message
            Transport.send(message);
        } catch (MessagingException e) {throw new RuntimeException(e);}

    }

    /**
     * Creates new form Appointment
     */
    public Appointment_Database() {
        initComponents();
        ShowTableData();
        deletepassedappointments();
    }

    /**
     * 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();
        jScrollPane1 = new javax.swing.JScrollPane();
        jTable1 = new javax.swing.JTable();
        jButton2 = new javax.swing.JButton();
        fname = new javax.swing.JTextField();
        lname = new javax.swing.JTextField();
        doctor = new javax.swing.JComboBox<>();
        chair = new javax.swing.JComboBox<>();
        timeslot = new javax.swing.JComboBox<>();
        jButton3 = new javax.swing.JButton();

```

```

PatientID = new javax.swing.JTextField();
jDateChooser1 = new com.toedter.calendar.JDateChooser();
PrintTable = new javax.swing.JButton();
jButton1 = new javax.swing.JButton();
jButton4 = new javax.swing.JButton();
jDateChooser2 = new com.toedter.calendar.JDateChooser();
jButton5 = new javax.swing.JButton();
jButton6 = new javax.swing.JButton();

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

jPanell1.setBackground(new java.awt.Color(255, 202, 212));
jPanell1.setForeground(new java.awt.Color(102, 102, 102));
jPanell1.setLayout(new org.netbeans.lib.awtextra.AbsoluteLayout());

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

    },
    new String [] {
        "First name", "Last name", "Doctor", "Chair", "Date"
    }
));
jScrollPane1.setViewportView(jTable1);

jPanell1.add(jScrollPane1, new
org.netbeans.lib.awtextra.AbsoluteConstraints(12, 13, 623, -1));

jButton2.setFont(new java.awt.Font("Tw Cen MT", 1, 18)); // NOI18N
jButton2.setForeground(new java.awt.Color(102, 102, 102));
jButton2.setText("Cancel appointment");
jButton2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton2ActionPerformed(evt);
    }
});
jPanell1.add(jButton2, new
org.netbeans.lib.awtextra.AbsoluteConstraints(781, 251, 203, -1));
jPanell1.add(fname, new
org.netbeans.lib.awtextra.AbsoluteConstraints(671, 56, 203, 29));

lname.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        lnameActionPerformed(evt);
    }
});
jPanell1.add(lname, new
org.netbeans.lib.awtextra.AbsoluteConstraints(900, 56, 203, 29));

doctor.setFont(new java.awt.Font("Tw Cen MT", 0, 18)); // NOI18N
doctor.setForeground(new java.awt.Color(102, 102, 102));
doctor.setModel(new javax.swing.DefaultComboBoxModel<>(new String[] {
"Dr Sara", "Dr Ema", "Dr Anita" }));
jPanell1.add(doctor, new
org.netbeans.lib.awtextra.AbsoluteConstraints(671, 114, 203, 29));

chair.setFont(new java.awt.Font("Tw Cen MT", 0, 18)); // NOI18N

```

```

        chair.setForeground(new java.awt.Color(102, 102, 102));
        chair.setModel(new javax.swing.DefaultComboBoxModel<>(new String[] {
"Blue Chair", "Green Chair" }));
        jPanell.add(chair, new
org.netbeans.lib.awtextra.AbsoluteConstraints(900, 114, 203, 29));

        timeslot.setFont(new java.awt.Font("Tw Cen MT", 0, 18)); // NOI18N
        timeslot.setForeground(new java.awt.Color(102, 102, 102));
        timeslot.setModel(new javax.swing.DefaultComboBoxModel<>(new String[] {
"8:00-9:00", "9:15-10:15", "10:00-11:00", "11:00-12:00", "12:00-13:00",
"15:00-16:00" }));
        jPanell.add(timeslot, new
org.netbeans.lib.awtextra.AbsoluteConstraints(671, 161, 203, 29));

        jButton3.setFont(new java.awt.Font("Tw Cen MT", 1, 18)); // NOI18N
        jButton3.setForeground(new java.awt.Color(102, 102, 102));
        jButton3.setText("Book appointment");
        jButton3.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton3ActionPerformed(evt);
            }
        });
        jPanell.add(jButton3, new
org.netbeans.lib.awtextra.AbsoluteConstraints(671, 208, 203, -1));
        jPanell.add(PatientID, new
org.netbeans.lib.awtextra.AbsoluteConstraints(900, 14, 203, 29));

        jDateChooser1.setDateFormatString("yyyy-MM-dd");
        jPanell.add(jDateChooser1, new
org.netbeans.lib.awtextra.AbsoluteConstraints(900, 161, 203, 29));

        PrintTable.setFont(new java.awt.Font("Tw Cen MT", 1, 18)); // NOI18N
        PrintTable.setForeground(new java.awt.Color(102, 102, 102));
        PrintTable.setText("Print today's schedule");
        PrintTable.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                PrintTableActionPerformed(evt);
            }
        });
        jPanell.add(PrintTable, new
org.netbeans.lib.awtextra.AbsoluteConstraints(900, 209, -1, -1));

        jButton1.setFont(new java.awt.Font("Tw Cen MT", 1, 18)); // NOI18N
        jButton1.setForeground(new java.awt.Color(102, 102, 102));
        jButton1.setText("Search by ID");
        jButton1.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton1ActionPerformed(evt);
            }
        });
        jPanell.add(jButton1, new
org.netbeans.lib.awtextra.AbsoluteConstraints(671, 13, 203, -1));

        jButton4.setFont(new java.awt.Font("Tw Cen MT", 1, 18)); // NOI18N
        jButton4.setForeground(new java.awt.Color(102, 102, 102));
        jButton4.setText("Exit");
        jButton4.addActionListener(new java.awt.event.ActionListener() {

```

```

        public void actionPerformed(java.awt.event.ActionEvent evt) {
            jButton4ActionPerformed(evt);
        }
    });
    jPanel1.add(jButton4, new
org.netbeans.lib.awtextra.AbsoluteConstraints(786, 387, 196, -1));

    jDateChooser2.setForeground(new java.awt.Color(102, 102, 102));
    jDateChooser2.setDateFormatString("yyyy-MM-dd");
    jPanel1.add(jDateChooser2, new
org.netbeans.lib.awtextra.AbsoluteConstraints(679, 293, 203, 29));

    jButton5.setFont(new java.awt.Font("Tw Cen MT", 1, 18)); // NOI18N
    jButton5.setForeground(new java.awt.Color(102, 102, 102));
    jButton5.setText("Print specific schedule");
    jButton5.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            jButton5ActionPerformed(evt);
        }
    });
    jPanel1.add(jButton5, new
org.netbeans.lib.awtextra.AbsoluteConstraints(900, 293, -1, -1));

    jButton6.setFont(new java.awt.Font("Tw Cen MT", 1, 18)); // NOI18N
    jButton6.setForeground(new java.awt.Color(102, 102, 102));
    jButton6.setText("Send email");
    jButton6.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            jButton6ActionPerformed(evt);
        }
    });
    jPanel1.add(jButton6, new
org.netbeans.lib.awtextra.AbsoluteConstraints(786, 340, 196, -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.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
    );

    pack();
    setLocationRelativeTo(null);
} // </editor-fold> // GEN-END: initComponents

    private void lnameActionPerformed(java.awt.event.ActionEvent evt)
{ // GEN-FIRST: event_lnameActionPerformed
    // TODO add your handling code here:

```



```

} //GEN-LAST:event_lnameActionPerformed

private void jButton3ActionPerformed(java.awt.event.ActionEvent evt)
{ //GEN-FIRST:event_jButton3ActionPerformed

    String chaircomparison2 = chair.getSelectedItemAt().toString();
    String timeslotcomparison2 = timeslot.getSelectedItemAt().toString();
    String doctortcomparison2 = doctor.getSelectedItemAt().toString();
    SimpleDateFormat dcn = new SimpleDateFormat("yyyy-MM-dd");
    String date = dcn.format(jDateChooser1.getDate());
    String selectquery = "SELECT `Date`, `Chair`, `Time slot`, `Doctor`
FROM `clinic_database`.`appointments`";

    try{
        conn = ReusableClasses.dbconnection.connection();
        pst = conn.prepareStatement(selectquery);
        Statement stmt =
conn.createStatement(ResultSet.TYPE_SCROLL_SENSITIVE,
ResultSet.CONCUR_UPDATABLE);
        rs = stmt.executeQuery (selectquery);

        if (!rs.next()){

            approvedappointment();

        }else{
            while(rs.next()){

                String datecomparison1 = rs.getString("Date");
                String chaircomparison1 = rs.getString("Chair");
                String timeslotcomparison1 = rs.getString("Time slot");
                String doctorcomparison1 = rs.getString("Doctor");

                if(datecomparison1.equals(date) &&
chaircomparison1.equals(chaircomparison2) &&
doctorcomparison1.equals(doctortcomparison2) &&
timeslotcomparison1.equals(timeslotcomparison2)){
                    JOptionPane.showMessageDialog(null, "Appointment is already
taken! Please try another one.");

                    break;
                }
                if(rs.isAfterLast()){

                    approvedappointment();
                    rs.close();
                }
            }
            if(rs.isAfterLast()){

                approvedappointment();
                rs.close();
            }
        }
    }
}

```

```

        ShowTableData();
    }catch(SQLException e){
        JOptionPane.showMessageDialog(null, e);
    }
}

//GEN-LAST:event_jButton3ActionPerformed

private void jButton2ActionPerformed(java.awt.event.ActionEvent evt)
{
//GEN-FIRST:event_jButton2ActionPerformed
    try{
        DefaultTableModel model = (DefaultTableModel)jTable1.getModel();
        int rownumber = jTable1.getSelectedRow();
        String temporaryidentity= model.getValueAt(rownumber,
7).toString();
        int finalidentity = Integer.parseInt(temporaryidentity);
        String deletequery="DELETE FROM clinic_database.appointments WHERE
(`ID` = '" + finalidentity + "')";
        conn = ReusableClasses.dbconnection.connection();
        pst = conn.prepareStatement(deletequery);
        pst.executeUpdate();

        ShowTableData();

    } catch(NumberFormatException | SQLException e){
        JOptionPane.showMessageDialog(null,e);
    }
}

//GEN-LAST:event_jButton2ActionPerformed

private void PrintTableActionPerformed(java.awt.event.ActionEvent evt)
{
//GEN-FIRST:event_PrintTableActionPerformed
    printtodaysschedule();
}

//GEN-LAST:event_PrintTableActionPerformed

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt)
{
//GEN-FIRST:event_jButton1ActionPerformed
    String SearchID = PatientID.getText();
    String searchquery="Select * FROM `clinic_database`.`patients` WHERE
(`ID` = '" + SearchID + "')";
    try{
        conn = ReusableClasses.dbconnection.connection();
        pst = conn.prepareStatement(searchquery);
        rs = pst.executeQuery(searchquery);
        if(rs.next()){
            String name = rs.getString("First Name");
            String lastname = rs.getString("Last Name");
            fname.setText(name);
            lname.setText(lastname);
        }

    }catch(SQLException e){
        System.out.println(e);
    }
}

//GEN-LAST:event_jButton1ActionPerformed

private void jButton4ActionPerformed(java.awt.event.ActionEvent evt)
{
//GEN-FIRST:event_jButton4ActionPerformed
    Dashboard Dash= new Dashboard ();
    Dash.setVisible(true);
}

```

```

        this.setVisible(false);
        this.dispose();
    } //GEN-LAST:event_jButton4ActionPerformed

    private void jButton6ActionPerformed(java.awt.event.ActionEvent evt)
    { //GEN-FIRST:event_jButton6ActionPerformed
        DefaultTableModel model = (DefaultTableModel) jTable1.getModel();
        int selectedRowIndex = jTable1.getSelectedRow();
        String Firsttname = (model.getValueAt(selectedRowIndex, 0).toString());
        String Lastname = (model.getValueAt(selectedRowIndex, 1).toString());
        String ID = (model.getValueAt(selectedRowIndex, 2).toString());
        String Doctor = (model.getValueAt(selectedRowIndex, 3).toString());
        String Chair = (model.getValueAt(selectedRowIndex, 4).toString());
        String Timeslot = (model.getValueAt(selectedRowIndex, 5).toString());
        String Date = (model.getValueAt(selectedRowIndex, 6).toString());
        String content = "Dear " + Firsttname + " " + Lastname + " \n " +
            " Your appointment has been scheduled for the following date: "
+ Date + " \n " +
            " Doctor: " + Doctor + " \n" +
            " Chair: " + Chair + " \n" +
            "Time: " + Timeslot + " ";
        String subject = "Appointment with the Dental Clinic Dr Sata";

        String populatedatabase = "SELECT `Email` FROM
`clinic_database`.patients WHERE (`ID`='" + ID + "')";
        try{
            conn = ReusableClasses.dbconnection.connection();
            pst = conn.prepareStatement(populatedatabase);
            rs = pst.executeQuery(populatedatabase);
            if(rs.next()){
                String receipientemail = rs.getString("Email");
                SendEmail(receipientemail, subject, content);
            }

        } catch (SQLException e) {
            System.out.println(e);
        }

    } //GEN-LAST:event_jButton6ActionPerformed

    private void jButton5ActionPerformed(java.awt.event.ActionEvent evt)
    { //GEN-FIRST:event_jButton5ActionPerformed
        printtomorrowsschedule();
    } //GEN-LAST:event_jButton5ActionPerformed

    /**
     * @param args the command line arguments
     */
    public static void main(String args[]) {
        /* Set the Nimbus look and feel */
        //<editor-fold defaultstate="collapsed" desc=" Look and feel setting
code (optional) ">
        /* If Nimbus (introduced in Java SE 6) is not available, stay with the
default look and feel.

```

```

        * For details see
http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
        */
        try {
            for (javax.swing.UIManager.LookAndFeelInfo info :
                javax.swing.UIManager.getInstalledLookAndFeels()) {
                if ("Nimbus".equals(info.getName())) {
                    javax.swing.UIManager.setLookAndFeel(info.getClassName());
                    break;
                }
            }
        } catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(Appointment_Database.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
        } catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(Appointment_Database.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
        } catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(Appointment_Database.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
        } catch (javax.swing.UnsupportedLookAndFeelException ex) {

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

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

// Variables declaration - do not modify//GEN-BEGIN:variables
private javax.swing.JTextField PatientID;
private javax.swing.JButton PrintTable;
private javax.swing.JComboBox<String> chair;
private javax.swing.JComboBox<String> doctor;
private javax.swing.JTextField fname;
private javax.swing.JButton jButton1;
private javax.swing.JButton jButton2;
private javax.swing.JButton jButton3;
private javax.swing.JButton jButton4;
private javax.swing.JButton jButton5;
private javax.swing.JButton jButton6;
private com.toedter.calendar.JDateChooser jDateChooser1;
private com.toedter.calendar.JDateChooser jDateChooser2;
private javax.swing.JPanel jPanel1;
private javax.swing.JScrollPane jScrollPane1;
private javax.swing.JTable jTable1;
private javax.swing.JTextField lname;

```

```
private javax.swing.JComboBox<String> timeslot;  
// End of variables declaration//GEN-END:variables  
}
```