JPL MINI PROJECT

Team Members:-

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TOPIC: - Crypto Trading Application

Github repository of all the codes

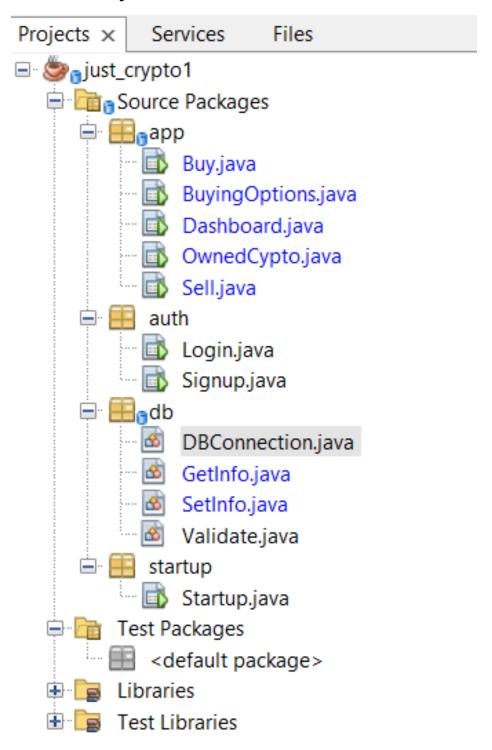
https://github.com/codingmickey/just_crypto

Problem Definition:-

- Cryptocurrency is a digital currency in which transactions are verified and records maintained by a decentralized system using cryptography, rather than by a centralized authority.
- In today's world, many people are trading with cryptocurrency.
- Cryptocurrency is also now a major part of trading in few parts of world.
- So,we have made <u>Just Crypto</u>,an online crypto trading app which allows users to buy and sell cryptocurrency. For trading in cryptos, there is a wallet separately made to show your balance money and trade it accordingly. There is a section in which it will show the current price of various cryptocurrencies.
- This application is made with the help of JAVA GUI Swings method.....

GUI

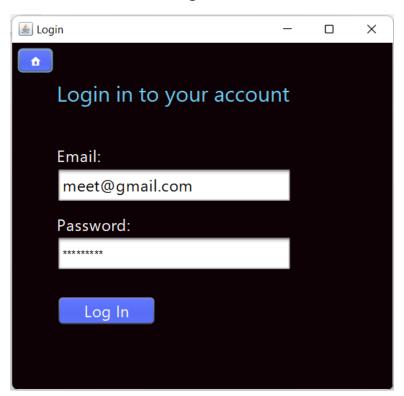
Folder/Project Structure



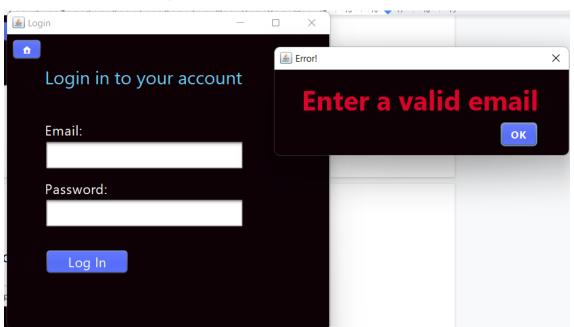
Start up Screen

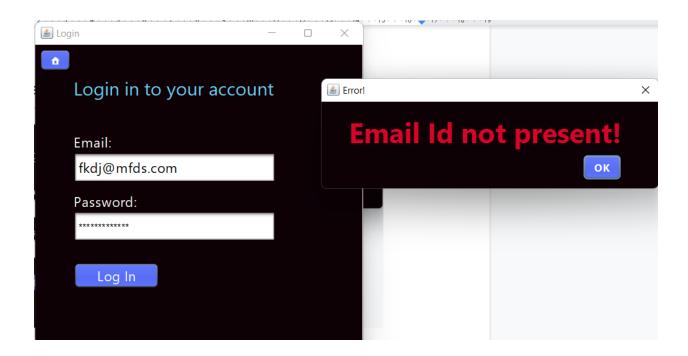


When clicked on login

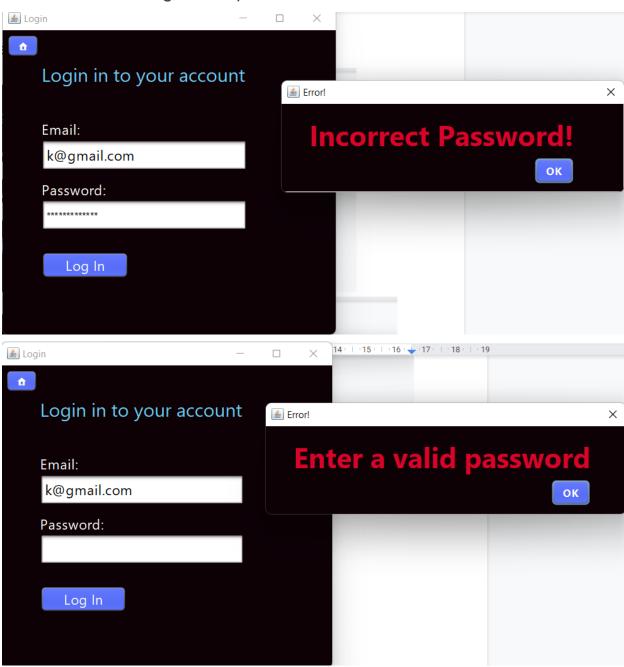


When entered wrong/empty email

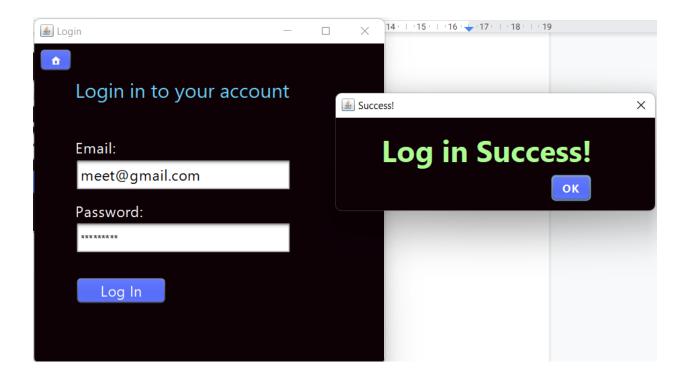




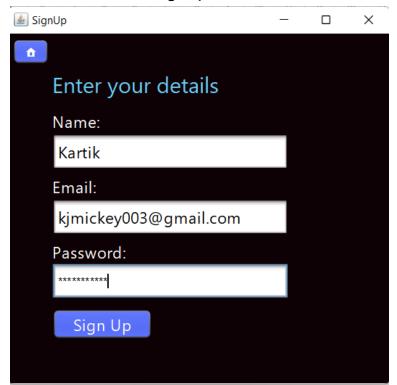
When entered wrong/invalid password



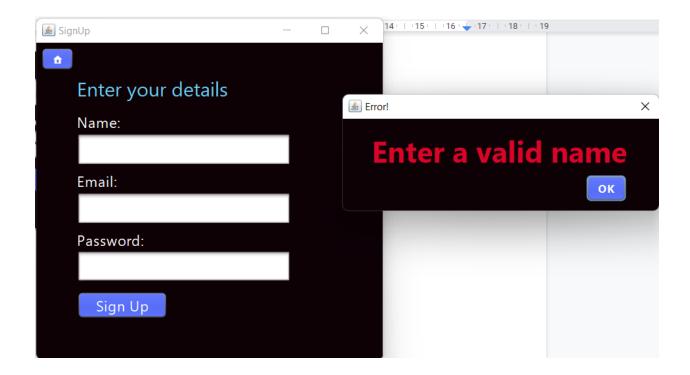
When the password and email is correct then logged into the app



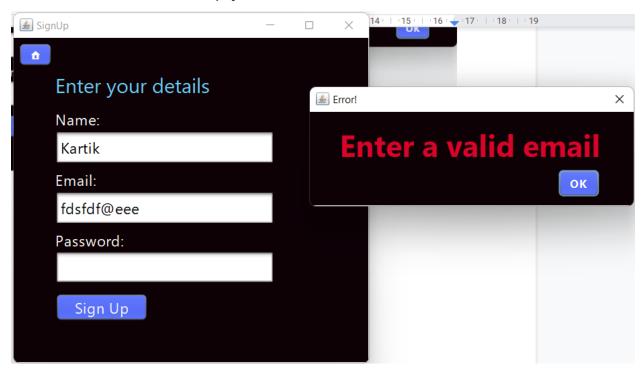
When clicked on Signup



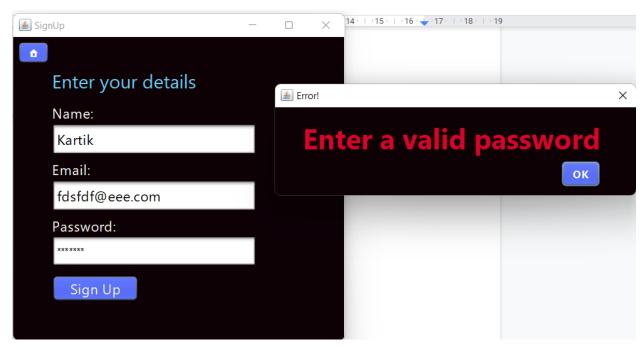
When name is less than 3 characters



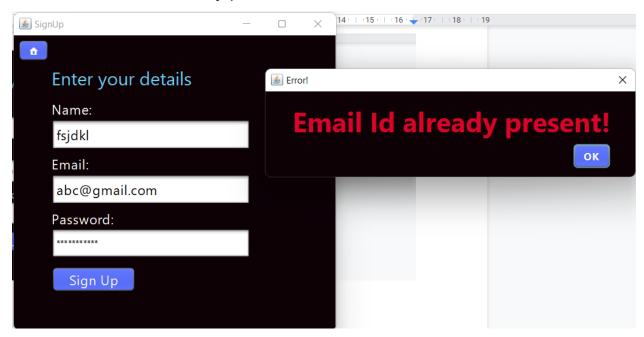
When email is invalid/empty



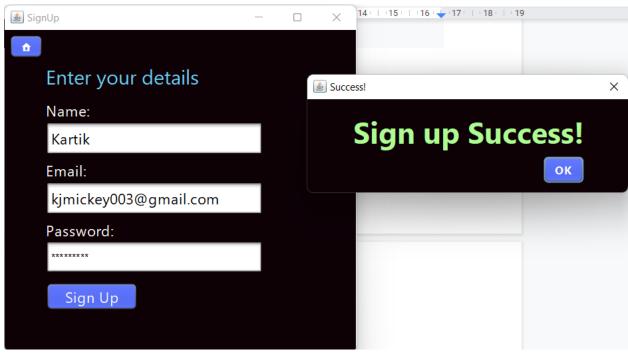
When password is less than 7 characters



When the email is already present



When everything is proper, user signs up



After clicking on OK the user is taken to the app

Dashboard

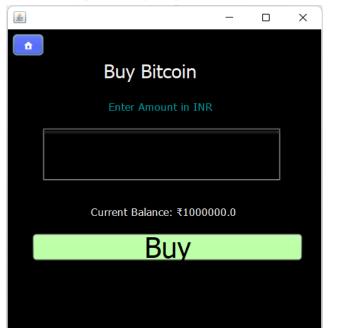
In Dashboard, the User can buy, sell and see all the owned cryptos, as well as the prices of the cryptos present.

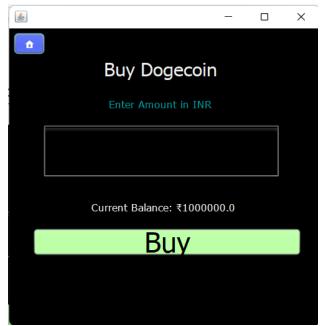


After clicking on Buy User is directed to the Buying screen to select which crypto to buy.

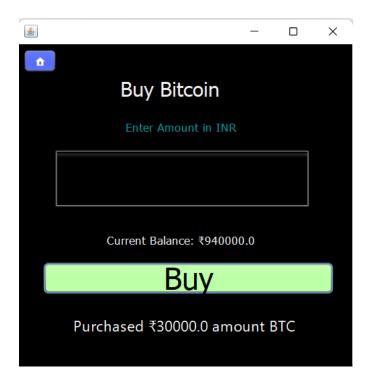


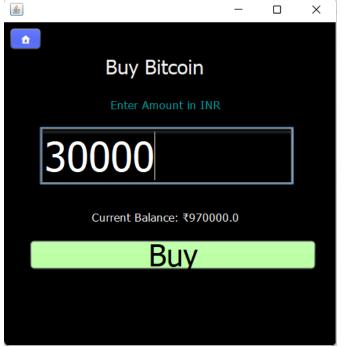
By clicking on any crypto user is taken to the buy screen





Then we can buy the crypto from our Balance



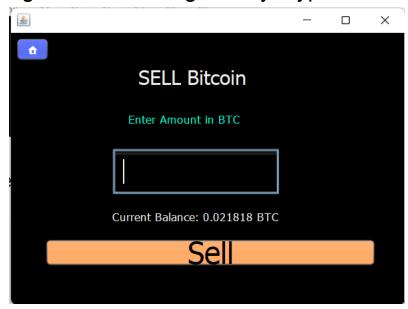


Then by clicking the home button the user can go to the dashboard.

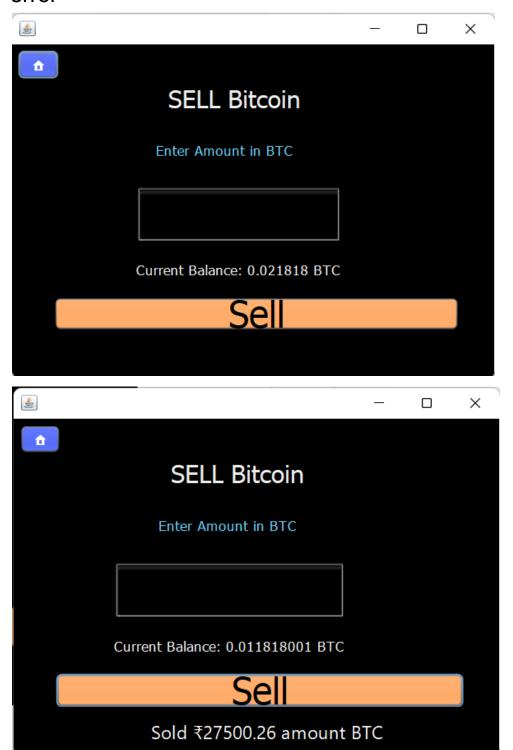
By clicking the Sell or the Owned cryptos the user is directed to the specific screen



Again after clicking on any crypto we can sell them



If the user enters more than the owned amount it shows an error



After selling the Wallet is updated with the added amount



Database Tables

User

mysql> select * from user;						
user_id	username	email	password	balance		
13 14 15 16 17 18 19 20 21	kart fsjdkl fsjdkl kartik fsjdkl meet fsjdkl Kartik	kja@gmail.com abc@gmail.com abc1@gmail.com abc2@gmail.com k@gmail.com k1@gmail.com meet@gmail.com abc11@gmail.com kjmickey003@gmail.com	fjdsklfds ffdsfdsfsdf ffdsfdsfsdf kartikjol ffdsfdsfsdf meeetp123 ffdsfdsfsdf Kartikdak	1000000 1000000 1000000 1000000 1000000 1000000		

Crypto

```
mysql> select * from crypto;
 current_price
                  abbr
                          name
        2750026
                  BTC
                          Bitcoin
                          Dogecoin
             10
                  DOGE
         198287
                          Ethereum
                  ETH
           7985
                  LTC
                          Litecoin
```

Owned cryptos by user

<pre>mysql> select * from owned_cryptos;</pre>						
abbr	user_id	bought_at	bought_price	bought_quantity		
DOGE BTC DOGE	21	2022-01-29 00:02:30 2022-01-29 00:40:11 2022-01-29 00:45:21	10 2750026 10	100 0.011818 40		

Codes

Package startup

Startup.java

```
package startup;
import auth.Login;
import auth.Signup;
* Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
* Click nbfs://nbhost/SystemFileSystem/Templates/GUIForms/JFrame.java to edit this template
*/
/**
* @author Kartik
public class Startup extends javax.swing.JFrame {
  /**
  * Creates new form Startup
  public Startup() {
    initComponents();
    this.setLocation(500, 200);
    getContentPane().setBackground(new java.awt.Color(13, 1, 6));
  }
   * 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() {
    jLabel1 = new javax.swing.JLabel();
    jLabel2 = new javax.swing.JLabel();
    jButton1 = new javax.swing.JButton();
    jButton2 = new javax.swing.JButton();
    setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
```

```
setTitle("Just Crypto");
    setBackground(new java.awt.Color(51, 255, 51));
    setPreferredSize(new java.awt.Dimension(424, 387));
    jLabel1.setFont(new java.awt.Font("Segoe UI", 3, 36)); // NOI18N
    jLabel1.setForeground(new java.awt.Color(108, 207, 246));
    jLabel1.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
    jLabel1.setText("Just Crypto");
    jLabel2.setFont(new java.awt.Font("Segoe UI", 0, 36)); // NOI18N
    jLabel2.setForeground(new java.awt.Color(255, 255, 252));
    jLabel2.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
    jLabel2.setText("Welcome to");
    jButton1.setBackground(new java.awt.Color(61, 82, 213));
    jButton1.setFont(new java.awt.Font("Segoe UI", 0, 24)); // NOI18N
    jButton1.setForeground(new java.awt.Color(255, 255, 252));
    jButton1.setText("Log In");
    jButton1.setMaximumSize(new java.awt.Dimension(141, 33));
    jButton1.setPreferredSize(new java.awt.Dimension(141, 33));
    ¡Button1.addActionListener(new java.awt.event.ActionListener() {
       public void actionPerformed(java.awt.event.ActionEvent evt) {
         jButton1ActionPerformed(evt);
      }
    });
    jButton2.setBackground(new java.awt.Color(61, 82, 213));
    jButton2.setFont(new java.awt.Font("Segoe UI", 0, 24)); // NOI18N
    jButton2.setForeground(new java.awt.Color(255, 255, 252));
    ¡Button2.setText("Sign Up");
    jButton2.setMaximumSize(new java.awt.Dimension(141, 33));
    jButton2.setPreferredSize(new java.awt.Dimension(141, 33));
    jButton2.addActionListener(new java.awt.event.ActionListener() {
       public void actionPerformed(java.awt.event.ActionEvent evt) {
         jButton2ActionPerformed(evt);
      }
    });
    javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
    getContentPane().setLayout(layout);
    layout.setHorizontalGroup(
       layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
       .addGroup(javax.swing.GroupLayout.Alignment.TRAILING, layout.createSequentialGroup()
         .addContainerGap(56, Short.MAX VALUE)
         .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
            .addComponent(jLabel1, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
            .addComponent(jLabel2, javax.swing.GroupLayout.DEFAULT_SIZE, 236,
Short.MAX_VALUE))
```

```
.addContainerGap(57, Short.MAX VALUE))
      .addGroup(layout.createSequentialGroup()
         .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
         .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
           .addComponent(jButton1, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT SIZE, Short.MAX VALUE)
           .addComponent(jButton2, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
         .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
    );
    layout.setVerticalGroup(
      layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
      .addGroup(layout.createSequentialGroup()
         .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
         .addComponent(jLabel2, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT SIZE, Short.MAX VALUE)
         .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
         .addComponent(jLabel1, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT SIZE, Short.MAX VALUE)
         .addGap(54, 54, 54)
         .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 46,
javax.swing.GroupLayout.PREFERRED SIZE)
         .addGap(31, 31, 31)
         .addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 46,
javax.swing.GroupLayout.PREFERRED SIZE)
         .addContainerGap(40, Short.MAX VALUE))
    );
    pack();
  }// </editor-fold>
  private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
    // LOG IN button
    Login I = new Login();
    I.show();
    dispose();
  }
  private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
    // SIGN UP button
    Signup s = new Signup();
    s.show();
    dispose();
  }
    @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(Startup.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
     } catch (InstantiationException ex) {
       java.util.logging.Logger.getLogger(Startup.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
     } catch (IllegalAccessException ex) {
       java.util.logging.Logger.getLogger(Startup.class.getName()).log(java.util.logging.Level.SEVERE,
     } catch (javax.swing.UnsupportedLookAndFeelException ex) {
       java.util.logging.Logger.getLogger(Startup.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
     }
     //</editor-fold>
     /* Create and display the form */
    java.awt.EventQueue.invokeLater(new Runnable() {
       public void run() {
          new Startup().setVisible(true);
    });
  // Variables declaration - do not modify
  private javax.swing.JButton jButton1;
  private javax.swing.JButton jButton2;
  private javax.swing.JLabel jLabel1;
  private javax.swing.JLabel jLabel2;
  // End of variables declaration
}
```

Package app

Buy.java

```
package app;
import db.GetInfo;
import db.SetInfo;
* Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
* Click nbfs://nbhost/SystemFileSystem/Templates/GUIForms/JFrame.java to edit this template
*/
/**
* @author Marwin Shroff
public class Buy extends javax.swing.JFrame {
   * Creates new form Buy
  public Buy(String coinName) {
    this.coinName = coinName;
    initComponents();
    this.setLocation(500, 200);
    jLabel1.setText("Buy " + coinName);
    jLabel4.setText("Current Balance: ₹" + GetInfo.getBalance(GetInfo.userEmail));
  }
   * 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
  // <editor-fold defaultstate="collapsed" desc="Generated Code">
  private void initComponents() {
    jPanel1 = new javax.swing.JPanel();
    jLabel1 = new javax.swing.JLabel();
    jLabel2 = new javax.swing.JLabel();
    jLabel4 = new javax.swing.JLabel();
    ¡Button1 = new javax.swing.JButton();
    jTextField1 = new javax.swing.JTextField();
    jLabel5 = new javax.swing.JLabel();
    jLabel6 = new javax.swing.JLabel();
```

```
¡Button2 = new javax.swing.JButton();
setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
jPanel1.setBackground(new java.awt.Color(0, 0, 0));
jLabel1.setFont(new java.awt.Font("Tahoma", 0, 24)); // NOI18N
jLabel1.setForeground(new java.awt.Color(240, 240, 240));
jLabel1.setText("Buy Bitcoin");
jLabel2.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N
jLabel2.setForeground(new java.awt.Color(0, 153, 153));
jLabel2.setText("
                      Enter Amount in INR");
jLabel4.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N
jLabel4.setForeground(new java.awt.Color(240, 240, 240));
jLabel4.setText("Current Balance: ₹100,000");
jButton1.setBackground(new java.awt.Color(173, 252, 146));
jButton1.setFont(new java.awt.Font("Tahoma", 0, 36)); // NOI18N
¡Button1.setText("Buy");
jButton1.addActionListener(new java.awt.event.ActionListener() {
  public void actionPerformed(java.awt.event.ActionEvent evt) {
    ¡Button1ActionPerformed(evt);
});
jTextField1.setBackground(new java.awt.Color(0, 0, 0));
jTextField1.setFont(new java.awt.Font("Tahoma", 0, 48)); // NOI18N
jTextField1.setForeground(new java.awt.Color(255, 255, 255));
jTextField1.setAlignmentX(0.0F);
jTextField1.setMaximumSize(new java.awt.Dimension(80, 58));
jTextField1.setMinimumSize(new java.awt.Dimension(53, 58));
iTextField1.setSelectedTextColor(new java.awt.Color(0, 0, 0));
jTextField1.addActionListener(new java.awt.event.ActionListener() {
  public void actionPerformed(java.awt.event.ActionEvent evt) {
    jTextField1ActionPerformed(evt);
  }
});
jLabel6.setBackground(new java.awt.Color(0, 0, 0));
jLabel6.setFont(new java.awt.Font("Segoe UI", 0, 18)); // NOI18N
jLabel6.setForeground(new java.awt.Color(255, 255, 255));
jLabel6.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
jButton2.setBackground(new java.awt.Color(61, 82, 213));
jButton2.setForeground(new java.awt.Color(255, 255, 252));
jButton2.addActionListener(new java.awt.event.ActionListener() {
```

```
public void actionPerformed(java.awt.event.ActionEvent evt) {
         ¡Button2ActionPerformed(evt);
      }
    });
    javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
    ¡Panel1.setLayout(¡Panel1Layout);
    jPanel1Layout.setHorizontalGroup(
      jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
       .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
¡Panel1Layout.createSequentialGroup()
         .addContainerGap(30, Short.MAX VALUE)
         .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 346,
javax.swing.GroupLayout.PREFERRED SIZE)
         .addGap(24, 24, 24))
       .addGroup(jPanel1Layout.createSequentialGroup()
         .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
           .addGroup(jPanel1Layout.createSequentialGroup()
             .addContainerGap()
             .addComponent(jButton2)
             .addGap(76, 76, 76)
             .addComponent(jLabel1))
           .addGroup(jPanel1Layout.createSequentialGroup()
             .addGap(75, 75, 75)
             .addComponent(jLabel2, javax.swing.GroupLayout.PREFERRED_SIZE, 251,
javax.swing.GroupLayout.PREFERRED SIZE))
           .addGroup(jPanel1Layout.createSequentialGroup()
             .addGap(106, 106, 106)
             .addComponent(jLabel4))
           .addGroup(jPanel1Layout.createSequentialGroup()
             .addGap(174, 174, 174)
             .addComponent(jLabel5, javax.swing.GroupLayout.PREFERRED_SIZE, 37,
javax.swing.GroupLayout.PREFERRED SIZE))
           .addGroup(jPanel1Layout.createSequentialGroup()
             .addGap(43, 43, 43)
             .addComponent(jTextField1, javax.swing.GroupLayout.PREFERRED_SIZE, 305,
javax.swing.GroupLayout.PREFERRED SIZE))
           .addGroup(jPanel1Layout.createSequentialGroup()
             .addGap(48, 48, 48)
             .addComponent(jLabel6, javax.swing.GroupLayout.PREFERRED_SIZE, 301,
javax.swing.GroupLayout.PREFERRED SIZE)))
         .addContainerGap(javax.swing.GroupLayout.DEFAULT SIZE, Short.MAX VALUE))
    iPanel1Layout.setVerticalGroup(
      jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
      .addGroup(jPanel1Layout.createSequentialGroup()
         .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
           .addGroup(jPanel1Layout.createSequentialGroup()
             .addGap(35, 35, 35)
```

```
.addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 37,
javax.swing.GroupLayout.PREFERRED_SIZE))
           .addGroup(jPanel1Layout.createSequentialGroup()
             .addContainerGap()
             .addComponent(jButton2)))
         .addGap(18, 18, 18)
         .addComponent(jLabel2)
         .addGap(18, 18, 18)
         .addComponent(jTextField1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
         .addGap(30, 30, 30)
         .addComponent(jLabel4)
         .addGap(18, 18, 18)
         .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED SIZE, 37,
javax.swing.GroupLayout.PREFERRED SIZE)
         .addGap(18, 18, 18)
         .addComponent(jLabel5)
         .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
         .addComponent(jLabel6, javax.swing.GroupLayout.PREFERRED_SIZE, 26,
javax.swing.GroupLayout.PREFERRED SIZE)
         .addContainerGap(41, 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.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();
  }// </editor-fold>
  private void jTextField1ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
  }
  private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    Dashboard d = new Dashboard();
    d.show();
    dispose();
  }
```

```
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {//
GEN-FIRST:event_jButton1ActionPerformed
    // TODO add your handling code here:
     float money = Float.parseFloat(jTextField1.getText());
     float balance = (float) GetInfo.getBalance(GetInfo.userEmail);
     if (balance >= money) {
       jTextField1.setText(null);
       balance = balance - money;
       if (SetInfo.updateBalance(balance)) {
         ¡Label6.setText("Purchased ₹" + money + " amount " + GetInfo.getAbbr(coinName));
         jLabel4.setText("Current Balance: ₹" + balance);
         SetInfo.updateOwned(coinName, money);
       } else {
         jLabel6.setText("Transaction Failed");
       }
    } else {
       jLabel6.setText("Out of Money");
       ¡TextField1.setText(null);
  }// GEN-LAST:event jButton1ActionPerformed
  /**
   * @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(Buy.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex):
    } catch (InstantiationException ex) {
       java.util.logging.Logger.getLogger(Buy.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
```

```
} catch (IllegalAccessException ex) {
       java.util.logging.Logger.getLogger(Buy.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
     } catch (javax.swing.UnsupportedLookAndFeelException ex) {
       java.util.logging.Logger.getLogger(Buy.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
     // </editor-fold>
     /* Create and display the form */
//
      java.awt.EventQueue.invokeLater(new Runnable() {
//
         public void run() {
//
           new Buy("").setVisible(true);
//
        }
//
      });
  private String coinName = "NONE";
  // Variables declaration - do not modify
  private javax.swing.JButton jButton1;
  private javax.swing.JButton jButton2;
  private javax.swing.JLabel jLabel1;
  private javax.swing.JLabel jLabel2;
  private javax.swing.JLabel jLabel4;
  private javax.swing.JLabel jLabel5;
  private javax.swing.JLabel jLabel6;
  private javax.swing.JPanel jPanel1;
  private javax.swing.JTextField jTextField1;
  // End of variables declaration
}
```

BuyingOptions.java

```
/*
    * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
    * Click nbfs://nbhost/SystemFileSystem/Templates/GUIForms/JFrame.java to edit this template
    */
    package app;

import java.awt.event.MouseAdapter;
import java.awt.event.MouseEvent;

/**
    * @author Kartik
    */
    public class BuyingOptions extends javax.swing.JFrame {
```

```
/**
* Creates new form BuyingOptions
public BuyingOptions() {
  initComponents();
  this.setLocation(500, 200);
  crypto1.addMouseListener(new MouseAdapter() {
    @Override
    public void mouseClicked(MouseEvent e) {
       onMouseClicked(e);
  });
  crypto2.addMouseListener(new MouseAdapter() {
    @Override
    public void mouseClicked(MouseEvent e) {
       onMouseClicked(e);
    }
  });
  crypto3.addMouseListener(new MouseAdapter() {
    @Override
    public void mouseClicked(MouseEvent e) {
       onMouseClicked(e);
  });
  crypto4.addMouseListener(new MouseAdapter() {
    @Override
    public void mouseClicked(MouseEvent e) {
       onMouseClicked(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">
private void initComponents() {
  ¡Panel1 = new javax.swing.JPanel();
  jLabel2 = new javax.swing.JLabel();
  crypto1 = new javax.swing.JLabel();
  jLabel9 = new javax.swing.JLabel();
  crypto2 = new javax.swing.JLabel();
  jLabel11 = new javax.swing.JLabel();
```

```
jLabel7 = new javax.swing.JLabel();
crypto3 = new javax.swing.JLabel();
jLabel13 = new javax.swing.JLabel();
jLabel14 = new javax.swing.JLabel();
crypto4 = new javax.swing.JLabel();
jLabel16 = new javax.swing.JLabel();
jLabel17 = new javax.swing.JLabel();
jLabel1 = new javax.swing.JLabel();
jLabel18 = new javax.swing.JLabel();
jButton2 = new javax.swing.JButton();
setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
setTitle("Buy Crypto");
setPreferredSize(new java.awt.Dimension(424, 387));
iPanel1.setBackground(new java.awt.Color(13, 1, 6));
jPanel1.setForeground(new java.awt.Color(255, 255, 252));
jLabel2.setFont(new java.awt.Font("Segoe UI", 1, 24)); // NOI18N
jLabel2.setForeground(new java.awt.Color(255, 255, 252));
jLabel2.setHorizontalAlignment(javax.swing.SwingConstants.LEFT);
jLabel2.setText("₹ 2750026");
crypto1.setFont(new java.awt.Font("Segoe UI", 1, 24)); // NOI18N
crypto1.setForeground(new java.awt.Color(255, 255, 252));
crypto1.setHorizontalAlignment(javax.swing.SwingConstants.LEFT);
crypto1.setText("Bitcoin");
jLabel9.setFont(new java.awt.Font("Segoe UI", 0, 14)); // NOI18N
jLabel9.setForeground(new java.awt.Color(108, 207, 246));
jLabel9.setText("BTC");
crypto2.setFont(new java.awt.Font("Segoe UI", 1, 24)); // NOI18N
crypto2.setForeground(new java.awt.Color(255, 255, 252));
crypto2.setHorizontalAlignment(javax.swing.SwingConstants.LEFT);
crypto2.setText("Dogecoin");
jLabel11.setFont(new java.awt.Font("Segoe UI", 0, 14)); // NOI18N
jLabel11.setForeground(new java.awt.Color(108, 207, 246));
jLabel11.setText("DOGE");
jLabel7.setFont(new java.awt.Font("Segoe UI", 1, 24)); // NOI18N
jLabel7.setForeground(new java.awt.Color(255, 255, 252));
jLabel7.setHorizontalAlignment(javax.swing.SwingConstants.LEFT);
jLabel7.setText("₹ 10");
crypto3.setFont(new java.awt.Font("Segoe UI", 1, 24)); // NOI18N
crypto3.setForeground(new java.awt.Color(255, 255, 252));
crypto3.setHorizontalAlignment(javax.swing.SwingConstants.LEFT);
```

```
crypto3.setText("Ethereum");
jLabel13.setFont(new java.awt.Font("Segoe UI", 0, 14)); // NOI18N
jLabel13.setForeground(new java.awt.Color(108, 207, 246));
jLabel13.setText("ETH");
jLabel14.setFont(new java.awt.Font("Segoe UI", 1, 24)); // NOI18N
jLabel14.setForeground(new java.awt.Color(255, 255, 252));
jLabel14.setHorizontalAlignment(javax.swing.SwingConstants.LEFT);
jLabel14.setText("₹ 198287");
crypto4.setFont(new java.awt.Font("Segoe UI", 1, 24)); // NOI18N
crypto4.setForeground(new java.awt.Color(255, 255, 252));
crypto4.setHorizontalAlignment(javax.swing.SwingConstants.LEFT);
crypto4.setText("Litecoin");
jLabel16.setFont(new java.awt.Font("Segoe UI", 0, 14)); // NOI18N
jLabel16.setForeground(new java.awt.Color(108, 207, 246));
jLabel16.setText("LTC");
jLabel17.setFont(new java.awt.Font("Segoe UI", 1, 24)); // NOI18N
jLabel17.setForeground(new java.awt.Color(255, 255, 252));
jLabel17.setHorizontalAlignment(javax.swing.SwingConstants.LEFT);
¡Label17.setText("₹ 7985");
jLabel1.setFont(new java.awt.Font("Segoe UI", 1, 36)); // NOI18N
jLabel1.setForeground(new java.awt.Color(108, 207, 246));
jLabel1.setHorizontalAlignment(javax.swing.SwingConstants.LEFT);
jLabel1.setText("Avaliable Cryptos");
jLabel18.setFont(new java.awt.Font("Segoe UI", 0, 18)); // NOI18N
jLabel18.setForeground(new java.awt.Color(255, 255, 252));
jLabel18.setHorizontalAlignment(javax.swing.SwingConstants.LEFT);
jLabel18.setText("Click on anyone to BUY");
iButton2.setBackground(new java.awt.Color(61, 82, 213));
jButton2.setForeground(new java.awt.Color(255, 255, 252));
jButton2.addActionListener(new java.awt.event.ActionListener() {
  public void actionPerformed(java.awt.event.ActionEvent evt) {
     ¡Button2ActionPerformed(evt);
  }
});
javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
iPanel1.setLayout(iPanel1Layout);
jPanel1Layout.setHorizontalGroup(
  ¡Panel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
  .addGroup(jPanel1Layout.createSequentialGroup()
```

```
.addGap(26, 26, 26)
         .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
           .addGroup(jPanel1Layout.createSequentialGroup()
             .addComponent(jLabel18)
             .addGap(0, 0, Short.MAX VALUE))
           .addGroup(jPanel1Layout.createSequentialGroup()
             .addComponent(jLabel1)
             .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
           .addGroup(jPanel1Layout.createSequentialGroup()
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
               .addGroup(jPanel1Layout.createSequentialGroup()
                  .addComponent(crypto4)
                  .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                  .addComponent(jLabel16)
                  .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT SIZE, Short.MAX VALUE)
                  .addComponent(jLabel17))
                .addGroup(jPanel1Layout.createSequentialGroup()
                  .addComponent(crypto3)
                  .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                  .addComponent(jLabel13)
                  .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 104,
Short.MAX VALUE)
                  .addComponent(jLabel14))
               .addGroup(jPanel1Layout.createSequentialGroup()
                  .addComponent(crypto2)
                  .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                  .addComponent(jLabel11)
                  .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT SIZE, Short.MAX VALUE)
                  .addComponent(jLabel7))
               .addGroup(jPanel1Layout.createSequentialGroup()
                  .addComponent(crypto1)
                  .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                  .addComponent(iLabel9)
                  .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                  .addComponent(jLabel2)))
             .addGap(23, 23, 23))))
      .addGroup(jPanel1Layout.createSequentialGroup()
         .addContainerGap()
         .addComponent(jButton2)
         .addGap(0, 0, Short.MAX VALUE))
    iPanel1Layout.setVerticalGroup(
      iPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
      .addGroup(jPanel1Layout.createSequentialGroup()
         .addContainerGap()
```

```
.addComponent(jButton2)
         .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
         .addComponent(jLabel1)
         .addGap(1, 1, 1)
         .addComponent(jLabel18, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT SIZE, Short.MAX VALUE)
         .addGap(40, 40, 40)
         .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
           .addComponent(jLabel2, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
           .addComponent(jLabel9)
           .addComponent(crypto1, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
         .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
         .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
           .addComponent(crypto2, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT SIZE, Short.MAX VALUE)
           .addComponent(jLabel11)
           .addComponent(jLabel7, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT SIZE, Short.MAX VALUE))
         .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
         .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
           .addComponent(crypto3, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
           .addComponent(jLabel13)
           .addComponent(jLabel14, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
         .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
         .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
           .addComponent(crypto4, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT SIZE, Short.MAX VALUE)
           .addComponent(jLabel16)
           .addComponent(jLabel17, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT SIZE, Short.MAX VALUE))
         .addGap(16, 16, 16))
    );
    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();
  }// </editor-fold>
  private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    Dashboard d = new Dashboard();
     d.show();
     dispose();
  }
  private void onMouseClicked(MouseEvent e) {
     Buy b = new Buy(((javax.swing.JLabel) e.getSource()).getText());
     b.show();
     dispose();
  }
    @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(BuyingOptions.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (InstantiationException ex) {
java.util.logging.Logger.getLogger(BuyingOptions.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (IllegalAccessException ex) {
java.util.logging.Logger.getLogger(BuyingOptions.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {
```

```
java.util.logging.Logger.getLogger(BuyingOptions.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    }
    //</editor-fold>
    /* Create and display the form */
    java.awt.EventQueue.invokeLater(new Runnable() {
       public void run() {
          new BuyingOptions().setVisible(true);
    });
  }
  // Variables declaration - do not modify
  private javax.swing.JLabel crypto1;
  private javax.swing.JLabel crypto2;
  private javax.swing.JLabel crypto3;
  private javax.swing.JLabel crypto4;
  private javax.swing.JButton jButton2;
  private javax.swing.JLabel jLabel1;
  private javax.swing.JLabel jLabel11;
  private javax.swing.JLabel jLabel13;
  private javax.swing.JLabel jLabel14;
  private javax.swing.JLabel jLabel16;
  private javax.swing.JLabel jLabel17;
  private javax.swing.JLabel jLabel18;
  private javax.swing.JLabel jLabel2;
  private javax.swing.JLabel jLabel7;
  private javax.swing.JLabel jLabel9;
  private javax.swing.JPanel jPanel1;
  // End of variables declaration
```

Dashboard.java

}

```
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* Click nbfs://nbhost/SystemFileSystem/Templates/GUIForms/JFrame.java to edit this template
*/
package app;
import db.DBConnection;
import db.GetInfo;
* @author Kartik
```

```
*/
public class Dashboard extends javax.swing.JFrame {
  /**
   * Creates new form Dashboard
   * @param userEmail
  public Dashboard() {
    initComponents();
    this.setLocation(500, 200);
    jLabel6.setText(GetInfo.getUserName(GetInfo.userEmail));
    jLabel4.setText(Float.toString(GetInfo.getBalance(GetInfo.userEmail)));
  }
   * 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() {
    ¡Panel1 = new javax.swing.JPanel();
    ¡Panel2 = new javax.swing.JPanel();
    ¡Label1 = new javax.swing.JLabel();
    jLabel3 = new javax.swing.JLabel();
    jLabel4 = new javax.swing.JLabel();
    ¡Label5 = new javax.swing.JLabel();
    jLabel6 = new javax.swing.JLabel();
    ¡Button1 = new javax.swing.JButton();
    ¡Button2 = new javax.swing.JButton();
    ¡Button3 = new javax.swing.JButton();
    jLabel2 = new javax.swing.JLabel();
    jLabel8 = new javax.swing.JLabel();
    jLabel9 = new javax.swing.JLabel();
    jLabel10 = new javax.swing.JLabel();
    jLabel11 = new javax.swing.JLabel();
    jLabel7 = new javax.swing.JLabel();
    jLabel12 = new javax.swing.JLabel();
    jLabel13 = new javax.swing.JLabel();
    jLabel14 = new javax.swing.JLabel();
    jLabel15 = new javax.swing.JLabel();
    jLabel16 = new javax.swing.JLabel();
    jLabel17 = new javax.swing.JLabel();
    setDefaultCloseOperation(javax.swing.WindowConstants.EXIT ON CLOSE);
    setTitle("Dashboard");
```

```
setPreferredSize(new java.awt.Dimension(424, 387));
    jPanel1.setBackground(new java.awt.Color(13, 1, 6));
    jPanel1.setForeground(new java.awt.Color(255, 255, 252));
    jPanel2.setBackground(new java.awt.Color(61, 82, 213));
    jLabel1.setFont(new java.awt.Font("Segoe UI", 3, 24)); // NOI18N
    iLabel1.setForeground(new java.awt.Color(255, 255, 252));
    jLabel1.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
    ¡Label1.setText("Just Crypto");
    jLabel3.setFont(new java.awt.Font("Segoe UI", 0, 18)); // NOI18N
    jLabel3.setForeground(new java.awt.Color(255, 255, 252));
    jLabel3.setText("Wallet");
    jLabel4.setFont(new java.awt.Font("Segoe UI", 1, 18)); // NOI18N
    jLabel4.setForeground(new java.awt.Color(255, 255, 252));
    iLabel4.setText("₹ 100, 000");
    jLabel5.setForeground(new java.awt.Color(255, 255, 252));
    iLabel5.setText("Welcome,");
    jLabel6.setFont(new java.awt.Font("Segoe UI", 0, 18)); // NOI18N
    jLabel6.setForeground(new java.awt.Color(255, 255, 252));
    iLabel6.setText("Kartik");
    javax.swing.GroupLayout jPanel2Layout = new javax.swing.GroupLayout(jPanel2);
    ¡Panel2.setLayout(¡Panel2Layout);
    iPanel2Layout.setHorizontalGroup(
       iPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
       .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
¡Panel2Layout.createSequentialGroup()
         .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel2Layout.createSequentialGroup()
              .addGap(22, 22, 22)
              .addComponent(jLabel1)
              .addGap(35, 35, 35)
              .addComponent(jLabel3)
              .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
            .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
¡Panel2Layout.createSequentialGroup()
              .addContainerGap(156, Short.MAX VALUE)
              .addComponent(jLabel4)
              .addGap(77, 77, 77)))
         .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addComponent(jLabel5, javax.swing.GroupLayout.Alignment.TRAILING)
            .addComponent(jLabel6, javax.swing.GroupLayout.Alignment.TRAILING))
```

```
.addGap(27, 27, 27))
    );
    iPanel2Layout.setVerticalGroup(
       ¡Panel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
       .addGroup(jPanel2Layout.createSequentialGroup()
         .addContainerGap()
         .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel2Layout.createSequentialGroup()
              .addComponent(jLabel5)
              .addGap(0, 0, 0)
              .addComponent(jLabel6)
              .addGap(45, 45, 45))
            .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
¡Panel2Layout.createSequentialGroup()
.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel3)
                .addComponent(jLabel1, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT SIZE, Short.MAX VALUE))
              .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
              .addComponent(jLabel4)
              .addGap(21, 21, 21))))
    );
    jButton1.setBackground(new java.awt.Color(173, 252, 146));
    ¡Button1.setFont(new java.awt.Font("Segoe UI", 0, 18)); // NOI18N
    jButton1.setForeground(new java.awt.Color(13, 1, 6));
    ¡Button1.setText("Buy");
    ¡Button1.setHorizontalTextPosition(javax.swing.SwingConstants.CENTER);
    jButton1.setMaximumSize(new java.awt.Dimension(141, 33));
    ¡Button1.setPreferredSize(new java.awt.Dimension(141, 33));
    jButton1.addActionListener(new java.awt.event.ActionListener() {
       public void actionPerformed(java.awt.event.ActionEvent evt) {
         iButton1ActionPerformed(evt);
      }
    });
    jButton2.setBackground(new java.awt.Color(241, 153, 83));
    jButton2.setFont(new java.awt.Font("Segoe UI", 0, 18)); // NOI18N
    jButton2.setForeground(new java.awt.Color(13, 1, 6));
    ¡Button2.setText("Sell");
    jButton2.setHorizontalTextPosition(javax.swing.SwingConstants.CENTER);
    jButton2.setMaximumSize(new java.awt.Dimension(141, 33));
    jButton2.setPreferredSize(new java.awt.Dimension(141, 33));
    jButton2.addActionListener(new java.awt.event.ActionListener() {
       public void actionPerformed(java.awt.event.ActionEvent evt) {
         ¡Button2ActionPerformed(evt);
      }
    });
```

```
jButton3.setBackground(new java.awt.Color(108, 207, 246));
jButton3.setFont(new java.awt.Font("Segoe UI", 0, 18)); // NOI18N
jButton3.setForeground(new java.awt.Color(13, 1, 6));
jButton3.setText("Owned Crypto");
jButton3.setHorizontalTextPosition(javax.swing.SwingConstants.CENTER);
jButton3.setMaximumSize(new java.awt.Dimension(141, 33));
jButton3.setPreferredSize(new java.awt.Dimension(141, 33));
jButton3.addActionListener(new java.awt.event.ActionListener() {
  public void actionPerformed(java.awt.event.ActionEvent evt) {
     ¡Button3ActionPerformed(evt);
  }
});
jLabel2.setFont(new java.awt.Font("Segoe UI", 1, 24)); // NOI18N
jLabel2.setForeground(new java.awt.Color(255, 255, 252));
jLabel2.setHorizontalAlignment(javax.swing.SwingConstants.LEFT);
jLabel2.setText("₹ 2750026");
jLabel8.setFont(new java.awt.Font("Segoe UI", 1, 24)); // NOI18N
jLabel8.setForeground(new java.awt.Color(255, 255, 252));
jLabel8.setHorizontalAlignment(javax.swing.SwingConstants.LEFT);
jLabel8.setText("Bitcoin");
jLabel9.setFont(new java.awt.Font("Segoe UI", 0, 14)); // NOI18N
jLabel9.setForeground(new java.awt.Color(108, 207, 246));
jLabel9.setText("BTC");
jLabel10.setFont(new java.awt.Font("Segoe UI", 1, 24)); // NOI18N
jLabel10.setForeground(new java.awt.Color(255, 255, 252));
jLabel10.setHorizontalAlignment(javax.swing.SwingConstants.LEFT);
¡Label10.setText("Dogecoin");
jLabel11.setFont(new java.awt.Font("Segoe UI", 0, 14)); // NOI18N
jLabel11.setForeground(new java.awt.Color(108, 207, 246));
jLabel11.setText("DOGE");
jLabel7.setFont(new java.awt.Font("Segoe UI", 1, 24)); // NOI18N
jLabel7.setForeground(new java.awt.Color(255, 255, 252));
jLabel7.setHorizontalAlignment(javax.swing.SwingConstants.LEFT);
jLabel7.setText("₹ 10");
jLabel12.setFont(new java.awt.Font("Segoe UI", 1, 24)); // NOI18N
jLabel12.setForeground(new java.awt.Color(255, 255, 252));
jLabel12.setHorizontalAlignment(javax.swing.SwingConstants.LEFT);
iLabel12.setText("Ethereum");
jLabel13.setFont(new java.awt.Font("Segoe UI", 0, 14)); // NOI18N
jLabel13.setForeground(new java.awt.Color(108, 207, 246));
```

```
¡Label13.setText("ETH");
    jLabel14.setFont(new java.awt.Font("Segoe UI", 1, 24)); // NOI18N
    jLabel14.setForeground(new java.awt.Color(255, 255, 252));
    jLabel14.setHorizontalAlignment(javax.swing.SwingConstants.LEFT);
    jLabel14.setText("₹ 198287");
    jLabel15.setFont(new java.awt.Font("Segoe UI", 1, 24)); // NOI18N
    jLabel15.setForeground(new java.awt.Color(255, 255, 252));
    jLabel15.setHorizontalAlignment(javax.swing.SwingConstants.LEFT);
    ¡Label15.setText("Litecoin");
    jLabel16.setFont(new java.awt.Font("Segoe UI", 0, 14)); // NOI18N
    jLabel16.setForeground(new java.awt.Color(108, 207, 246));
    jLabel16.setText("LTC");
    jLabel17.setFont(new java.awt.Font("Segoe UI", 1, 24)); // NOI18N
    jLabel17.setForeground(new java.awt.Color(255, 255, 252));
    jLabel17.setHorizontalAlignment(javax.swing.SwingConstants.LEFT);
    jLabel17.setText("₹ 7985");
    javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
    ¡Panel1.setLayout(¡Panel1Layout);
    ¡Panel1Layout.setHorizontalGroup(
      jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
       .addComponent(jPanel2, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
       .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
¡Panel1Layout.createSequentialGroup()
         .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
           .addGroup(jPanel1Layout.createSequentialGroup()
              .addGap(22, 22, 22)
              .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 69,
javax.swing.GroupLayout.PREFERRED SIZE)
              .addGap(18, 18, 18)
              .addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 69,
javax.swing.GroupLayout.PREFERRED SIZE)
              .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 49,
Short.MAX VALUE)
              .addComponent(jButton3, javax.swing.GroupLayout.PREFERRED_SIZE, 150,
javax.swing.GroupLayout.PREFERRED SIZE))
           .addGroup(javax.swing.GroupLayout.Alignment.LEADING,
¡Panel1Layout.createSequentialGroup()
              .addGap(26, 26, 26)
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(jPanel1Layout.createSequentialGroup()
                  .addComponent(jLabel15)
                  .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
```

```
.addComponent(jLabel16)
                  .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                  .addComponent(iLabel17))
               .addGroup(jPanel1Layout.createSequentialGroup()
                  .addComponent(jLabel12)
                  .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                  .addComponent(jLabel13)
                  .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                  .addComponent(jLabel14))
               .addGroup(jPanel1Layout.createSequentialGroup()
                  .addComponent(jLabel10)
                  .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                  .addComponent(jLabel11)
                  .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT SIZE, Short.MAX VALUE)
                  .addComponent(jLabel7))
               .addGroup(jPanel1Layout.createSequentialGroup()
                  .addComponent(jLabel8, javax.swing.GroupLayout.PREFERRED_SIZE, 79,
javax.swing.GroupLayout.PREFERRED SIZE)
                  .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                  .addComponent(jLabel9)
                  .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                  .addComponent(jLabel2)))))
         .addGap(23, 23, 23))
    iPanel1Layout.setVerticalGroup(
      iPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)\\
      .addGroup(jPanel1Layout.createSequentialGroup()
         .addComponent(jPanel2, javax.swing.GroupLayout.PREFERRED_SIZE, 91,
javax.swing.GroupLayout.PREFERRED_SIZE)
         .addGap(18, 18, 18)
         .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
           .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT SIZE, javax.swing.GroupLayout.PREFERRED SIZE)
           .addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT SIZE, javax.swing.GroupLayout.PREFERRED SIZE)
           .addComponent(jButton3, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT SIZE, javax.swing.GroupLayout.PREFERRED SIZE))
         .addGap(28, 28, 28)
         .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
           .addComponent(jLabel2, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
           .addComponent(jLabel9)
           .addComponent(jLabel8, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT SIZE, Short.MAX VALUE))
         .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
```

```
.addGroup(iPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
           .addComponent(jLabel10, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
           .addComponent(iLabel11)
           .addComponent(jLabel7, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT SIZE, Short.MAX VALUE))
         .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
         .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
           .addComponent(jLabel12, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
           .addComponent(jLabel13)
           .addComponent(jLabel14, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
         .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
         .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
           .addComponent(jLabel15, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT SIZE, Short.MAX VALUE)
           .addComponent(jLabel16)
           .addComponent(jLabel17, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT SIZE, Short.MAX VALUE))
         .addGap(16, 16, 16))
    );
    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();
  }// </editor-fold>
  private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
    // BUY Button
    BuyingOptions b = new BuyingOptions();
    b.show();
    dispose();
  }
  private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {
    // OWNED CRYPTOS Button
    OwnedCypto oc = new OwnedCypto();
```

```
oc.show();
     dispose();
  }
  private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
    // SELL Button
     OwnedCypto oc = new OwnedCypto();
     oc.show();
     dispose();
  }
    @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 Runnable() {
```

```
//
         public void run() {
           new Dashboard().setVisible(true);
//
//
        }
//
      });
  }
  // Variables declaration - do not modify
  private javax.swing.JButton jButton1;
  private javax.swing.JButton jButton2;
  private javax.swing.JButton jButton3;
  private javax.swing.JLabel jLabel1;
  private javax.swing.JLabel jLabel10;
  private javax.swing.JLabel jLabel11;
  private javax.swing.JLabel jLabel12;
  private javax.swing.JLabel jLabel13;
  private javax.swing.JLabel jLabel14;
  private javax.swing.JLabel jLabel15;
  private javax.swing.JLabel jLabel16;
  private javax.swing.JLabel jLabel17;
  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.JPanel jPanel2;
  // End of variables declaration
}
```

OwnedCrypto.java

```
/*
    * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
    * Click nbfs://nbhost/SystemFileSystem/Templates/GUIForms/JFrame.java to edit this template
    */
    package app;

import db.GetInfo;
import java.awt.event.MouseAdapter;
import java.awt.event.MouseEvent;

/**
    * @author Kartik
    */
```

```
public class OwnedCypto extends javax.swing.JFrame {
   * Creates new form OwnedCypto
   */
  public OwnedCypto() {
    initComponents();
    this.setLocation(500, 200);
    jLabel8.addMouseListener(new MouseAdapter() {
       @Override
       public void mouseClicked(MouseEvent e) {
         onMouseClicked(e);
       }
    });
    jLabel10.addMouseListener(new MouseAdapter() {
       @Override
       public void mouseClicked(MouseEvent e) {
         onMouseClicked(e);
       }
    });
    jLabel12.addMouseListener(new MouseAdapter() {
       @Override
       public void mouseClicked(MouseEvent e) {
         onMouseClicked(e);
       }
    });
    jLabel15.addMouseListener(new MouseAdapter() {
       @Override
       public void mouseClicked(MouseEvent e) {
         onMouseClicked(e);
       }
    });
    jLabel19.setText(GetInfo.getUserName(GetInfo.userEmail) + ", Your Porfolio");
    jLabel2.setText(Float.toString(GetInfo.getUserQuantity("Bitcoin")));
    jLabel7.setText(Float.toString(GetInfo.getUserQuantity("Dogecoin")));
    jLabel14.setText(Float.toString(GetInfo.getUserQuantity("Ethereum")));
    jLabel17.setText(Float.toString(GetInfo.getUserQuantity("Litecoin")));
  }
  * 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();
  jLabel2 = new javax.swing.JLabel();
  jLabel8 = new javax.swing.JLabel();
  jLabel9 = new javax.swing.JLabel();
  jLabel10 = new javax.swing.JLabel();
  jLabel11 = new javax.swing.JLabel();
  jLabel7 = new javax.swing.JLabel();
  jLabel12 = new javax.swing.JLabel();
  ¡Label13 = new javax.swing.JLabel();
  jLabel14 = new javax.swing.JLabel();
  jLabel15 = new javax.swing.JLabel();
  jLabel16 = new javax.swing.JLabel();
  jLabel17 = new javax.swing.JLabel();
  jLabel1 = new javax.swing.JLabel();
  jLabel18 = new javax.swing.JLabel();
  jButton2 = new javax.swing.JButton();
  jLabel19 = new javax.swing.JLabel();
  jLabel20 = new javax.swing.JLabel();
  setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
  iPanel1.setBackground(new java.awt.Color(13, 1, 6));
  jPanel1.setForeground(new java.awt.Color(255, 255, 252));
  jLabel2.setFont(new java.awt.Font("Segoe UI", 1, 24)); // NOI18N
  jLabel2.setForeground(new java.awt.Color(255, 255, 252));
  jLabel2.setHorizontalAlignment(javax.swing.SwingConstants.LEFT);
  iLabel2.setText("0.001");
  jLabel8.setFont(new java.awt.Font("Segoe UI", 1, 24)); // NOI18N
  jLabel8.setForeground(new java.awt.Color(255, 255, 252));
  iLabel8.setHorizontalAlignment(javax.swing.SwingConstants.LEFT);
  jLabel8.setText("Bitcoin");
  jLabel9.setFont(new java.awt.Font("Segoe UI", 0, 14)); // NOI18N
  jLabel9.setForeground(new java.awt.Color(108, 207, 246));
  jLabel9.setText("BTC");
  jLabel10.setFont(new java.awt.Font("Segoe UI", 1, 24)); // NOI18N
  jLabel10.setForeground(new java.awt.Color(255, 255, 252));
  jLabel10.setHorizontalAlignment(javax.swing.SwingConstants.LEFT);
  jLabel10.setText("Dogecoin");
  jLabel11.setFont(new java.awt.Font("Segoe UI", 0, 14)); // NOI18N
  jLabel11.setForeground(new java.awt.Color(108, 207, 246));
  ¡Label11.setText("DOGE");
```

```
jLabel7.setFont(new java.awt.Font("Segoe UI", 1, 24)); // NOI18N
jLabel7.setForeground(new java.awt.Color(255, 255, 252));
jLabel7.setHorizontalAlignment(javax.swing.SwingConstants.LEFT);
jLabel7.setText("400");
jLabel12.setFont(new java.awt.Font("Segoe UI", 1, 24)); // NOI18N
jLabel12.setForeground(new java.awt.Color(255, 255, 252));
jLabel12.setHorizontalAlignment(javax.swing.SwingConstants.LEFT);
jLabel12.setText("Ethereum");
jLabel13.setFont(new java.awt.Font("Segoe UI", 0, 14)); // NOI18N
jLabel13.setForeground(new java.awt.Color(108, 207, 246));
jLabel13.setText("ETH");
jLabel14.setFont(new java.awt.Font("Segoe UI", 1, 24)); // NOI18N
jLabel14.setForeground(new java.awt.Color(255, 255, 252));
jLabel14.setHorizontalAlignment(javax.swing.SwingConstants.LEFT);
jLabel14.setText("0");
jLabel15.setFont(new java.awt.Font("Segoe UI", 1, 24)); // NOI18N
jLabel15.setForeground(new java.awt.Color(255, 255, 252));
jLabel15.setHorizontalAlignment(javax.swing.SwingConstants.LEFT);
jLabel15.setText("Litecoin");
jLabel16.setFont(new java.awt.Font("Segoe UI", 0, 14)); // NOI18N
jLabel16.setForeground(new java.awt.Color(108, 207, 246));
jLabel16.setText("LTC");
jLabel17.setFont(new java.awt.Font("Segoe UI", 1, 24)); // NOI18N
jLabel17.setForeground(new java.awt.Color(255, 255, 252));
jLabel17.setHorizontalAlignment(javax.swing.SwingConstants.LEFT);
iLabel17.setText("0");
jLabel1.setFont(new java.awt.Font("Segoe UI", 1, 36)); // NOI18N
jLabel1.setForeground(new java.awt.Color(108, 207, 246));
jLabel1.setHorizontalAlignment(javax.swing.SwingConstants.LEFT);
jLabel1.setText("Owned Cryptos");
jLabel18.setFont(new java.awt.Font("Segoe UI", 0, 18)); // NOI18N
jLabel18.setForeground(new java.awt.Color(255, 255, 252));
jLabel18.setHorizontalAlignment(javax.swing.SwingConstants.LEFT);
jLabel18.setText("Click on anyone to SELL");
jButton2.setBackground(new java.awt.Color(61, 82, 213));
jButton2.setForeground(new java.awt.Color(255, 255, 252));
jButton2.addActionListener(new java.awt.event.ActionListener() {
  public void actionPerformed(java.awt.event.ActionEvent evt) {
     jButton2ActionPerformed(evt);
```

```
}
    });
    jLabel19.setFont(new java.awt.Font("Segoe UI", 0, 18)); // NOI18N
    jLabel19.setForeground(new java.awt.Color(255, 255, 252));
    jLabel19.setHorizontalAlignment(javax.swing.SwingConstants.RIGHT);
    jLabel19.setText("Kartik, Your Porfolio");
    jLabel20.setFont(new java.awt.Font("Segoe UI", 0, 14)); // NOI18N
    jLabel20.setForeground(new java.awt.Color(108, 207, 246));
    jLabel20.setHorizontalAlignment(javax.swing.SwingConstants.RIGHT);
    jLabel20.setText("Owned Quantity");
    javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
    ¡Panel1.setLayout(¡Panel1Layout);
    ¡Panel1Layout.setHorizontalGroup(
      ¡Panel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
      .addGroup(jPanel1Layout.createSequentialGroup()
         .addGap(26, 26, 26)
         .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
           .addGroup(jPanel1Layout.createSequentialGroup()
              .addComponent(jLabel18)
              .addGap(0, 0, Short.MAX VALUE))
           .addGroup(jPanel1Layout.createSequentialGroup()
              .addComponent(jLabel1)
              .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
           .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
¡Panel1Layout.createSequentialGroup()
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                .addGroup(javax.swing.GroupLayout.Alignment.LEADING,
¡Panel1Layout.createSequentialGroup()
                  .addComponent(jLabel15)
                  .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                  .addComponent(jLabel16)
                  .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                  .addComponent(jLabel17))
                .addGroup(javax.swing.GroupLayout.Alignment.LEADING,
jPanel1Layout.createSequentialGroup()
                  .addComponent(jLabel12)
                  .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                  .addComponent(jLabel13)
                  .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 192,
Short.MAX_VALUE)
                  .addComponent(jLabel14))
                .addGroup(javax.swing.GroupLayout.Alignment.LEADING,
¡Panel1Layout.createSequentialGroup()
                  .addComponent(jLabel10)
```

```
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                  .addComponent(jLabel11)
                  .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT SIZE, Short.MAX VALUE)
                  .addComponent(jLabel7))
               .addGroup(javax.swing.GroupLayout.Alignment.LEADING,
¡Panel1Layout.createSequentialGroup()
                  .addComponent(jLabel8)
                  .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                  .addComponent(jLabel9)
                  .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT SIZE, Short.MAX VALUE)
                  .addComponent(jLabel2))
               .addGroup(jPanel1Layout.createSequentialGroup()
                  .addGap(0, 0, Short.MAX VALUE)
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                    .addComponent(jLabel20)
                    .addComponent(jLabel19))))
             .addGap(23, 23, 23))))
       .addGroup(jPanel1Layout.createSequentialGroup()
         .addContainerGap()
         .addComponent(jButton2)
         .addGap(0, 0, Short.MAX VALUE))
    iPanel1Layout.setVerticalGroup(
      iPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
      .addGroup(jPanel1Layout.createSequentialGroup()
         .addContainerGap()
         .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
           .addComponent(iButton2)
           .addComponent(jLabel19, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT SIZE, Short.MAX VALUE))
         .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
         .addComponent(jLabel1)
         .addGap(1, 1, 1)
         .addComponent(jLabel18, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT SIZE, Short.MAX VALUE)
         .addGap(20, 20, 20)
         .addComponent(jLabel20)
         .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
         .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
           .addComponent(jLabel2, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT SIZE, Short.MAX VALUE)
           .addComponent(jLabel9)
           .addComponent(jLabel8, javax.swing.GroupLayout.DEFAULT SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
         .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
         .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
```

```
.addComponent(jLabel10, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
           .addComponent(jLabel11)
           .addComponent(jLabel7, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
         .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
         .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
           .addComponent(jLabel12, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT SIZE, Short.MAX VALUE)
           .addComponent(jLabel13)
           .addComponent(jLabel14, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT SIZE, Short.MAX VALUE))
         .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
         .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
           .addComponent(jLabel15, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT SIZE, Short.MAX VALUE)
           .addComponent(jLabel16)
           .addComponent(jLabel17, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT SIZE, Short.MAX VALUE))
         .addGap(16, 16, 16))
    );
    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();
  }// </editor-fold>
  private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    Dashboard d = new Dashboard();
    d.show();
    dispose();
  }
  private void onMouseClicked(MouseEvent e) {
    Sell s = new Sell(((javax.swing.JLabel) e.getSource()).getText());
    s.show();
    dispose();
```

```
}
  /**
   * @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.LookAndFeeIInfo 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(OwnedCypto.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (InstantiationException ex) {
java.util.logging.Logger.getLogger(OwnedCypto.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (IllegalAccessException ex) {
java.util.logging.Logger.getLogger(OwnedCypto.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {
java.util.logging.Logger.getLogger(OwnedCypto.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    }
    //</editor-fold>
    /* Create and display the form */
    java.awt.EventQueue.invokeLater(new Runnable() {
       public void run() {
          new OwnedCypto().setVisible(true);
       }
    });
  }
  // Variables declaration - do not modify
  private javax.swing.JButton jButton2;
  private javax.swing.JLabel jLabel1;
```

```
private javax.swing.JLabel jLabel10;
  private javax.swing.JLabel jLabel11;
  private javax.swing.JLabel jLabel12;
  private javax.swing.JLabel jLabel13;
  private javax.swing.JLabel jLabel14;
  private javax.swing.JLabel jLabel15;
  private javax.swing.JLabel jLabel16;
  private javax.swing.JLabel jLabel17;
  private javax.swing.JLabel jLabel18;
  private javax.swing.JLabel jLabel19;
  private javax.swing.JLabel jLabel2;
  private javax.swing.JLabel jLabel20;
  private javax.swing.JLabel jLabel7;
  private javax.swing.JLabel jLabel8;
  private javax.swing.JLabel jLabel9;
  private javax.swing.JPanel jPanel1;
  // End of variables declaration
}
Sell.java
package app;
import db.GetInfo;
import db.SetInfo;
* Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
* Click nbfs://nbhost/SystemFileSystem/Templates/GUIForms/JFrame.java to edit this template
*/
/**
* @author Marwin Shroff
public class Sell extends javax.swing.JFrame {
   * Creates new form Sell
  public Sell(String coinName) {
     initComponents();
     this.setLocation(500, 200);
     this.coinName = coinName;
     jLabel1.setText("SELL " + coinName);
    jLabel4.setText("Enter Amount in " + GetInfo.getAbbr(coinName));
     jLabel6.setText("Current Balance: " + GetInfo.getUserQuantity(coinName) + " " +
GetInfo.getAbbr(coinName));
```

}

```
* 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
// <editor-fold defaultstate="collapsed" desc="Generated Code">
private void initComponents() {
  ¡Panel1 = new javax.swing.JPanel();
  ¡Button2 = new javax.swing.JButton();
  jLabel1 = new javax.swing.JLabel();
  jLabel2 = new javax.swing.JLabel();
  jLabel3 = new javax.swing.JLabel();
  jLabel4 = new javax.swing.JLabel();
  jLabel6 = new javax.swing.JLabel();
  ¡Button1 = new javax.swing.JButton();
  jTextField1 = new javax.swing.JTextField();
  jLabel5 = new javax.swing.JLabel();
  setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
  jPanel1.setBackground(new java.awt.Color(0, 0, 0));
  jButton2.setBackground(new java.awt.Color(61, 82, 213));
  jButton2.setForeground(new java.awt.Color(255, 255, 252));
  jButton2.addActionListener(new java.awt.event.ActionListener() {
     public void actionPerformed(java.awt.event.ActionEvent evt) {
       jButton2ActionPerformed(evt);
  });
  jLabel1.setFont(new java.awt.Font("Tahoma", 0, 24)); // NOI18N
  jLabel1.setForeground(new java.awt.Color(240, 240, 240));
  ¡Label1.setText("SELL Bitcoin");
  jLabel2.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N
  jLabel2.setForeground(new java.awt.Color(240, 240, 240));
  jLabel4.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N
  jLabel4.setForeground(new java.awt.Color(108, 207, 246));
  jLabel4.setText("Enter Amount in Bitcoin");
  jLabel6.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N
  jLabel6.setForeground(new java.awt.Color(240, 240, 240));
  jLabel6.setText("Current Balance: 3.45 BTC");
```

/**

```
jButton1.setBackground(new java.awt.Color(241, 153, 83));
    jButton1.setFont(new java.awt.Font("Tahoma", 0, 36)); // NOI18N
    iButton1.setText("Sell");
    jButton1.addActionListener(new java.awt.event.ActionListener() {
       public void actionPerformed(java.awt.event.ActionEvent evt) {
         ¡Button1ActionPerformed(evt);
      }
    });
    jTextField1.setBackground(new java.awt.Color(0, 0, 0));
    jTextField1.setFont(new java.awt.Font("Tahoma", 0, 24)); // NOI18N
    jTextField1.setForeground(new java.awt.Color(255, 255, 255));
    ¡TextField1.setText(" ");
    jTextField1.addActionListener(new java.awt.event.ActionListener() {
       public void actionPerformed(java.awt.event.ActionEvent evt) {
         jTextField1ActionPerformed(evt);
       }
    });
    jLabel5.setBackground(new java.awt.Color(0, 0, 0));
    jLabel5.setFont(new java.awt.Font("Segoe UI", 0, 18)); // NOI18N
    jLabel5.setForeground(new java.awt.Color(255, 255, 255));
    jLabel5.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
    javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
    ¡Panel1.setLayout(¡Panel1Layout);
    jPanel1Layout.setHorizontalGroup(
       ¡Panel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
       .addGroup(jPanel1Layout.createSequentialGroup()
         .addGap(223, 223, 223)
         .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addComponent(jLabel3, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX VALUE)
           .addComponent(jLabel2, javax.swing.GroupLayout.PREFERRED_SIZE, 183,
javax.swing.GroupLayout.PREFERRED SIZE))
         .addGap(114, 114, 114))
       .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanel1Layout.createSequentialGroup()
         .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
         .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING,
false)
           .addComponent(jLabel6, javax.swing.GroupLayout.DEFAULT_SIZE, 178,
Short.MAX VALUE)
           .addComponent(jTextField1))
         .addGap(198, 198, 198))
       .addGroup(jPanel1Layout.createSequentialGroup()
         .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel1Layout.createSequentialGroup()
```

```
.addGap(41, 41, 41)
             .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 397,
javax.swing.GroupLayout.PREFERRED SIZE))
           .addGroup(jPanel1Layout.createSequentialGroup()
             .addGap(111, 111, 111)
             .addComponent(jLabel5, javax.swing.GroupLayout.PREFERRED SIZE, 273,
javax.swing.GroupLayout.PREFERRED SIZE))
           .addGroup(jPanel1Layout.createSequentialGroup()
             .addContainerGap()
             .addComponent(jButton2)
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(jPanel1Layout.createSequentialGroup()
                  .addGap(95, 95, 95)
                  .addComponent(jLabel4, javax.swing.GroupLayout.PREFERRED SIZE, 152,
javax.swing.GroupLayout.PREFERRED SIZE))
               .addGroup(jPanel1Layout.createSequentialGroup()
                  .addGap(107, 107, 107)
                  .addComponent(jLabel1)))))
         .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
    );
    iPanel1Layout.setVerticalGroup(
      jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
       .addGroup(jPanel1Layout.createSequentialGroup()
         .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
           .addGroup(jPanel1Layout.createSequentialGroup()
             .addGap(35, 35, 35)
             .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 36,
javax.swing.GroupLayout.PREFERRED SIZE))
           .addGroup(jPanel1Layout.createSequentialGroup()
             .addContainerGap()
             .addComponent(jButton2)))
         .addGap(18, 18, 18)
         .addComponent(jLabel2)
         .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
         .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
           .addComponent(jLabel3)
           .addComponent(jLabel4))
         .addGap(27, 27, 27)
         .addComponent(jTextField1, javax.swing.GroupLayout.PREFERRED_SIZE, 55,
javax.swing.GroupLayout.PREFERRED SIZE)
         .addGap(18, 18, 18)
         .addComponent(jLabel6)
         .addGap(18, 18, 18)
         .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 33,
javax.swing.GroupLayout.PREFERRED SIZE)
         .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
         .addComponent(jLabel5, javax.swing.GroupLayout.DEFAULT_SIZE, 34, Short.MAX_VALUE)
         .addContainerGap())
```

```
);
    javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
    getContentPane().setLayout(layout);
    layout.setHorizontalGroup(
       layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
       .addGroup(layout.createSequentialGroup()
         .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE, 473,
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.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    );
    pack();
  }// </editor-fold>
  private void jTextField1ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
  }
  private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    Dashboard d = new Dashboard();
    d.show();
    dispose();
  }
  private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {//
GEN-FIRST:event jButton1ActionPerformed
    // TODO add your handling code here:
    float num = Float.parseFloat(jTextField1.getText());
    float balance = GetInfo.getBalance(GetInfo.userEmail);
    float soldMoney:
    float currentPrice = GetInfo.getCoinPrice(coinName);
    float currentCoins = GetInfo.getUserQuantity(coinName);
    if (num <= currentCoins) {
       soldMoney = currentPrice * num;
       ¡Label5.setText("Sold ₹" + soldMoney + " amount " + GetInfo.getAbbr(coinName));
       ¡TextField1.setText(null);
       currentCoins -= num;
       balance = balance + soldMoney;
       SetInfo.updateBalance(balance);
       SetInfo.updateQuantity(coinName, currentCoins);
       jLabel6.setText("Current Balance: " + currentCoins + " " + GetInfo.getAbbr(coinName));
    } else {
```

```
jLabel5.setText("Out of Amount");
       jTextField1.setText(null);
  }// GEN-LAST:event jButton1ActionPerformed
    @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(Sell.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
    } catch (InstantiationException ex) {
       java.util.logging.Logger.getLogger(Sell.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
    } catch (IllegalAccessException ex) {
       java.util.logging.Logger.getLogger(Sell.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {
       java.util.logging.Logger.getLogger(Sell.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
    // </editor-fold>
    /* Create and display the form */
//
     java.awt.EventQueue.invokeLater(new Runnable() {
//
        public void run() {
//
           new Sell().setVisible(true);
//
        }
//
     });
  }
```

```
private String coinName = "NONE";

// Variables declaration - do not modify
private javax.swing.JButton jButton1;
private javax.swing.JButton jButton2;
private javax.swing.JLabel jLabel1;
private javax.swing.JLabel jLabel2;
private javax.swing.JLabel jLabel3;
private javax.swing.JLabel jLabel4;
private javax.swing.JLabel jLabel5;
private javax.swing.JLabel jLabel6;
private javax.swing.JPanel jPanel1;
private javax.swing.JTextField jTextField1;
// End of variables declaration
}
```

Package auth

Login.java

```
package auth;
import db.DBConnection;
import db.Validate;
import java.util.logging.Level;
import java.util.logging.Logger;
import startup. Startup;
import app.Dashboard;
import db.GetInfo;
* Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
* Click nbfs://nbhost/SystemFileSystem/Templates/GUIForms/JFrame.java to edit this template
*/
/**
* @author Kartik
public class Login extends javax.swing.JFrame {
  /**
   * Creates new form Login
  public Login() {
    initComponents();
    this.setLocation(500, 200);
  }
  /**
   * 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() {
     error = new javax.swing.JDialog();
    jPanel2 = new javax.swing.JPanel();
     errorText = new javax.swing.JLabel();
     successDialogExit1 = new javax.swing.JButton();
     success = new javax.swing.JDialog();
    jPanel3 = new javax.swing.JPanel();
     successText = new javax.swing.JLabel();
```

```
successDialogExit = new javax.swing.JButton();
jPanel1 = new javax.swing.JPanel();
jLabel1 = new javax.swing.JLabel();
jLabel3 = new javax.swing.JLabel();
email = new javax.swing.JTextField();
jLabel4 = new javax.swing.JLabel();
¡Button1 = new javax.swing.JButton();
password = new javax.swing.JPasswordField();
¡Button2 = new javax.swing.JButton();
error.setTitle("Error!");
jPanel2.setBackground(new java.awt.Color(13, 1, 6));
errorText.setFont(new java.awt.Font("Segoe UI", 1, 36)); // NOI18N
errorText.setForeground(new java.awt.Color(217, 4, 41));
errorText.setText("Enter a valid Email");
errorText.setToolTipText("");
successDialogExit1.setBackground(new java.awt.Color(61, 82, 213));
successDialogExit1.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
successDialogExit1.setForeground(new java.awt.Color(255, 255, 252));
successDialogExit1.setText("OK");
successDialogExit1.addActionListener(new java.awt.event.ActionListener() {
  public void actionPerformed(java.awt.event.ActionEvent evt) {
     successDialogExit1ActionPerformed(evt);
  }
});
javax.swing.GroupLayout jPanel2Layout = new javax.swing.GroupLayout(jPanel2);
iPanel2.setLayout(iPanel2Layout);
iPanel2Layout.setHorizontalGroup(
  ¡Panel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
  .addGroup(jPanel2Layout.createSequentialGroup()
     .addGap(35, 35, 35)
     .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
       .addComponent(successDialogExit1)
       .addComponent(errorText))
     .addContainerGap(87, Short.MAX VALUE))
iPanel2Layout.setVerticalGroup(
  ¡Panel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
  .addGroup(jPanel2Layout.createSequentialGroup()
     .addGap(15, 15, 15)
     .addComponent(errorText)
     .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
     .addComponent(successDialogExit1)
     .addContainerGap(224, Short.MAX VALUE))
);
```

```
javax.swing.GroupLayout errorLayout = new javax.swing.GroupLayout(error.getContentPane());
    error.getContentPane().setLayout(errorLayout);
    errorLayout.setHorizontalGroup(
       error Layout. create Parallel Group (javax.swing. Group Layout. Alignment. LEADING) \\
       .addComponent(jPanel2, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    );
    errorLayout.setVerticalGroup(
       errorLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
       .addComponent(jPanel2, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    );
    success.setDefaultCloseOperation(javax.swing.WindowConstants.DISPOSE ON CLOSE);
    success.setTitle("Success!");
    jPanel3.setBackground(new java.awt.Color(13, 1, 6));
    successText.setFont(new java.awt.Font("Segoe UI", 1, 36)); // NOI18N
    successText.setForeground(new java.awt.Color(173, 252, 146));
    successText.setText("Log in Success!");
    successText.setToolTipText("");
    successDialogExit.setBackground(new java.awt.Color(61, 82, 213));
    successDialogExit.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
    successDialogExit.setForeground(new java.awt.Color(255, 255, 252));
    successDialogExit.setText("OK");
    successDialogExit.addActionListener(new java.awt.event.ActionListener() {
       public void actionPerformed(java.awt.event.ActionEvent evt) {
         successDialogExitActionPerformed(evt);
      }
    });
    javax.swing.GroupLayout jPanel3Layout = new javax.swing.GroupLayout(jPanel3);
    iPanel3.setLayout(iPanel3Layout);
    iPanel3Layout.setHorizontalGroup(
       ¡Panel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
       .addGroup(jPanel3Layout.createSequentialGroup()
         .addGap(55, 55, 55)
         .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
            .addComponent(successDialogExit)
            .addComponent(successText))
         .addContainerGap(123, Short.MAX VALUE))
    iPanel3Layout.setVerticalGroup(
       ¡Panel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
       .addGroup(jPanel3Layout.createSequentialGroup()
         .addGap(15, 15, 15)
```

```
.addComponent(successText)
         .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
         .addComponent(successDialogExit)
         .addContainerGap(224, Short.MAX VALUE))
    );
    javax.swing.GroupLayout successLayout = new
javax.swing.GroupLayout(success.getContentPane());
    success.getContentPane().setLayout(successLayout);
    successLayout.setHorizontalGroup(
       successLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
       .addComponent(jPanel3, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    successLayout.setVerticalGroup(
       successLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
       .addComponent(jPanel3, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    );
    setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
    setTitle("Login");
    setBackground(new java.awt.Color(102, 0, 102));
    jPanel1.setBackground(new java.awt.Color(13, 1, 6));
    iPanel1.setForeground(new java.awt.Color(204, 255, 255));
    jPanel1.setPreferredSize(new java.awt.Dimension(424, 387));
    jLabel1.setFont(new java.awt.Font("Segoe UI", 0, 24)); // NOI18N
    jLabel1.setForeground(new java.awt.Color(108, 207, 246));
    jLabel1.setText("Login in to your account");
    jLabel3.setFont(new java.awt.Font("Segoe UI", 0, 18)); // NOI18N
    jLabel3.setForeground(new java.awt.Color(255, 255, 252));
    jLabel3.setText("Email:");
    email.setFont(new java.awt.Font("Segoe UI", 0, 18)); // NOI18N
    email.setText("meet@gmail.com");
    email.setToolTipText("Enter your email here");
    email.addActionListener(new java.awt.event.ActionListener() {
       public void actionPerformed(java.awt.event.ActionEvent evt) {
         emailActionPerformed(evt);
       }
    });
    jLabel4.setFont(new java.awt.Font("Segoe UI", 0, 18)); // NOI18N
    jLabel4.setForeground(new java.awt.Color(255, 255, 252));
    ¡Label4.setText("Password:");
```

```
jButton1.setBackground(new java.awt.Color(61, 82, 213));
    jButton1.setFont(new java.awt.Font("Segoe UI", 0, 18)); // NOI18N
    jButton1.setForeground(new java.awt.Color(255, 255, 252));
    ¡Button1.setText("Log In");
    jButton1.setHorizontalTextPosition(javax.swing.SwingConstants.CENTER);
    jButton1.setMaximumSize(new java.awt.Dimension(141, 33));
    jButton1.setPreferredSize(new java.awt.Dimension(141, 33));
    jButton1.addActionListener(new java.awt.event.ActionListener() {
       public void actionPerformed(java.awt.event.ActionEvent evt) {
         jButton1ActionPerformed(evt);
      }
    });
    password.setText("meeetp123");
    password.setToolTipText("Enter more than 7 digits");
    jButton2.setBackground(new java.awt.Color(61, 82, 213));
    jButton2.setForeground(new java.awt.Color(255, 255, 252));
    iButton2.setText("\(\frac{1}{40}\)");
    jButton2.addActionListener(new java.awt.event.ActionListener() {
       public void actionPerformed(java.awt.event.ActionEvent evt) {
         ¡Button2ActionPerformed(evt);
      }
    });
    javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
    ¡Panel1.setLayout(¡Panel1Layout);
    jPanel1Layout.setHorizontalGroup(
       ¡Panel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
       .addGroup(jPanel1Layout.createSequentialGroup()
         .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel1Layout.createSequentialGroup()
              .addGap(50, 50, 50)
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
                .addComponent(jLabel4)
                .addComponent(jLabel3)
                .addComponent(jLabel1)
                .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 110,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(email, javax.swing.GroupLayout.DEFAULT_SIZE, 260,
Short.MAX VALUE)
                 .addComponent(password)))
            .addGroup(jPanel1Layout.createSequentialGroup()
              .addContainerGap()
              .addComponent(jButton2)))
         .addContainerGap(114, Short.MAX VALUE))
    iPanel1Layout.setVerticalGroup(
```

```
jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
       .addGroup(jPanel1Layout.createSequentialGroup()
         .addContainerGap()
         .addComponent(jButton2)
         .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
         .addComponent(jLabel1)
         .addGap(41, 41, 41)
         .addComponent(jLabel3)
         .addGap(2, 2, 2)
         .addComponent(email, javax.swing.GroupLayout.PREFERRED_SIZE, 38,
javax.swing.GroupLayout.PREFERRED SIZE)
         .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
         .addComponent(jLabel4)
         .addGap(1, 1, 1)
         .addComponent(password, javax.swing.GroupLayout.PREFERRED SIZE, 38,
javax.swing.GroupLayout.PREFERRED SIZE)
         .addGap(28, 28, 28)
         .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT SIZE, javax.swing.GroupLayout.PREFERRED SIZE)
         .addContainerGap(66, 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.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();
  }// </editor-fold>
  private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
    // LOG IN Button
    userEmail = email.getText();
    userPassword = password.getText();
    System.out.println(userEmail + " " + userPassword);
    if (!Validate.validate(userEmail)) {
      error.setVisible(true);
      error.setSize(400, 150);
```

```
error.setLocation(450, 250);
     errorText.setText("Enter a valid email");
  } else if (userPassword.length() < 8) {
     error.setVisible(true);
     error.setSize(475, 150);
     error.setLocation(450, 250);
     errorText.setText("Enter a valid password");
  } else {
     try {
       Class.forName("com.mysql.jdbc.Driver");
     } catch (ClassNotFoundException ex) {
       Logger.getLogger(Signup.class.getName()).log(Level.SEVERE, null, ex);
     if (DBConnection.checkUser(userEmail, userPassword) == 2) {
       error.setVisible(true);
       error.setSize(450, 150);
       error.setLocation(450, 250);
       errorText.setText("Email Id not present!");
     } else if (DBConnection.checkUser(userEmail, userPassword) == 1) {
       error.setVisible(true);
       error.setSize(450, 150);
       error.setLocation(450, 250);
       errorText.setText("Incorrect Password!");
     } else if (DBConnection.checkUser(userEmail, userPassword) == 0) {
       success.setVisible(true);
       success.setSize(400, 150);
       success.setLocation(450, 250);
       GetInfo.userEmail = userEmail;
    }
  }
}
private void emailActionPerformed(java.awt.event.ActionEvent evt) {
  // TODO add your handling code here:
}
private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
  // HOME Button
  Startup s = new Startup();
  s.show();
  dispose();
}
private void successDialogExit1ActionPerformed(java.awt.event.ActionEvent evt) {
  // Error Dialog dispose
  error.dispose();
}
private void successDialogExitActionPerformed(java.awt.event.ActionEvent evt) {
```

```
// Success Dialog dispose
     Dashboard d = new Dashboard();
     d.show();
     dispose();
     success.dispose();
  }
   * @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.LookAndFeeIInfo info:
javax.swing.UIManager.getInstalledLookAndFeels()) {
          if ("Nimbus".equals(info.getName())) {
            javax.swing.UIManager.setLookAndFeel(info.getClassName());
         }
    } catch (ClassNotFoundException ex) {
       java.util.logging.Logger.getLogger(Login.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (InstantiationException ex) {
       java.util.logging.Logger.getLogger(Login.class.getName()).log(java.util.logging.Level.SEVERE,
    } catch (IllegalAccessException ex) {
       java.util.logging.Logger.getLogger(Login.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {
       java.util.logging.Logger.getLogger(Login.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 Login().setVisible(true);
    });
  }
  private String userPassword, userEmail;
```

```
// Variables declaration - do not modify
  private javax.swing.JTextField email;
  private javax.swing.JDialog error;
  private javax.swing.JLabel errorText;
  private javax.swing.JButton jButton1;
  private javax.swing.JButton jButton2;
  private javax.swing.JLabel jLabel1;
  private javax.swing.JLabel jLabel3;
  private javax.swing.JLabel jLabel4;
  private javax.swing.JPanel jPanel1;
  private javax.swing.JPanel jPanel2;
  private javax.swing.JPanel jPanel3;
  private javax.swing.JPasswordField password;
  private javax.swing.JDialog success;
  private javax.swing.JButton successDialogExit;
  private javax.swing.JButton successDialogExit1;
  private javax.swing.JLabel successText;
  // End of variables declaration
}
Signup.java
package auth;
import startup. Startup;
import app.Dashboard;
import db.Validate;
import db.DBConnection;
import db.GetInfo;
import java.util.logging.Level;
import java.util.logging.Logger;
import javax.swing.JDialog;
* Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
* Click nbfs://nbhost/SystemFileSystem/Templates/GUIForms/JFrame.java to edit this template
*/
/**
* @author Kartik
public class Signup extends javax.swing.JFrame {
   * Creates new form Login
   */
```

public Signup() {

```
initComponents();
  this.setLocation(500, 200);
}
/**
* 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() {
  error = new javax.swing.JDialog();
  ¡Panel2 = new javax.swing.JPanel();
  errorText = new javax.swing.JLabel();
  successDialogExit1 = new javax.swing.JButton();
  success = new javax.swing.JDialog();
  ¡Panel3 = new javax.swing.JPanel();
  successText = new javax.swing.JLabel();
  successDialogExit = new javax.swing.JButton();
  ¡Panel1 = new javax.swing.JPanel();
  jLabel1 = new javax.swing.JLabel();
  jLabel2 = new javax.swing.JLabel();
  name = new javax.swing.JTextField();
  ¡Label3 = new javax.swing.JLabel();
  email = new javax.swing.JTextField();
  jLabel4 = new javax.swing.JLabel();
  ¡Button1 = new javax.swing.JButton();
  password = new javax.swing.JPasswordField();
  ¡Button2 = new javax.swing.JButton();
  error.setTitle("Error!");
  jPanel2.setBackground(new java.awt.Color(13, 1, 6));
  errorText.setFont(new java.awt.Font("Segoe UI", 1, 36)); // NOI18N
  errorText.setForeground(new java.awt.Color(217, 4, 41));
  errorText.setText("Enter a valid Email");
  errorText.setToolTipText("");
  successDialogExit1.setBackground(new java.awt.Color(61, 82, 213));
  successDialogExit1.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
  successDialogExit1.setForeground(new java.awt.Color(255, 255, 252));
  successDialogExit1.setText("OK");
  successDialogExit1.addActionListener(new java.awt.event.ActionListener() {
     public void actionPerformed(java.awt.event.ActionEvent evt) {
       successDialogExit1ActionPerformed(evt);
     }
```

```
});
    javax.swing.GroupLayout jPanel2Layout = new javax.swing.GroupLayout(jPanel2);
    ¡Panel2.setLayout(¡Panel2Layout);
    ¡Panel2Layout.setHorizontalGroup(
      jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
       .addGroup(jPanel2Layout.createSequentialGroup()
         .addGap(35, 35, 35)
         .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
           .addComponent(successDialogExit1)
           .addComponent(errorText))
         .addContainerGap(87, Short.MAX VALUE))
    jPanel2Layout.setVerticalGroup(
      jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
       .addGroup(jPanel2Layout.createSequentialGroup()
         .addGap(15, 15, 15)
         .addComponent(errorText)
         .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
         .addComponent(successDialogExit1)
         .addContainerGap(224, Short.MAX VALUE))
    );
    javax.swing.GroupLayout errorLayout = new javax.swing.GroupLayout(error.getContentPane());
    error.getContentPane().setLayout(errorLayout);
    errorLayout.setHorizontalGroup(
      errorLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
       .addComponent(jPanel2, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    errorLayout.setVerticalGroup(
      errorLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
       .addComponent(jPanel2, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    );
    success.setDefaultCloseOperation(javax.swing.WindowConstants.DISPOSE ON CLOSE);
    success.setTitle("Success!");
    jPanel3.setBackground(new java.awt.Color(13, 1, 6));
    successText.setFont(new java.awt.Font("Segoe UI", 1, 36)); // NOI18N
    successText.setForeground(new java.awt.Color(173, 252, 146));
    successText.setText("Sign up Success!");
    successText.setToolTipText("");
    successDialogExit.setBackground(new java.awt.Color(61, 82, 213));
    successDialogExit.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
    successDialogExit.setForeground(new java.awt.Color(255, 255, 252));
```

```
successDialogExit.setText("OK");
    successDialogExit.addActionListener(new java.awt.event.ActionListener() {
      public void actionPerformed(java.awt.event.ActionEvent evt) {
         successDialogExitActionPerformed(evt);
    });
    javax.swing.GroupLayout jPanel3Layout = new javax.swing.GroupLayout(jPanel3);
    ¡Panel3.setLayout(¡Panel3Layout);
    jPanel3Layout.setHorizontalGroup(
      ¡Panel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
       .addGroup(jPanel3Layout.createSequentialGroup()
         .addGap(55, 55, 55)
         .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
           .addComponent(successDialogExit)
           .addComponent(successText))
         .addContainerGap(99, Short.MAX VALUE))
    );
    iPanel3Layout.setVerticalGroup(
      jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
       .addGroup(jPanel3Layout.createSequentialGroup()
         .addGap(15, 15, 15)
         .addComponent(successText)
         .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
         .addComponent(successDialogExit)
         .addContainerGap(224, Short.MAX VALUE))
    );
    javax.swing.GroupLayout successLayout = new
javax.swing.GroupLayout(success.getContentPane());
    success.getContentPane().setLayout(successLayout);
    successLayout.setHorizontalGroup(
      successLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
       .addComponent(iPanel3, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    successLayout.setVerticalGroup(
      successLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
       .addComponent(jPanel3, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    );
    setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
    setTitle("SignUp");
    setBackground(new java.awt.Color(102, 0, 102));
    jPanel1.setBackground(new java.awt.Color(13, 1, 6));
    jPanel1.setForeground(new java.awt.Color(204, 255, 255));
    ¡Panel1.setPreferredSize(new java.awt.Dimension(424, 387));
```

```
jLabel1.setFont(new java.awt.Font("Segoe UI", 0, 24)); // NOI18N
jLabel1.setForeground(new java.awt.Color(108, 207, 246));
jLabel1.setText("Enter your details");
jLabel2.setFont(new java.awt.Font("Segoe UI", 0, 18)); // NOI18N
jLabel2.setForeground(new java.awt.Color(255, 255, 252));
jLabel2.setText("Name:");
name.setFont(new java.awt.Font("Segoe UI", 0, 18)); // NOI18N
name.setText("fsjdkl");
name.setToolTipText("Enter your name here");
name.addActionListener(new java.awt.event.ActionListener() {
  public void actionPerformed(java.awt.event.ActionEvent evt) {
     nameActionPerformed(evt);
  }
});
jLabel3.setFont(new java.awt.Font("Segoe UI", 0, 18)); // NOI18N
jLabel3.setForeground(new java.awt.Color(255, 255, 252));
¡Label3.setText("Email:");
email.setFont(new java.awt.Font("Segoe UI", 0, 18)); // NOI18N
email.setText("abc@gmail.com");
email.setToolTipText("Enter your email here");
email.addActionListener(new java.awt.event.ActionListener() {
  public void actionPerformed(java.awt.event.ActionEvent evt) {
     emailActionPerformed(evt);
});
jLabel4.setFont(new java.awt.Font("Segoe UI", 0, 18)); // NOI18N
jLabel4.setForeground(new java.awt.Color(255, 255, 252));
jLabel4.setText("Password:");
¡Button1.setBackground(new java.awt.Color(61, 82, 213));
jButton1.setFont(new java.awt.Font("Segoe UI", 0, 18)); // NOI18N
jButton1.setForeground(new java.awt.Color(255, 255, 252));
¡Button1.setText("Sign Up");
jButton1.setHorizontalTextPosition(javax.swing.SwingConstants.CENTER);
jButton1.setMaximumSize(new java.awt.Dimension(141, 33));
jButton1.setPreferredSize(new java.awt.Dimension(141, 33));
jButton1.addActionListener(new java.awt.event.ActionListener() {
  public void actionPerformed(java.awt.event.ActionEvent evt) {
     jButton1ActionPerformed(evt);
  }
});
password.setText("ffdsfdsfsdf");
```

```
password.setToolTipText("Enter more than 7 digits");
    password.addActionListener(new java.awt.event.ActionListener() {
       public void actionPerformed(java.awt.event.ActionEvent evt) {
         passwordActionPerformed(evt);
    });
    jButton2.setBackground(new java.awt.Color(61, 82, 213));
    jButton2.setForeground(new java.awt.Color(255, 255, 252));
    jButton2.setText("\( \frac{1}{40}\)");
    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);
    iPanel1Layout.setHorizontalGroup(
       jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
       .addGroup(jPanel1Layout.createSequentialGroup()
         .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel1Layout.createSequentialGroup()
              .addGap(50, 50, 50)
.addGroup(iPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
                .addComponent(jLabel4)
                .addComponent(jLabel3)
                .addComponent(jLabel2)
                .addComponent(jLabel1)
                .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 110,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(name, javax.swing.GroupLayout.DEFAULT_SIZE, 260,
Short.MAX VALUE)
                .addComponent(email)
                .addComponent(password)))
           .addGroup(jPanel1Layout.createSequentialGroup()
              .addContainerGap()
              .addComponent(jButton2)))
         .addContainerGap(114, Short.MAX_VALUE))
    );
    iPanel1Layout.setVerticalGroup(
       ¡Panel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
       .addGroup(jPanel1Layout.createSequentialGroup()
         .addContainerGap()
         .addComponent(jButton2)
         .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
         .addComponent(jLabel1)
         .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
```

```
.addComponent(jLabel2)
         .addGap(2, 2, 2)
         .addComponent(name, javax.swing.GroupLayout.PREFERRED_SIZE, 39,
javax.swing.GroupLayout.PREFERRED_SIZE)
         .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
         .addComponent(jLabel3)
         .addGap(2, 2, 2)
         .addComponent(email, javax.swing.GroupLayout.PREFERRED_SIZE, 39,
javax.swing.GroupLayout.PREFERRED SIZE)
         .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
         .addComponent(jLabel4)
         .addGap(1, 1, 1)
         .addComponent(password, javax.swing.GroupLayout.PREFERRED_SIZE, 38,
javax.swing.GroupLayout.PREFERRED_SIZE)
         .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
         .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT SIZE, javax.swing.GroupLayout.PREFERRED SIZE)
         .addContainerGap(41, 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.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();
  }// </editor-fold>
  private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
    // SIGN UP Button
    userEmail = email.getText();
    userName = name.getText();
    userPassword = password.getText();
    if (name.getText().equals("") || userName.length() < 4) {
      error.setVisible(true);
      error.setSize(400, 150);
      error.setLocation(450, 250);
      errorText.setText("Enter a valid name");
    } else if (!Validate.validate(email.getText())) {
       error.setVisible(true);
```

```
error.setSize(400, 150);
     error.setLocation(450, 250);
     errorText.setText("Enter a valid email");
  } else if (userPassword.length() < 8) {
     error.setVisible(true);
     error.setSize(475, 150);
     error.setLocation(450, 250);
     errorText.setText("Enter a valid password");
  } else {
    try {
       Class.forName("com.mysgl.jdbc.Driver");
     } catch (ClassNotFoundException ex) {
       Logger.getLogger(Signup.class.getName()).log(Level.SEVERE, null, ex);
     if (DBConnection.saveUser(userName, userEmail, userPassword)) {
       success.setVisible(true);
       success.setSize(400, 150);
       success.setLocation(450, 250);
       GetInfo.userEmail = userEmail;
     } else {
       error.setVisible(true);
       error.setSize(500, 150);
       error.setLocation(450, 250);
       errorText.setText("Email Id already present!");
    }
  }
}
private void emailActionPerformed(java.awt.event.ActionEvent evt) {
  // EMAIL Textfield
}
private void nameActionPerformed(java.awt.event.ActionEvent evt) {
  // NAME Textfield
}
private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
  // HOME Button
  Startup s = new Startup();
  s.show();
  dispose();
}
private void successDialogExitActionPerformed(java.awt.event.ActionEvent evt) {
  // Success Dialog dispose
  Dashboard d = new Dashboard();
  d.show();
  dispose();
  success.dispose();
```

```
}
  private void successDialogExit1ActionPerformed(java.awt.event.ActionEvent evt) {
    // Error Dialog dispose
     error.dispose();
  }
  private void passwordActionPerformed(java.awt.event.ActionEvent evt) {
     // Password Textfield
  }
    @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. UIM an ager.set Look And Feel (info.get Class Name ()); \\
            break;
         }
    } catch (ClassNotFoundException ex) {
       java.util.logging.Logger.getLogger(Signup.class
             .getName()).log(java.util.logging.Level.SEVERE, null, ex);
    } catch (InstantiationException ex) {
       java.util.logging.Logger.getLogger(Signup.class
             .getName()).log(java.util.logging.Level.SEVERE, null, ex);
    } catch (IllegalAccessException ex) {
       java.util.logging.Logger.getLogger(Signup.class
             .getName()).log(java.util.logging.Level.SEVERE, null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {
       java.util.logging.Logger.getLogger(Signup.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 Signup().setVisible(true);
     }
  });
}
public String userName;
private String userPassword, userEmail;
// Variables declaration - do not modify
private javax.swing.JTextField email;
private javax.swing.JDialog error;
private javax.swing.JLabel errorText;
private javax.swing.JButton jButton1;
private javax.swing.JButton jButton2;
private javax.swing.JLabel jLabel1;
private javax.swing.JLabel jLabel2;
private javax.swing.JLabel jLabel3;
private javax.swing.JLabel jLabel4;
private javax.swing.JPanel jPanel1;
private javax.swing.JPanel jPanel2;
private javax.swing.JPanel jPanel3;
private javax.swing.JTextField name;
private javax.swing.JPasswordField password;
private javax.swing.JDialog success;
private javax.swing.JButton successDialogExit;
private javax.swing.JButton successDialogExit1;
private javax.swing.JLabel successText;
// End of variables declaration
```

}

Package db

DBConnection.java

```
* Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
* Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template
package db;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.SQLException;
import java.sql.Statement;
import java.sql.ResultSet;
/**
* @author Kartik
public class DBConnection {
  public static boolean saveUser(String username, String email, String password) {
     try ( Connection con = DriverManager.getConnection(
          "jdbc:mysql://localhost:3306/just_crypto", "root", "K@r11k003"); // here sonoo is database
name, root is username and password
           Statement stmt = con.createStatement();) {
       ResultSet rs = stmt.executeQuery("SELECT * FROM user WHERE email="" + email + "";");
       if (rs.next() == false) {
         stmt.execute("INSERT INTO user (username, email, password) VALUES ("" + username + "","" +
email
               + "'," + password + "');");
          return true;
       } else {
          System.out.println("WORKING");
         return false;
       }
    } catch (SQLException e) {
       System.out.println(e);
    }
    return false;
  }
  public static int checkUser(String email, String password) {
    try ( Connection con = DriverManager.getConnection(
```

```
"jdbc:mysql://localhost:3306/just_crypto", "root", "K@r11k003"); // here sonoo is database
name, root is username and password
           Statement stmt = con.createStatement();) {
       ResultSet rs = stmt.executeQuery("SELECT * FROM user WHERE email="" + email + "";");
       if (rs.next()) {
          System.err.println("HI THRE");
          if (rs.getString("password").equals(password)) {
            System.out.println(rs.getString("password"));
            return 0; // Account found and authenticated
         } else {
            return 1; // Incorrect Password
          }
       } else {
          System.out.println("NOT WORKING");
          return 2; // Email not present
     } catch (SQLException e) {
       System.out.println(e);
     return 4;
//
//
   public static Float getBalance(String email) {
      try ( Connection con = DriverManager.getConnection(
//
//
           "jdbc:mysql://localhost:3306/just_crypto", "root", "K@r11k003"); // here sonoo is database
name, root is username and password
            Statement stmt = con.createStatement();) {
//
         ResultSet rs = stmt.executeQuery("SELECT * FROM user WHERE email="" + email + "";");
//
//
         if (rs.next()) {
//
           return rs.getFloat("balance");
//
        } else {
//
           return 0.0f;
//
        }
//
      } catch (SQLException e) {
         System.out.println(e);
//
//
      }
//
      return 0.0f;
// }
```

GetInfo.java

```
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*/
package db;
```

```
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.sql.Statement;
* @author Kartik
public class GetInfo {
  public static String userEmail;
  public static String getUserName(String email) {
    try ( Connection con = DriverManager.getConnection(
          "jdbc:mysql://localhost:3306/just_crypto", "root", "K@r11k003"); // here sonoo is database
name, root is username and password
           Statement stmt = con.createStatement();) {
       ResultSet rs = stmt.executeQuery("SELECT * FROM user WHERE email="" + email + "";");
       if (rs.next()) {
          return rs.getString("username");
       } else {
          return "NOT FOUND";
    } catch (SQLException e) {
       System.out.println(e);
    }
    return "NULL";
  }
  public static int getUserId(String email) {
     try ( Connection con = DriverManager.getConnection(
          "jdbc:mysql://localhost:3306/just_crypto", "root", "K@r11k003"); // here sonoo is database
name, root is username and password
           Statement stmt = con.createStatement();) {
       ResultSet rs = stmt.executeQuery("SELECT * FROM user WHERE email="" + email + "";");
       if (rs.next()) {
         return rs.getInt("user_id");
       } else {
         return 0;
    } catch (SQLException e) {
       System.out.println(e);
    }
    return 0;
```

```
public static float getBalance(String email) {
    try ( Connection con = DriverManager.getConnection(
          "jdbc:mysql://localhost:3306/just_crypto", "root", "K@r11k003"); // here sonoo is database
name, root is username and password
           Statement stmt = con.createStatement();) {
       ResultSet rs = stmt.executeQuery("SELECT * FROM user WHERE email="" + email + "";");
       if (rs.next()) {
          return rs.getFloat("balance");
       } else {
          return 0.0f;
    } catch (SQLException e) {
       System.out.println(e);
    return 0.0f;
  }
  public static float getCoinPrice(String coinName) {
     try ( Connection con = DriverManager.getConnection(
          "jdbc:mysql://localhost:3306/just_crypto", "root", "K@r11k003"); // here sonoo is database
name, root is username and password
           Statement stmt = con.createStatement();) {
       ResultSet rs = stmt.executeQuery("SELECT * FROM crypto WHERE name="" + coinName + "";");
       if (rs.next()) {
          return (float) rs.getInt("current price");
       } else {
          return 0.0f;
    } catch (SQLException e) {
       System.out.println(e);
    return 0.0f;
  public static String getAbbr(String coinName) {
     try ( Connection con = DriverManager.getConnection(
          jdbc:mysql://localhost:3306/just_crypto", "root", "K@r11k003"); // here sonoo is database"
name, root is username and password
           Statement stmt = con.createStatement();) {
       ResultSet rs = stmt.executeQuery("SELECT * FROM crypto WHERE name="" + coinName + "";");
       if (rs.next()) {
          return rs.getString("abbr");
       } else {
          return "";
    } catch (SQLException e) {
       System.out.println(e);
    }
    return "";
```

```
}
  public static float getUserQuantity(String coinName) {
     try ( Connection con = DriverManager.getConnection(
          "jdbc:mysql://localhost:3306/just_crypto", "root", "K@r11k003"); // here sonoo is database
name, root is username and password
           Statement stmt = con.createStatement();) {
       ResultSet rs = stmt.executeQuery("SELECT * FROM owned cryptos WHERE user id=" +
getUserId(userEmail) + " AND abbr="" + getAbbr(coinName) + "";");
       if (rs.next()) {
          return rs.getFloat("bought quantity");
       } else {
          return 0.0f;
     } catch (SQLException e) {
       System.out.println(e);
     }
     return 0.0f;
  }
}
SetInfo.java
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*/
package db;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.sql.Statement;
 * @author Kartik
public class GetInfo {
  public static String userEmail;
  public static String getUserName(String email) {
     try ( Connection con = DriverManager.getConnection(
```

```
"jdbc:mysql://localhost:3306/just_crypto", "root", "K@r11k003"); // here sonoo is database
name, root is username and password
           Statement stmt = con.createStatement();) {
       ResultSet rs = stmt.executeQuery("SELECT * FROM user WHERE email="" + email + "";");
       if (rs.next()) {
          return rs.getString("username");
       } else {
         return "NOT FOUND";
    } catch (SQLException e) {
       System.out.println(e);
    }
    return "NULL";
  }
  public static int getUserId(String email) {
    try ( Connection con = DriverManager.getConnection(
          "jdbc:mysql://localhost:3306/just_crypto", "root", "K@r11k003"); // here sonoo is database
name, root is username and password
           Statement stmt = con.createStatement();) {
       ResultSet rs = stmt.executeQuery("SELECT * FROM user WHERE email="" + email + "";");
       if (rs.next()) {
          return rs.getInt("user id");
       } else {
          return 0;
       }
    } catch (SQLException e) {
       System.out.println(e);
    }
    return 0;
  public static float getBalance(String email) {
     try ( Connection con = DriverManager.getConnection(
          "jdbc:mysql://localhost:3306/just_crypto", "root", "K@r11k003"); // here sonoo is database
name, root is username and password
           Statement stmt = con.createStatement();) {
       ResultSet rs = stmt.executeQuery("SELECT * FROM user WHERE email="" + email + "";");
       if (rs.next()) {
         return rs.getFloat("balance");
       } else {
          return 0.0f;
    } catch (SQLException e) {
       System.out.println(e);
    }
    return 0.0f;
```

```
public static float getCoinPrice(String coinName) {
     try ( Connection con = DriverManager.getConnection(
          "jdbc:mysql://localhost:3306/just_crypto", "root", "K@r11k003"); // here sonoo is database
name, root is username and password
           Statement stmt = con.createStatement();) {
       ResultSet rs = stmt.executeQuery("SELECT * FROM crypto WHERE name="" + coinName + "';");
       if (rs.next()) {
          return (float) rs.getInt("current_price");
       } else {
          return 0.0f;
    } catch (SQLException e) {
       System.out.println(e);
    return 0.0f;
  }
  public static String getAbbr(String coinName) {
     try ( Connection con = DriverManager.getConnection(
          "jdbc:mysql://localhost:3306/just_crypto", "root", "K@r11k003"); // here sonoo is database
name, root is username and password
           Statement stmt = con.createStatement();) {
       ResultSet rs = stmt.executeQuery("SELECT * FROM crypto WHERE name="" + coinName + "';");
       if (rs.next()) {
          return rs.getString("abbr");
       } else {
          return "";
    } catch (SQLException e) {
       System.out.println(e);
    return "";
  }
  public static float getUserQuantity(String coinName) {
     try ( Connection con = DriverManager.getConnection(
          "jdbc:mysql://localhost:3306/just crypto", "root", "K@r11k003"); // here sonoo is database
name, root is username and password
           Statement stmt = con.createStatement();) {
       ResultSet rs = stmt.executeQuery("SELECT * FROM owned cryptos WHERE user id=" +
getUserId(userEmail) + "AND abbr=" + getAbbr(coinName) + "";");
       if (rs.next()) {
          return rs.getFloat("bought quantity");
       } else {
         return 0.0f;
    } catch (SQLException e) {
       System.out.println(e);
```

```
} return 0.0f; }
```

Validate.java

Conclusion:-

- The project of Crypto Trading Application has been successfully completed by us with the help of JAVA GUI.
- The concept of trading, investing through personal wallet has been covered in this project.
- The application <u>Just Crypto</u> is a good application to practise investing on cryptos as this is a dummy application.
- It was a great learning experience for all of us to work in this project.