**Main class**

package studentinfomationsystem;

import java.util.logging.Level;

import java.util.logging.Logger;

public class Main {

public static void main(String[] args) {

LaunchProgressBar lp = new LaunchProgressBar();

lp.setVisible(true);

for(int i=0;i<=100;i++){

try {

lp.getProgressBar().setValue(i);

Thread.sleep(30);

} catch (InterruptedException ex) {

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

}

}

lp.dispose();

Login jFl = new Login(null, true);

jFl.setVisible(true);

}

}

**LaunchProgressBar class**

package studentinfomationsystem;

import java.awt.Dimension;

import java.awt.Graphics;

import java.awt.Toolkit;

import javax.swing.ImageIcon;

import javax.swing.JComponent;

import javax.swing.JProgressBar;

import javax.swing.plaf.PanelUI;

public class LaunchProgressBar extends javax.swing.JDialog {

/\*\* Creates new form LaunchProgressBar \*/

public LaunchProgressBar() {

setUndecorated(true);

initComponents();

this.setAlwaysOnTop(true);

SplashPanel.setUI(new BgSplash());

Dimension dim = Toolkit.getDefaultToolkit().getScreenSize();

int x = (dim.width-getWidth())/2;

int y = (dim.height-getHeight())/2;

setLocation(x, y);

ProgressBar.setStringPainted(true);

}

public JProgressBar getProgressBar() {

return ProgressBar;

}

@SuppressWarnings("unchecked")

// <editor-fold defaultstate="collapsed" desc="Generated Code">

private void initComponents() {

SplashPanel = new javax.swing.JPanel();

ProgressBar = new javax.swing.JProgressBar();

jLabel4 = new javax.swing.JLabel();

jLabel1 = new javax.swing.JLabel();

setDefaultCloseOperation(javax.swing.WindowConstants.DISPOSE\_ON\_CLOSE);

getContentPane().setLayout(new javax.swing.BoxLayout(getContentPane(), javax.swing.BoxLayout.LINE\_AXIS));

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

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

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

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

jLabel4.setFont(new java.awt.Font("Tahoma", 1, 12)); // NOI18N

jLabel4.setText("Loading . . .");

jLabel1.setIcon(new javax.swing.ImageIcon(getClass().getResource("/Gambar/dice.jpg"))); // NOI18N

javax.swing.GroupLayout SplashPanelLayout = new javax.swing.GroupLayout(SplashPanel);

SplashPanel.setLayout(SplashPanelLayout);

SplashPanelLayout.setHorizontalGroup(

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

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

.addContainerGap()

.addComponent(ProgressBar, javax.swing.GroupLayout.DEFAULT\_SIZE, 365, Short.MAX\_VALUE))

.addGroup(SplashPanelLayout.createSequentialGroup()

.addGap(21, 21, 21)

.addComponent(jLabel4)

.addGap(0, 0, Short.MAX\_VALUE))

.addComponent(jLabel1, javax.swing.GroupLayout.Alignment.TRAILING, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)

);

SplashPanelLayout.setVerticalGroup(

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

.addGroup(SplashPanelLayout.createSequentialGroup()

.addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED\_SIZE, 282, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)

.addComponent(jLabel4)

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

.addComponent(ProgressBar, javax.swing.GroupLayout.PREFERRED\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addGap(0, 0, 0))

);

getContentPane().add(SplashPanel);

pack();

}// </editor-fold>

// Variables declaration - do not modify

private javax.swing.JProgressBar ProgressBar;

private javax.swing.JPanel SplashPanel;

private javax.swing.JLabel jLabel1;

private javax.swing.JLabel jLabel4;

// End of variables declaration

}

class BgSplash extends PanelUI {

ImageIcon background = new ImageIcon(getClass().getResource("/Gambar/dice.jpg"));

@Override

public void paint(Graphics g, JComponent c) {

g.drawImage(background.getImage(), 0, 0, null);

}

}

**Login class**

package studentinfomationsystem;

import javax.swing.JOptionPane;

public class Login extends javax.swing.JDialog {

/\*\* Creates new form Login \*/

public Login(java.awt.Frame parent, boolean modal) {

super(parent, modal);

initComponents();

this.setLocationRelativeTo(null);

this.setTitle("Login");

this.setAlwaysOnTop(true);

}

@SuppressWarnings("unchecked")

// <editor-fold defaultstate="collapsed" desc="Generated Code">

private void initComponents() {

jPanel1 = new javax.swing.JPanel();

jLabel2 = new javax.swing.JLabel();

jLabel1 = new javax.swing.JLabel();

txt\_username = new javax.swing.JTextField();

cmd\_login = new javax.swing.JButton();

txt\_password = new javax.swing.JPasswordField();

jButton1 = new javax.swing.JButton();

jLabel3 = new javax.swing.JLabel();

setDefaultCloseOperation(javax.swing.WindowConstants.DISPOSE\_ON\_CLOSE);

setBackground(new java.awt.Color(204, 204, 255));

jPanel1.setBorder(javax.swing.BorderFactory.createTitledBorder(null, "Login", javax.swing.border.TitledBorder.DEFAULT\_JUSTIFICATION, javax.swing.border.TitledBorder.DEFAULT\_POSITION, new java.awt.Font("Lucida Sans Typewriter", 1, 14), new java.awt.Color(0, 0, 204))); // NOI18N

jLabel2.setFont(new java.awt.Font("Tahoma", 1, 12)); // NOI18N

jLabel2.setText("Password");

jLabel1.setFont(new java.awt.Font("Tahoma", 1, 12)); // NOI18N

jLabel1.setText("Username");

cmd\_login.setText("Login");

cmd\_login.addActionListener(new java.awt.event.ActionListener() {

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

cmd\_loginActionPerformed(evt);

}

});

txt\_password.addKeyListener(new java.awt.event.KeyAdapter() {

public void keyPressed(java.awt.event.KeyEvent evt) {

txt\_passwordKeyPressed(evt);

}

});

jButton1.setText("Cancel");

jButton1.addActionListener(new java.awt.event.ActionListener() {

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

jButton1ActionPerformed(evt);

}

});

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

jPanel1.setLayout(jPanel1Layout);

jPanel1Layout.setHorizontalGroup(

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

.addGroup(jPanel1Layout.createSequentialGroup()

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

.addGroup(jPanel1Layout.createSequentialGroup()

.addContainerGap()

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

.addComponent(jLabel1, javax.swing.GroupLayout.Alignment.TRAILING)

.addComponent(jLabel2, javax.swing.GroupLayout.Alignment.TRAILING))

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

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

.addComponent(txt\_username)

.addComponent(txt\_password, javax.swing.GroupLayout.DEFAULT\_SIZE, 115, Short.MAX\_VALUE)))

.addGroup(jPanel1Layout.createSequentialGroup()

.addGap(30, 30, 30)

.addComponent(cmd\_login)

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

.addComponent(jButton1)))

.addContainerGap(25, Short.MAX\_VALUE))

);

jPanel1Layout.setVerticalGroup(

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

.addGroup(jPanel1Layout.createSequentialGroup()

.addContainerGap()

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

.addComponent(jLabel1)

.addComponent(txt\_username, javax.swing.GroupLayout.PREFERRED\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.PREFERRED\_SIZE))

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

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

.addComponent(jLabel2)

.addComponent(txt\_password, javax.swing.GroupLayout.PREFERRED\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.PREFERRED\_SIZE))

.addGap(18, 18, Short.MAX\_VALUE)

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

.addComponent(cmd\_login)

.addComponent(jButton1))

.addContainerGap())

);

jLabel3.setIcon(new javax.swing.ImageIcon(getClass().getResource("/Gambar/fender-vince-ray-voodoo-bucket-300ce.jpg"))); // NOI18N

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()

.addComponent(jLabel3, javax.swing.GroupLayout.PREFERRED\_SIZE, 438, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)

.addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addContainerGap())

);

layout.setVerticalGroup(

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

.addGroup(layout.createSequentialGroup()

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

.addGroup(layout.createSequentialGroup()

.addGap(71, 71, 71)

.addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.PREFERRED\_SIZE))

.addGroup(layout.createSequentialGroup()

.addContainerGap()

.addComponent(jLabel3, javax.swing.GroupLayout.PREFERRED\_SIZE, 259, javax.swing.GroupLayout.PREFERRED\_SIZE)))

.addContainerGap(javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE))

);

pack();

}// </editor-fold>

private void cmd\_loginActionPerformed(java.awt.event.ActionEvent evt) {

String name = txt\_username.getText();

String pass = txt\_password.getText();

if(name.equals("abc")&&pass.equals("123")){

dispose();

Student s = new Student();

s.setVisible(true);

}

else{

JOptionPane.showMessageDialog(rootPane, "Error");

}

}

private void txt\_passwordKeyPressed(java.awt.event.KeyEvent evt) {

}

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {

System.exit(0);

}

public static void main(String args[]) {

java.awt.EventQueue.invokeLater(new Runnable() {

public void run() {

Login dialog = new Login(new javax.swing.JFrame(), true);

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

public void windowClosing(java.awt.event.WindowEvent e) {

System.exit(0);

}

});

dialog.setVisible(true);

}

});

}

// Variables declaration - do not modify

private javax.swing.JButton cmd\_login;

private javax.swing.JButton jButton1;

private javax.swing.JLabel jLabel1;

private javax.swing.JLabel jLabel2;

private javax.swing.JLabel jLabel3;

private javax.swing.JPanel jPanel1;

private javax.swing.JPasswordField txt\_password;

private javax.swing.JTextField txt\_username;

// End of variables declaration

}

**Student class**

package studentinfomationsystem;

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.ResultSet;

import java.sql.SQLException;

import java.sql.Statement;

import java.util.Calendar;

import java.util.GregorianCalendar;

import java.util.logging.Level;

import java.util.logging.Logger;

import javax.swing.JOptionPane;

import java.awt.Toolkit;

import java.awt.event.WindowEvent;

import java.awt.print.PrinterException;

public class Student extends javax.swing.JFrame {

Connection conn;

ResultSet rs;

Statement state;

int curRow = 0;

public Student() {

initComponents();

DoConnect();

CurrentDate();

}

public void DoConnect(){

try{

String host = "jdbc:derby://localhost:1527/StudentInfo";

String dName = "abc";

String dPass= "123";

conn = DriverManager.getConnection( host, dName, dPass );

state = conn.createStatement(ResultSet.TYPE\_SCROLL\_SENSITIVE, ResultSet.CONCUR\_UPDATABLE);

String SQL = "SELECT \* FROM APP.STUDENT";

rs = state.executeQuery( SQL );

rs.next();

int Id = rs.getInt("StdID");

String Id2 = Integer.toString(Id); //Convert int ID to String

String sName = rs.getString("StdName");

String sFaculty = rs.getString("Faculty");

String sCourse = rs.getString("Course");

String sCity = rs.getString("City");

String sAddress = rs.getString("Address");

String sPhone = rs.getString("Phone");

String sEmail = rs.getString("Email");

txtId.setText(Id2); //Set record values onto form textfields

txtName.setText(sName);

txtFaculty.setText(sFaculty);

txtCourse.setText(sCourse);

txtCity.setText(sCity);

txtAddress.setText(sAddress);

txtPhone.setText(sPhone);

txtEmail.setText(sEmail);

}

catch ( SQLException err ) { //Handle database connection errors

System.out.println( err.getMessage( ) );

}

}

public void CurrentDate(){

Thread clock = new Thread(){

public void run(){

for(;;){

Calendar cal = new GregorianCalendar();

int month = cal.get(Calendar.MONTH);

int year = cal.get(Calendar.YEAR);

int day = cal.get(Calendar.DAY\_OF\_MONTH);

txt\_date.setText("Date "+year+"/"+(month+1)+"/"+day);

int second = cal.get(Calendar.SECOND);

int minute = cal.get(Calendar.MINUTE);

int hour = cal.get(Calendar.HOUR);

txt\_time.setText("Time "+hour+":"+(minute)+":"+second);

try {

sleep(1000);

} catch (InterruptedException ex) {

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

}

}

}

};

clock.start();

}

public void close(){

WindowEvent winClosingEvent = new WindowEvent(this,WindowEvent.WINDOW\_CLOSING);

Toolkit.getDefaultToolkit().getSystemEventQueue().postEvent(winClosingEvent);

}

/\*\*

\* 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();

txtCourse = new javax.swing.JTextField();

txtCity = new javax.swing.JTextField();

txtFaculty = new javax.swing.JTextField();

jLabel4 = new javax.swing.JLabel();

jLabel1 = new javax.swing.JLabel();

jLabel2 = new javax.swing.JLabel();

jLabel7 = new javax.swing.JLabel();

jLabel6 = new javax.swing.JLabel();

txtAddress = new javax.swing.JTextField();

txtId = new javax.swing.JTextField();

jLabel5 = new javax.swing.JLabel();

txtName = new javax.swing.JTextField();

jLabel8 = new javax.swing.JLabel();

txtEmail = new javax.swing.JTextField();

jLabel3 = new javax.swing.JLabel();

txtPhone = new javax.swing.JTextField();

btnFirst = new javax.swing.JButton();

btnPrev = new javax.swing.JButton();

btnNext = new javax.swing.JButton();

btnLast = new javax.swing.JButton();

jPanel2 = new javax.swing.JPanel();

btnNew = new javax.swing.JButton();

btnUpdate = new javax.swing.JButton();

jButton2 = new javax.swing.JButton();

btnDel = new javax.swing.JButton();

btnSave = new javax.swing.JButton();

btnCancel = new javax.swing.JButton();

jButton4 = new javax.swing.JButton();

jButton1 = new javax.swing.JButton();

jButton3 = new javax.swing.JButton();

jMenuBar1 = new javax.swing.JMenuBar();

jMenu1 = new javax.swing.JMenu();

jMenuItem2 = new javax.swing.JMenuItem();

jMenuItem1 = new javax.swing.JMenuItem();

txt\_date = new javax.swing.JMenu();

txt\_time = new javax.swing.JMenu();

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT\_ON\_CLOSE);

jPanel1.setBorder(javax.swing.BorderFactory.createTitledBorder(null, "Student Infomation", javax.swing.border.TitledBorder.DEFAULT\_JUSTIFICATION, javax.swing.border.TitledBorder.DEFAULT\_POSITION, new java.awt.Font("Adobe Garamond Pro Bold", 1, 18), java.awt.Color.red)); // NOI18N

jLabel4.setFont(new java.awt.Font("Tahoma", 1, 11)); // NOI18N

jLabel4.setText("Course");

jLabel1.setFont(new java.awt.Font("Tahoma", 1, 11)); // NOI18N

jLabel1.setText("Id");

jLabel2.setFont(new java.awt.Font("Tahoma", 1, 11)); // NOI18N

jLabel2.setText("Name");

jLabel7.setFont(new java.awt.Font("Tahoma", 1, 11)); // NOI18N

jLabel7.setText("Phone");

jLabel6.setFont(new java.awt.Font("Tahoma", 1, 11)); // NOI18N

jLabel6.setText("Address");

jLabel5.setFont(new java.awt.Font("Tahoma", 1, 11)); // NOI18N

jLabel5.setText("City");

jLabel8.setFont(new java.awt.Font("Tahoma", 1, 11)); // NOI18N

jLabel8.setText("Email");

jLabel3.setFont(new java.awt.Font("Tahoma", 1, 11)); // NOI18N

jLabel3.setText("Faculty");

btnFirst.setText("First");

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

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

btnFirstActionPerformed(evt);

}

});

btnPrev.setText("Prev");

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

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

btnPrevActionPerformed(evt);

}

});

btnNext.setText("Next");

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

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

btnNextActionPerformed(evt);

}

});

btnLast.setText("Last");

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

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

btnLastActionPerformed(evt);

}

});

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

jPanel1.setLayout(jPanel1Layout);

jPanel1Layout.setHorizontalGroup(

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

.addGroup(jPanel1Layout.createSequentialGroup()

.addContainerGap()

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

.addComponent(jLabel3)

.addComponent(jLabel1)

.addComponent(jLabel5)

.addComponent(jLabel7))

.addGap(18, 18, 18)

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

.addComponent(txtId)

.addComponent(txtFaculty)

.addComponent(txtCity)

.addComponent(txtPhone, javax.swing.GroupLayout.PREFERRED\_SIZE, 76, javax.swing.GroupLayout.PREFERRED\_SIZE))

.addGap(18, 18, 18)

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

.addComponent(jLabel2)

.addComponent(jLabel4)

.addComponent(jLabel6)

.addComponent(jLabel8))

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)

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

.addComponent(txtCourse, javax.swing.GroupLayout.DEFAULT\_SIZE, 146, Short.MAX\_VALUE)

.addComponent(txtAddress)

.addComponent(txtName)

.addComponent(txtEmail))

.addGap(35, 35, 35))

.addGroup(jPanel1Layout.createSequentialGroup()

.addGap(22, 22, 22)

.addComponent(btnFirst)

.addGap(18, 18, 18)

.addComponent(btnPrev)

.addGap(18, 18, 18)

.addComponent(btnNext)

.addGap(18, 18, 18)

.addComponent(btnLast)

.addContainerGap(102, Short.MAX\_VALUE))

);

jPanel1Layout.setVerticalGroup(

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

.addGroup(jPanel1Layout.createSequentialGroup()

.addContainerGap()

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

.addComponent(txtId, javax.swing.GroupLayout.PREFERRED\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addComponent(jLabel1)

.addComponent(txtName, javax.swing.GroupLayout.PREFERRED\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addComponent(jLabel2))

.addGap(18, 18, 18)

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

.addComponent(jLabel3)

.addComponent(txtFaculty, javax.swing.GroupLayout.PREFERRED\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addComponent(jLabel4)

.addComponent(txtCourse, javax.swing.GroupLayout.PREFERRED\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.PREFERRED\_SIZE))

.addGap(18, 18, 18)

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

.addComponent(txtCity, javax.swing.GroupLayout.PREFERRED\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addComponent(jLabel6)

.addComponent(txtAddress, javax.swing.GroupLayout.PREFERRED\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addComponent(jLabel5))

.addGap(18, 18, 18)

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

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

.addComponent(jLabel8)

.addComponent(txtPhone, javax.swing.GroupLayout.PREFERRED\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addComponent(jLabel7))

.addComponent(txtEmail, javax.swing.GroupLayout.PREFERRED\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.PREFERRED\_SIZE))

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 32, Short.MAX\_VALUE)

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

.addComponent(btnFirst)

.addComponent(btnPrev)

.addComponent(btnNext)

.addComponent(btnLast))

.addGap(24, 24, 24))

);

jPanel2.setBorder(javax.swing.BorderFactory.createTitledBorder(null, "Command", javax.swing.border.TitledBorder.DEFAULT\_JUSTIFICATION, javax.swing.border.TitledBorder.DEFAULT\_POSITION, new java.awt.Font("Comic Sans MS", 1, 18))); // NOI18N

btnNew.setIcon(new javax.swing.ImageIcon(getClass().getResource("/Gambar/Button-Add-icon.png"))); // NOI18N

btnNew.setText("New");

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

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

btnNewActionPerformed(evt);

}

});

btnUpdate.setIcon(new javax.swing.ImageIcon(getClass().getResource("/Gambar/Actions-document-edit-icon.png"))); // NOI18N

btnUpdate.setText("Update");

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

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

btnUpdateActionPerformed(evt);

}

});

jButton2.setIcon(new javax.swing.ImageIcon(getClass().getResource("/Gambar/print-icon.png"))); // NOI18N

jButton2.setText("Print");

jButton2.addActionListener(new java.awt.event.ActionListener() {

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

jButton2ActionPerformed(evt);

}

});

btnDel.setIcon(new javax.swing.ImageIcon(getClass().getResource("/Gambar/Delete-Database-icon.png"))); // NOI18N

btnDel.setText("Delete");

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

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

btnDelActionPerformed(evt);

}

});

btnSave.setIcon(new javax.swing.ImageIcon(getClass().getResource("/Gambar/save.png"))); // NOI18N

btnSave.setText("Save");

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

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

btnSaveActionPerformed(evt);

}

});

btnCancel.setIcon(new javax.swing.ImageIcon(getClass().getResource("/Gambar/File-Delete-icon.png"))); // NOI18N

btnCancel.setText("Cancel");

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

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

btnCancelActionPerformed(evt);

}

});

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

jPanel2.setLayout(jPanel2Layout);

jPanel2Layout.setHorizontalGroup(

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

.addGroup(jPanel2Layout.createSequentialGroup()

.addContainerGap()

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

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING, false)

.addComponent(jButton2, javax.swing.GroupLayout.Alignment.LEADING, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)

.addComponent(btnCancel, javax.swing.GroupLayout.Alignment.LEADING, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE))

.addComponent(btnUpdate)

.addComponent(btnDel, javax.swing.GroupLayout.DEFAULT\_SIZE, 91, Short.MAX\_VALUE)

.addComponent(btnSave, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)

.addComponent(btnNew, javax.swing.GroupLayout.Alignment.TRAILING, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE))

.addContainerGap())

);

jPanel2Layout.setVerticalGroup(

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

.addGroup(jPanel2Layout.createSequentialGroup()

.addContainerGap()

.addComponent(btnUpdate)

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

.addComponent(btnNew)

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

.addComponent(btnSave)

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

.addComponent(btnDel)

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

.addComponent(btnCancel)

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

.addComponent(jButton2)

.addContainerGap(19, Short.MAX\_VALUE))

);

jButton4.setIcon(new javax.swing.ImageIcon(getClass().getResource("/Gambar/book-icon.png"))); // NOI18N

jButton4.setText("BookStore");

jButton4.addActionListener(new java.awt.event.ActionListener() {

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

jButton4ActionPerformed(evt);

}

});

jButton1.setIcon(new javax.swing.ImageIcon(getClass().getResource("/Gambar/DVD-icon.png"))); // NOI18N

jButton1.setText("VCD");

jButton1.addActionListener(new java.awt.event.ActionListener() {

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

jButton1ActionPerformed(evt);

}

});

jButton3.setIcon(new javax.swing.ImageIcon(getClass().getResource("/Gambar/money-icon.png"))); // NOI18N

jButton3.setText("Account");

jButton3.addActionListener(new java.awt.event.ActionListener() {

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

jButton3ActionPerformed(evt);

}

});

jMenu1.setText("File");

jMenuItem2.setAccelerator(javax.swing.KeyStroke.getKeyStroke(java.awt.event.KeyEvent.VK\_C, java.awt.event.InputEvent.ALT\_MASK | java.awt.event.InputEvent.CTRL\_MASK));

jMenuItem2.setIcon(new javax.swing.ImageIcon(getClass().getResource("/Gambar/Bookmark-delete-icon.png"))); // NOI18N

jMenuItem2.setText("Close");

jMenuItem2.addActionListener(new java.awt.event.ActionListener() {

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

jMenuItem2ActionPerformed(evt);

}

});

jMenu1.add(jMenuItem2);

jMenuItem1.setAccelerator(javax.swing.KeyStroke.getKeyStroke(java.awt.event.KeyEvent.VK\_E, java.awt.event.InputEvent.CTRL\_MASK));

jMenuItem1.setIcon(new javax.swing.ImageIcon(getClass().getResource("/Gambar/Button-Close-icon (1).png"))); // NOI18N

jMenuItem1.setText("Exit");

jMenuItem1.addActionListener(new java.awt.event.ActionListener() {

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

jMenuItem1ActionPerformed(evt);

}

});

jMenu1.add(jMenuItem1);

jMenuBar1.add(jMenu1);

txt\_date.setText("Date");

jMenuBar1.add(txt\_date);

txt\_time.setText("Time");

jMenuBar1.add(txt\_time);

setJMenuBar(jMenuBar1);

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

getContentPane().setLayout(layout);

layout.setHorizontalGroup(

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

.addGroup(layout.createSequentialGroup()

.addGap(31, 31, 31)

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

.addGroup(layout.createSequentialGroup()

.addComponent(jButton4)

.addGap(30, 30, 30)

.addComponent(jButton1, javax.swing.GroupLayout.PREFERRED\_SIZE, 83, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addGap(35, 35, 35)

.addComponent(jButton3))

.addGroup(layout.createSequentialGroup()

.addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addGap(29, 29, 29)

.addComponent(jPanel2, javax.swing.GroupLayout.PREFERRED\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.PREFERRED\_SIZE)))

.addContainerGap(javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE))

);

layout.setVerticalGroup(

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

.addGroup(layout.createSequentialGroup()

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

.addGroup(layout.createSequentialGroup()

.addGap(22, 22, 22)

.addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.PREFERRED\_SIZE))

.addGroup(layout.createSequentialGroup()

.addGap(31, 31, 31)

.addComponent(jPanel2, javax.swing.GroupLayout.PREFERRED\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.PREFERRED\_SIZE)))

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 13, Short.MAX\_VALUE)

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

.addComponent(jButton4)

.addComponent(jButton1)

.addComponent(jButton3))

.addGap(20, 20, 20))

);

pack();

}// </editor-fold>

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

try {

rs.first();

int Id = rs.getInt("StdID");

String Id2 = Integer.toString(Id); //Convert int ID to String

String sName = rs.getString("StdName");

String sFaculty = rs.getString("Faculty");

String sCourse = rs.getString("Course");

String sCity = rs.getString("City");

String sAddress = rs.getString("Address");

String sPhone = rs.getString("Phone");

String sEmail = rs.getString("Email");

txtId.setText(Id2);

txtName.setText(sName);

txtFaculty.setText(sFaculty);

txtCourse.setText(sCourse);

txtCity.setText(sCity);

txtAddress.setText(sAddress);

txtPhone.setText(sPhone);

txtEmail.setText(sEmail);

}

catch(SQLException err){

JOptionPane.showMessageDialog(this, err.getMessage());

}

}

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

try {

if(rs.next( )){

int Id = rs.getInt("StdID");

String Id2 = Integer.toString(Id); //Convert int ID to String

String sName = rs.getString("StdName");

String sFaculty = rs.getString("Faculty");

String sCourse = rs.getString("Course");

String sCity = rs.getString("City");

String sAddress = rs.getString("Address");

String sPhone = rs.getString("Phone");

String sEmail = rs.getString("Email");

txtId.setText(Id2);

txtName.setText(sName);

txtFaculty.setText(sFaculty);

txtCourse.setText(sCourse);

txtCity.setText(sCity);

txtAddress.setText(sAddress);

txtPhone.setText(sPhone);

txtEmail.setText(sEmail);

}

else{

rs.previous();

JOptionPane.showMessageDialog(this,"end of file");

}

}

catch(SQLException err){

JOptionPane.showMessageDialog(this, err.getMessage());

} // TODO add your handling code here:

}

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

try{

if(rs.previous()){

int Id = rs.getInt("StdID");

String Id2 = Integer.toString(Id); //Convert int ID to String

String sName = rs.getString("StdName");

String sFaculty = rs.getString("Faculty");

String sCourse = rs.getString("Course");

String sCity = rs.getString("City");

String sAddress = rs.getString("Address");

String sPhone = rs.getString("Phone");

String sEmail = rs.getString("Email");

txtId.setText(Id2);

txtName.setText(sName);

txtFaculty.setText(sFaculty);

txtCourse.setText(sCourse);

txtCity.setText(sCity);

txtAddress.setText(sAddress);

txtPhone.setText(sPhone);

txtEmail.setText(sEmail);

}

else{

rs.next();

JOptionPane.showMessageDialog(this, evt);

}

}

catch(SQLException err){

JOptionPane.showMessageDialog(this, err);

} // TODO add your handling code here:

}

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

try {

rs.last();

int Id = rs.getInt("StdID");

String Id2 = Integer.toString(Id); //Convert int ID to String

String sName = rs.getString("StdName");

String sFaculty = rs.getString("Faculty");

String sCourse = rs.getString("Course");

String sCity = rs.getString("City");

String sAddress = rs.getString("Address");

String sPhone = rs.getString("Phone");

String sEmail = rs.getString("Email");

txtId.setText(Id2);

txtName.setText(sName);

txtFaculty.setText(sFaculty);

txtCourse.setText(sCourse);

txtCity.setText(sCity);

txtAddress.setText(sAddress);

txtPhone.setText(sPhone);

txtEmail.setText(sEmail);

}

catch(SQLException err){

JOptionPane.showMessageDialog(this, err.getMessage());

} // TODO add your handling code here:

}

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

try{

curRow = rs.getRow(); //Get current row

rs.last(); //Go to last record

int Id = rs.getInt("StdID")+1; //Increment last record by 1

String Id2 = Integer.toString(Id); //Change integer to string

txtId.setText(Id2); //Set this number as new Student ID

//Clear all other text fields ready for new record

txtId.setText("");

txtName.setText("");

txtFaculty.setText("");

txtCourse.setText("");

txtCity.setText("");

txtAddress.setText("");

txtPhone.setText("");

txtEmail.setText("");

txtCity.setText("");

//Disable/Enable appropriate buttons

btnFirst.setEnabled( false );

btnPrev.setEnabled( false ) ;

btnNext.setEnabled( false );

btnLast.setEnabled( false );

btnUpdate.setEnabled( false );

btnDel.setEnabled( false );

btnNew.setEnabled( false );

btnSave.setEnabled( true );

btnCancel.setEnabled( true );

}

catch (SQLException err) { //Handle any error here

JOptionPane.showMessageDialog(this, err.getMessage());

}

}

private void jMenuItem1ActionPerformed(java.awt.event.ActionEvent evt) {

System.exit(0);

}

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

try{

rs.absolute( curRow );

txtId.setText( Integer.toString( rs.getInt("StdID" )));

txtName.setText(rs.getString("StdName"));

txtFaculty.setText(rs.getString("Faculty"));

txtCourse.setText(rs.getString("Course"));

txtCity.setText(rs.getString("City"));

txtAddress.setText(rs.getString("Address"));

txtPhone.setText(rs.getString("Phone"));

txtEmail.setText(rs.getString("Email"));

//Disable/Enable appropriate buttons

btnFirst.setEnabled( true );

btnPrev.setEnabled( true ) ;

btnNext.setEnabled( true );

btnLast.setEnabled( true );

btnUpdate.setEnabled( true );

btnDel.setEnabled( true );

btnNew.setEnabled( true );

btnSave.setEnabled( false );

btnCancel.setEnabled( false );

}catch(SQLException err){

JOptionPane.showMessageDialog(this, err.getMessage());

}

}

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

//Get data from form text fields

String newId = txtId.getText( );

String newName = txtName.getText( );

String newFaculty = txtFaculty.getText( );

String newCourse = txtCourse.getText( );

String newCity = txtCity.getText( );

String newAddress = txtAddress.getText( );

String newTelephone = txtPhone.getText( );

String newEmail = txtEmail.getText( );

//Check if user has entered required data

if(newId.equals("")||newName.equals("")||newFaculty.equals("")||newCourse.equals("")

||newAddress.equals("")||newTelephone.equals("")){

JOptionPane.showMessageDialog(this, "Please enter required details");

}else{

int newId2 = Integer.parseInt( newId ); //Change ID to int before saving

try {

//Update ResultSet with new data

rs.moveToInsertRow( );

rs.updateInt( "StdID", newId2 );

rs.updateString( "StdName", newName );

rs.updateString( "Faculty", newFaculty );

rs.updateString( "Course", newCourse );

rs.updateString( "City", newCity );

rs.updateString( "Address", newAddress );

rs.updateString( "Phone", newTelephone );

rs.updateString( "Email", newEmail );

rs.insertRow( ); //Insert row into table

rs.close( ); //Close ResultSet

state.close( ); //Close connection

//Re-load table data

state = conn.createStatement(ResultSet.TYPE\_SCROLL\_SENSITIVE, ResultSet.CONCUR\_UPDATABLE);

String SQL = "SELECT \* FROM APP.STUDENT";

rs = state.executeQuery( SQL );

rs.last( ); //Got to last record and get data

int Id = rs.getInt("StdID");

String Id2 = Integer.toString(Id);

String sName = rs.getString("StdName");

String sFaculty = rs.getString("Faculty");

String sCourse = rs.getString("Course");

String sCity = rs.getString("City");

String sAddress = rs.getString("Address");

String sTelephone = rs.getString("Phone");

String semail = rs.getString("Email");

//Populate form with data again

txtId.setText(Id2);

txtName.setText(sName);

txtFaculty.setText(sFaculty);

txtCourse.setText(sCourse);

txtCity.setText(sCity);

txtAddress.setText(sAddress);

txtPhone.setText(sTelephone);

txtEmail.setText(semail);

//Disable/Enable appropriate buttons

btnFirst.setEnabled( true );

btnPrev.setEnabled( true ) ;

btnNext.setEnabled( true );

btnLast.setEnabled( true );

btnUpdate.setEnabled( true );

btnDel.setEnabled( true );

btnNew.setEnabled( true );

btnSave.setEnabled( false );

btnCancel.setEnabled( false );

JOptionPane.showMessageDialog(this, "Record saved successfully");

}

catch (SQLException err) { //Handle errors here

JOptionPane.showMessageDialog(this, err.getMessage( ));

}

}

}

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

//Ask user to confirm record deletion

int temp = JOptionPane.showConfirmDialog(null, "Delete record?" , "Confirm deletion" , JOptionPane.YES\_NO\_OPTION);

if (temp == 0) //Here we check which option was selected by user: Yes = 0

{

try {

rs.deleteRow( ); //Delete table record

rs.close( ); //Close ResultSet

state.close( ); //Close connection

//Re-load table data

state = conn.createStatement(ResultSet.TYPE\_SCROLL\_INSENSITIVE, ResultSet.CONCUR\_UPDATABLE);

String SQL = "SELECT \* FROM APP.Students";

rs = state.executeQuery( SQL );

rs.next( );

int Id = rs.getInt("StdID");

String Id2 = Integer.toString(Id);

String sName = rs.getString("StdName");

String sFaculty = rs.getString("Faculty");

String sCourse = rs.getString("Course");

String sCity = rs.getString("City");

String sAddress = rs.getString("Address");

String sTelephone = rs.getString("Phone");

String sEmail = rs.getString("Email");

//Populate form with data again

txtId.setText(Id2);

txtName.setText(sName);

txtFaculty.setText(sFaculty);

txtCourse.setText(sCourse);

txtCity.setText(sCity);

txtAddress.setText(sAddress);

txtPhone.setText(sTelephone);

txtEmail.setText(sEmail);

JOptionPane.showMessageDialog(this, "Record deleted successfully");

}

catch (SQLException err) { //Handle errors here

JOptionPane.showMessageDialog(this, err.getMessage());

}

}

}

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

//Get data from form text fields

String upId = txtId.getText( );

String upName = txtName.getText( );

String upFaculty = txtFaculty.getText( );

String upCourse = txtCourse.getText( );

String upCity = txtCity.getText( );

String upAddress = txtAddress.getText( );

String upphone = txtPhone.getText( );

String upemail = txtEmail.getText( );

int upId2 = Integer.parseInt( upId );//Change string ID to int ID before update

try {

//Update table with new data

rs.updateString( "StdID", upId );

rs.updateString( "StdName", upName );

rs.updateString( "Faculty", upFaculty );

rs.updateString( "Course", upCourse );

rs.updateString( "City", upCity );

rs.updateString( "Address", upAddress );

rs.updateString( "Phone", upphone );

rs.updateString( "Email", upemail );

rs.updateRow( ); //Commit changes to table

JOptionPane.showMessageDialog(this, "Record updated");

}

catch (SQLException err) { //Handle errors here

JOptionPane.showMessageDialog(this, err.getMessage( ));

}

}

private void jMenuItem2ActionPerformed(java.awt.event.ActionEvent evt) {

close();

}

private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {

try {

boolean abcd = txtId.print();

if(abcd){

JOptionPane.showMessageDialog(null, "Done printing","Infomation",JOptionPane.INFORMATION\_MESSAGE);

}

else{

JOptionPane.showMessageDialog(null, "Printing","Printer",JOptionPane.ERROR\_MESSAGE);

}

} catch (PrinterException ex) {

JOptionPane.showMessageDialog(null, ex);

}

}

private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {

new BookStoreForm().setVisible(true);

dispose();

}

private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {

new AccountForm().setVisible(true);

dispose();

}

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {

new VcdForm().setVisible(true);

dispose();

}

// Variables declaration - do not modify

private javax.swing.JButton btnCancel;

private javax.swing.JButton btnDel;

private javax.swing.JButton btnFirst;

private javax.swing.JButton btnLast;

private javax.swing.JButton btnNew;

private javax.swing.JButton btnNext;

private javax.swing.JButton btnPrev;

private javax.swing.JButton btnSave;

private javax.swing.JButton btnUpdate;

private javax.swing.JButton jButton1;

private javax.swing.JButton jButton2;

private javax.swing.JButton jButton3;

private javax.swing.JButton jButton4;

private javax.swing.JLabel jLabel1;

private javax.swing.JLabel jLabel2;

private javax.swing.JLabel jLabel3;

private javax.swing.JLabel jLabel4;

private javax.swing.JLabel jLabel5;

private javax.swing.JLabel jLabel6;

private javax.swing.JLabel jLabel7;

private javax.swing.JLabel jLabel8;

private javax.swing.JMenu jMenu1;

private javax.swing.JMenuBar jMenuBar1;

private javax.swing.JMenuItem jMenuItem1;

private javax.swing.JMenuItem jMenuItem2;

private javax.swing.JPanel jPanel1;

private javax.swing.JPanel jPanel2;

private javax.swing.JTextField txtAddress;

private javax.swing.JTextField txtCity;

private javax.swing.JTextField txtCourse;

private javax.swing.JTextField txtEmail;

private javax.swing.JTextField txtFaculty;

private javax.swing.JTextField txtId;

private javax.swing.JTextField txtName;

private javax.swing.JTextField txtPhone;

private javax.swing.JMenu txt\_date;

private javax.swing.JMenu txt\_time;

// End of variables declaration

}

**BookStoreForm**

package studentinfomationsystem;

import javax.swing.JOptionPane;

public class BookStoreForm extends javax.swing.JFrame {

/\*\*

\* Creates new form BookStoreForm

\*/

public BookStoreForm() {

initComponents();

jTable1.setModel(new javax.swing.table.DefaultTableModel(

new Object [][] {

{1112, "Object Oriented Programming", 89.99, "Book"},

{1113, "Software Engineering", 70.80, "Book"},

{1114, "C Programming", 50.50, "Book"},

{2111, "Reader Digest", 33.39, "Magazine"},

{2112, "Programming Magazine", 45.50, "Magazine"},

},

new String [] {

"ISBN", "Title", "Price(RM)", "Genre"

}

));

}

@SuppressWarnings("unchecked")

// <editor-fold defaultstate="collapsed" desc="Generated Code">

private void initComponents() {

jScrollPane1 = new javax.swing.JScrollPane();

jTable1 = new javax.swing.JTable();

jButton1 = new javax.swing.JButton();

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT\_ON\_CLOSE);

jTable1.setModel(new javax.swing.table.DefaultTableModel(

new Object [][] {

{null, null, null, null},

{null, null, null, null},

{null, null, null, null},

{null, null, null, null}

},

new String [] {

"Title 1", "Title 2", "Title 3", "Title 4"

}

));

jScrollPane1.setViewportView(jTable1);

jButton1.setIcon(new javax.swing.ImageIcon(getClass().getResource("/Gambar/shop-cart-icon.png"))); // NOI18N

jButton1.setText("Click Here To Purchase");

jButton1.addActionListener(new java.awt.event.ActionListener() {

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

jButton1ActionPerformed(evt);

}

});

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

getContentPane().setLayout(layout);

layout.setHorizontalGroup(

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

.addGroup(layout.createSequentialGroup()

.addGap(50, 50, 50)

.addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED\_SIZE, 563, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addContainerGap(20, Short.MAX\_VALUE))

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

.addContainerGap(javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)

.addComponent(jButton1, javax.swing.GroupLayout.PREFERRED\_SIZE, 191, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addGap(231, 231, 231))

);

layout.setVerticalGroup(

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

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

.addContainerGap(21, Short.MAX\_VALUE)

.addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED\_SIZE, 118, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addGap(85, 85, 85)

.addComponent(jButton1, javax.swing.GroupLayout.PREFERRED\_SIZE, 34, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addGap(129, 129, 129))

);

pack();

}// </editor-fold>

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {

Customer cust = new Customer("","","","");

Book[] bk = new Book[5];

Receipt rc = new Receipt();

cust.customerInput();

int buku = Integer.parseInt(JOptionPane.showInputDialog("How many book do you want to purchase?: "));

for(int i=0; i<buku; i++){

bk[i] = new Book();

bk[i].bookInput();

bk[i].setBookInfo(bk[i].getIsbn());

}

rc.calcBookPrice(bk, buku);

rc.calcDiscount(rc.getTotalPrice());

rc.caclMemberPoint(rc.getTotalPrice());

rc.displayReceiptInfo(cust, bk, buku);

}

// Variables declaration - do not modify

private javax.swing.JButton jButton1;

private javax.swing.JScrollPane jScrollPane1;

private javax.swing.JTable jTable1;

// End of variables declaration

}

**VcdForm**

package studentinfomationsystem;

import javax.swing.JOptionPane;

public class VcdForm extends javax.swing.JFrame {

/\*\*

\* Creates new form VcdForm

\*/

public VcdForm() {

initComponents();

jTable1.setModel(new javax.swing.table.DefaultTableModel(

new Object [][] {

{"Tom & Jerry", "Cartoon", "1.00/day"},

{"Iron Man 3", "Action", "2.00/day"},

{"Laksamana Do Re Mi", "Classic Comedy", "5.00/day"},

},

new String [] {

"Title", "Genre", "Rental Price(RM)",

}

));

}

@SuppressWarnings("unchecked")

// <editor-fold defaultstate="collapsed" desc="Generated Code">

private void initComponents() {

jButton1 = new javax.swing.JButton();

jScrollPane1 = new javax.swing.JScrollPane();

jTable1 = new javax.swing.JTable();

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT\_ON\_CLOSE);

jButton1.setIcon(new javax.swing.ImageIcon(getClass().getResource("/Gambar/shopping-icon.png"))); // NOI18N

jButton1.setText("Purchase");

jButton1.addActionListener(new java.awt.event.ActionListener() {

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

jButton1ActionPerformed(evt);

}

});

jTable1.setModel(new javax.swing.table.DefaultTableModel(

new Object [][] {

{null, null, null, null},

{null, null, null, null},

{null, null, null, null},

{null, null, null, null}

},

new String [] {

"Title 1", "Title 2", "Title 3", "Title 4"

}

));

jScrollPane1.setViewportView(jTable1);

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

getContentPane().setLayout(layout);

layout.setHorizontalGroup(

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

.addGroup(layout.createSequentialGroup()

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

.addGroup(layout.createSequentialGroup()

.addGap(49, 49, 49)

.addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED\_SIZE, 375, javax.swing.GroupLayout.PREFERRED\_SIZE))

.addGroup(layout.createSequentialGroup()

.addGap(163, 163, 163)

.addComponent(jButton1, javax.swing.GroupLayout.PREFERRED\_SIZE, 146, javax.swing.GroupLayout.PREFERRED\_SIZE)))

.addContainerGap(85, Short.MAX\_VALUE))

);

layout.setVerticalGroup(

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

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

.addContainerGap()

.addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED\_SIZE, 92, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addGap(68, 68, 68)

.addComponent(jButton1)

.addContainerGap(86, Short.MAX\_VALUE))

);

pack();

}// </editor-fold>

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {

String name,address,contact;

int rentDay;

String title,genre;

double rentPrice;

VCD [] vcd = new VCD[3];

Pelanggan cust = new Pelanggan("","","");

Rental rent;

name = JOptionPane.showInputDialog(("Customer name : "));

address = JOptionPane.showInputDialog(("Address : "));

contact = JOptionPane.showInputDialog(("Contact no : "));

rentDay = Integer.parseInt(JOptionPane.showInputDialog(("Rent day : ")));

cust = new Pelanggan(name,address,contact);

rent = new Rental(vcd,cust,rentDay);

for(int i=0;i<vcd.length;i++){

title = JOptionPane.showInputDialog(("Title : "));

genre = JOptionPane.showInputDialog(("Genre : "));

rentPrice = Double.parseDouble(JOptionPane.showInputDialog(("Rent price : ")));

vcd[i] = new VCD(title,rentPrice,genre); //

rent.CalculateRentalPrice(vcd[i]);

}

//output/

rent.displayCustomerInfo(cust);

rent.displayVCDInfo(null);

double totalAll = rent.getTotalRentalPrice() \* rent.getRentDay();

rent.calculateDisc(totalAll);

totalAll = totalAll - (rent.calculateDisc(totalAll) \*totalAll);

System.out.println("Discount : RM"+totalAll\*rent.calculateDisc(totalAll));

System.out.println("Total price : RM"+totalAll);

}

// Variables declaration - do not modify

private javax.swing.JButton jButton1;

private javax.swing.JScrollPane jScrollPane1;

private javax.swing.JTable jTable1;

// End of variables declaration

}

**AccountForm**

package studentinfomationsystem;

import java.util.Scanner;

public class AccountForm extends javax.swing.JFrame {

/\*\*

\* Creates new form AccountForm

\*/

public AccountForm() {

initComponents();

}

@SuppressWarnings("unchecked")

// <editor-fold defaultstate="collapsed" desc="Generated Code">

private void initComponents() {

jButton1 = new javax.swing.JButton();

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT\_ON\_CLOSE);

jButton1.setText("Enter Your Details");

jButton1.addActionListener(new java.awt.event.ActionListener() {

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

jButton1ActionPerformed(evt);

}

});

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

getContentPane().setLayout(layout);

layout.setHorizontalGroup(

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

.addGroup(layout.createSequentialGroup()

.addGap(96, 96, 96)

.addComponent(jButton1)

.addContainerGap(100, Short.MAX\_VALUE))

);

layout.setVerticalGroup(

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

.addGroup(layout.createSequentialGroup()

.addGap(69, 69, 69)

.addComponent(jButton1)

.addContainerGap(97, Short.MAX\_VALUE))

);

pack();

}// </editor-fold>

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {

Customer\_1 cust = new Customer\_1() ;

Account acct = new Account();

Inheritance inherit;

Inheritance\_lagi lagi;

Scanner input = new Scanner(System.in);

double amount;

System.out.println("Enter first name : ");

String n = input.next();

System.out.println("Enter last name : ");

String l = input.next();

cust = new Customer\_1(n,l);

System.out.println("How much do you have in Bank ? ");

double a = input.nextDouble();

cust.setAccount(new Account(a));

inherit = cust.getAccount();

System.out.println("\nEnter amount to deposit : ");

amount = input.nextDouble();

acct.deposit(amount);

System.out.println("\nEnter amount to withdraw : ");

amount = input.nextDouble();

acct.withdraw(amount);

System.out.println("Customer "+cust.getLastname()+" "+cust.getFirstname()+" has a balance "+acct.getBalance());

}

// Variables declaration - do not modify

private javax.swing.JButton jButton1;

// End of variables declaration

}

**Book class**

package studentinfomationsystem;

import javax.swing.JOptionPane;

public class Book {

private int book;

private int isbn;

private String title;

private double price;

private String genre;

public void setBookInfo(int isbn){

if(isbn == 1112){

title = "Object Oriented Programming";

price = 89.99;

genre = "Book";

}else

if(isbn == 1113){

title = "Software Engineering";

price = 70.80;

genre = "Book";

}else

if(isbn == 1114){

title = "C Programming";

price = 50.50;

genre = "Book";

}else

if(isbn == 2111){

title = "Reader Digest";

price = 33.39;

genre = "Magazine";

}else

if(isbn == 2112){

title = "Programmer Magazine";

price = 45.50;

genre = "Magazine";

}

}

public String getGenre() {

return genre;

}

public double getPrice() {

return price;

}

public String getTitle() {

return title;

}

public int getIsbn() {

return isbn;

}

public void bookInput(){

isbn = Integer.parseInt(JOptionPane.showInputDialog("Enter ISBN: "));

}

}

**Receipt class**

package studentinfomationsystem;

public class Receipt {

private double totalPrice;

private double discount;

private double currentPoint;

double newTotPrice;

double disc;

public double getTotalPrice() {

return totalPrice;

}

public void calcBookPrice(Book[] bk, int book){

for(int i=0; i<book; i++){

totalPrice = bk[i].getPrice() + totalPrice;

System.out.println("");

}

}

public void caclMemberPoint(double totalPrice){

currentPoint = 0.04 \* totalPrice;

}

public void calcDiscount(double totalPrice){

if(totalPrice <= 59.99){

newTotPrice = totalPrice - (0.01 \* totalPrice);

disc = 0.01 \* totalPrice;

}else

if( totalPrice >= 60.00 && totalPrice <= 100.99){

newTotPrice = totalPrice - (0.02 \* totalPrice);

disc = 0.01 \* totalPrice;

}else

if( totalPrice > 101.00){

newTotPrice = totalPrice - (0.05 \* totalPrice);

disc = 0.01 \* totalPrice;

}

}

public void displayReceiptInfo(Customer cust, Book[] bk, int book){

for(int i=0; i<book; i++){

System.out.println("Book ISBN: " + bk[i].getIsbn());

System.out.println("Book Title: " + bk[i].getTitle());

System.out.println("Book Price: RM" + bk[i].getPrice());

System.out.println("Book Genre: " + bk[i].getGenre());

System.out.println("Member No: " + cust.getMemberNo());

System.out.println("Customer Name: " + cust.getName());

System.out.println("Customer Address: " + cust.getAddress());

System.out.println("Customer ContactNo: " + cust.getContactNo());

System.out.println("Member Point: " + cust.getMemberPoint());

}

System.out.println("Total Price: RM" + totalPrice);

System.out.println("Discount: RM" + disc);

System.out.println("New Total Price: RM" + newTotPrice);

System.out.println("Member Point: " + (cust.getMemberPoint() + currentPoint));

}

}

**Customer class**

package studentinfomationsystem;

import javax.swing.JOptionPane;

public class Customer {

private String name;

private String address;

private String contactNo;

private String memberNo;

private double memberPoint;

public Customer(String name, String address, String contactNo, String memberNo){

this.name = name;

this.address = address;

this.contactNo = contactNo;

this.memberNo = memberNo;

}

public void setMemberPoint(double memberPoint){

this.memberPoint = memberPoint;

}

public String getAddress() {

return address;

}

public String getContactNo() {

return contactNo;

}

public String getMemberNo() {

return memberNo;

}

public String getName() {

return name;

}

public double getMemberPoint() {

return memberPoint;

}

public void customerInput(){

name = JOptionPane.showInputDialog("Enter Customer Name: ");

address = JOptionPane.showInputDialog("Enter Customer Address: ");

contactNo = JOptionPane.showInputDialog("Enter Customer ContactNo : ");

memberNo = JOptionPane.showInputDialog("Enter Customer MemberNo : ");

memberPoint=Double.parseDouble(JOptionPane.showInputDialog("Enter Customer MemberPoint "));

}

}

**Rental class**

package studentinfomationsystem;

public class Rental {

private VCD [] vcd;

private Pelanggan cust;

private double totalRentalPrice=0;

private int rentDay;

private double discount;

public double getTotalRentalPrice() {

return totalRentalPrice;

}

public double getDiscount() {

return discount;

}

public Rental(VCD []v, Pelanggan c, int d) {

vcd = v;

cust = c;

rentDay = d;

}

public double CalculateRentalPrice(VCD v){

return totalRentalPrice = totalRentalPrice+v.getRentPrice();

}

public double calculateDisc(double t){

if(t>1&&t<5.99){

discount=0.01;

}

else if(t>6&&t<10.99){

discount=0.02;

}

else if(t>11){

discount=0.05;

}

return discount;

}

public int getRentDay() {

return rentDay;

}

public void displayCustomerInfo(Pelanggan c){

System.out.println("Customer Name : "+c.getName());

System.out.println("Address : "+c.getAddress());

System.out.println("Contact no : "+c.getContactNo());

System.out.println("Rent day : "+rentDay);

}

public void displayVCDInfo(VCD v){

for(int i=0;i<vcd.length;i++){

System.out.println("VCD "+i+" :");

System.out.println(" Title : "+vcd[i].getTitle());

System.out.println(" Genre : "+vcd[i].getGenre());

System.out.println(" Rental Price : RM"+vcd[i].getRentPrice()+"/day");

}

}

}

**VCD class**

package studentinfomationsystem;

public class VCD {

private String title;

private double rentPrice;

private String genre;

public VCD(String t, double r, String g) {

title = t;

rentPrice = r;

genre = g;

}

public String getTitle() {

return title;

}

public double getRentPrice() {

return rentPrice;

}

public String getGenre() {

return genre;

}

}

**Pelanggan class**

package studentinfomationsystem;

import java.util.Scanner;

public class Pelanggan {

private String name;

private String address;

private String contactNo;

Scanner input = new Scanner(System.in);

public Pelanggan(String name, String address, String contactNo) {

this.name = name;

this.address = address;

this.contactNo = contactNo;

}

public String getName() {

return name;

}

public void setName(String n) {

name = n;

}

public String getAddress() {

return address;

}

public void setAddress(String a) {

address = a;

}

public String getContactNo() {

return contactNo;

}

public void setContactNo(String c) {

contactNo = c;

}

}

**Inheritance**

package studentinfomationsystem;

public class Inheritance {

private double balance;

public Inheritance() {

}

public Inheritance(double init\_balance) {

balance = init\_balance;

}

public double getBalance() {

return balance;

}

public void deposit(double amt){

balance+=amt;

}

public void withdraw(double amt){

balance-=amt;

}

}

**Inheritance\_lagi**

package studentinfomationsystem;

public class Inheritance\_lagi {

private String firstname;

private String lastname;

private Inheritance account;

public Inheritance\_lagi() {

}

public Inheritance\_lagi(String first, String last) {

firstname = first;

lastname = last;

}

public String getFirstname() {

return firstname;

}

public String getLastname() {

return lastname;

}

public Inheritance getAccount() {

return account;

}

public void setAccount(Inheritance acct) {

account = acct;

}

}

**Account**

package studentinfomationsystem;

public class Account extends Inheritance {

public Account() {

}

public Account(double init\_balance) {

super(init\_balance);

}

}

**Customer\_1**

package studentinfomationsystem;

public class Customer\_1 extends Inheritance\_lagi {

public Customer\_1() {

}

public Customer\_1(String first, String last) {

super(first, last);

}

}