                import java.sql.Connection;

                import java.sql.DriverManager;

                import java.sql.PreparedStatement;

                import java.sql.ResultSet;

                import java.sql.SQLException;

                import java.util.List;

                import java.util.ArrayList;

public class AddC {

                   private static final String URL = "jdbc:derby:C:\\Users\\Denis.Long\\MyDB";

                   private static final String USERNAME = "";

                   private static final String PASSWORD = "";

                   private Connection connection = null; // manages connection

                   private PreparedStatement insertNewPerson = null;

                   // constructor

                   public AddC()

                   {

                      try

                      {

                         connection =

                            DriverManager.getConnection( URL, USERNAME, PASSWORD );

                         insertNewPerson = connection.prepareStatement(

                            "INSERT INTO Addresses " +

                            "( FirstName, LastName, Email, PhoneNumber ) " +

                            "VALUES ( ?, ?, ?, ? )" );

                      } // end try

                      catch ( SQLException sqlException )

                      {

                         sqlException.printStackTrace();

                         System.exit( 1 );

                      } // end catch

                   } // end PersonQueries constructor

                   // select all of the addresses in the database

                   // add an entry

                   public int addPerson(

                      String fname, String lname, String email, String num )

                   {

                      int result = 0;

                      // set parameters, then execute insertNewPerson

                      try

                      {

                         insertNewPerson.setString( 1, fname );

                         insertNewPerson.setString( 2, lname );

                         insertNewPerson.setString( 3, email );

                         insertNewPerson.setString( 4, num );

                         // insert the new entry; returns # of rows updated

                         result = insertNewPerson.executeUpdate();

                      } // end try

                      catch ( SQLException sqlException )

                      {

                         sqlException.printStackTrace();

                         close();

                      } // end catch

                      return result;

                   } // end method addPerson

                   // close the database connection

                   public void close()

                   {

                      try

                      {

                         connection.close();

                      } // end try

                      catch ( SQLException sqlException )

                      {

                         sqlException.printStackTrace();

                      } // end catch

                   } // end method close

                } // end class PersonQueries

**public** **class** DBNoGui {

**private** AddC addC;

**public** DBNoGui (){

              addC = **new** AddC();

**int** result = addC.addPerson("Ds","Lg","[denis.long@cit.ie](mailto:denis.long@cit.ie)","5455573" );

**if** ( result == 1 )

                       System.***out***.println(  "Person added!" );

**else**

                       System.***out***.println( "Person not added!" );

       }

**public** **static** **void** main( String args[] )

          {

**new** DBNoGui();

          } // end method main

}

**import** java.awt.event.ActionEvent;

**import** java.awt.event.ActionListener;

**import** java.awt.event.WindowAdapter;

**import** java.awt.event.WindowEvent;

**import** java.awt.FlowLayout;

**import** java.awt.GridLayout;

**import** java.util.List;

**import** javax.swing.JButton;

**import** javax.swing.Box;

**import** javax.swing.JFrame;

**import** javax.swing.JLabel;

**import** javax.swing.JPanel;

**import** javax.swing.JTextField;

**import** javax.swing.WindowConstants;

**import** javax.swing.BoxLayout;

**import** javax.swing.BorderFactory;

**import** javax.swing.JOptionPane;

**public** **class** UseAddC **extends** JFrame{

**private** Person currentEntry;

**private** AddC addC;

**private** List< Person > results;

          JButton browseButton;

**private** JLabel emailLabel;

**private** JTextField emailTextField;

**private** JLabel firstNameLabel;

**private** JTextField firstNameTextField;

**private** JLabel idLabel;

**private** JTextField idTextField;

**private** JTextField indexTextField;

**private** JLabel lastNameLabel;

**private** JTextField lastNameTextField;

**private** JPanel displayPanel;

**private** JLabel phoneLabel;

**private** JTextField phoneTextField;

**private** JButton insertButton;

          // no-argument constructor

**public** UseAddC()

          {

**super**( "Address Book" );

             // establish database connection and set up PreparedStatements

             addC = **new** AddC();

             // create GUI

             idLabel = **new** JLabel();

             idTextField = **new** JTextField( 10 );

             firstNameLabel = **new** JLabel();

             firstNameTextField = **new** JTextField( 10 );

             lastNameLabel = **new** JLabel();

             lastNameTextField = **new** JTextField( 10 );

             emailLabel = **new** JLabel();

             emailTextField = **new** JTextField( 10 );

             phoneLabel = **new** JLabel();

             phoneTextField = **new** JTextField( 10 );

             browseButton = **new** JButton();

             insertButton = **new** JButton();

             setLayout( **new** FlowLayout( FlowLayout.***CENTER***, 10, 10 ) );

             setSize( 400, 300 );

             setResizable( **false** );

             displayPanel = **new** JPanel();

             displayPanel.setLayout( **new** GridLayout( 5, 2, 4, 4 ) );

             idLabel.setText( "Address ID:" );

             displayPanel.add( idLabel );

             idTextField.setEditable( **false** );

             displayPanel.add( idTextField );

             firstNameLabel.setText( "First Name:" );

             displayPanel.add( firstNameLabel );

             displayPanel.add( firstNameTextField );

             lastNameLabel.setText( "Last Name:" );

             displayPanel.add( lastNameLabel );

             displayPanel.add( lastNameTextField );

             emailLabel.setText( "Email:" );

             displayPanel.add( emailLabel );

             displayPanel.add( emailTextField );

             phoneLabel.setText( "Phone Number:" );

             displayPanel.add( phoneLabel );

             displayPanel.add( phoneTextField );

             add( displayPanel );

             insertButton.setText( "Insert New Entry" );

             insertButton.addActionListener(

**new** ActionListener()

                {

**public** **void** actionPerformed( ActionEvent evt )

                   {

                      insertButtonActionPerformed( evt );

                   } // end method actionPerformed

                } // end anonymous inner class

             ); // end call to addActionListener

                 add( insertButton );

             addWindowListener(

**new** WindowAdapter()

                {

**public** **void** windowClosing( WindowEvent evt )

                   {

                      addC.close(); // close database connection

                      System.*exit*( 0 );

                   } // end method windowClosing

                } // end anonymous inner class

             ); // end call to addWindowListener

             setVisible( **true** );

          } // end no-argument constructor

          // handles call when previousButton is clicked

          // handles call when insertButton is clicked

**private** **void** insertButtonActionPerformed( ActionEvent evt )

          {

**int** result = addC.addPerson( firstNameTextField.getText(),

                lastNameTextField.getText(), emailTextField.getText(),

                phoneTextField.getText() );

**if** ( result == 1 )

                JOptionPane.*showMessageDialog*( **this**, "Person added!",

                   "Person added", JOptionPane.***PLAIN\_MESSAGE*** );

**else**

                JOptionPane.*showMessageDialog*( **this**, "Person not added!",

                   "Error", JOptionPane.***PLAIN\_MESSAGE*** );

          } // end method insertButtonActionPerformed

          // main method

**public** **static** **void** main( String args[] )

          {

**new** UseAddC();

          } // end method main

       } // end class AddressBookDisplay