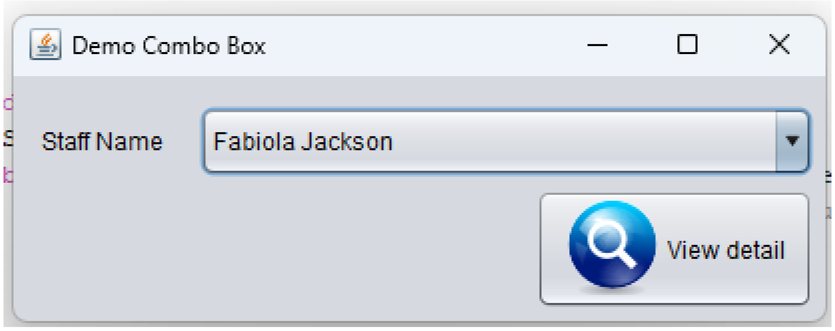
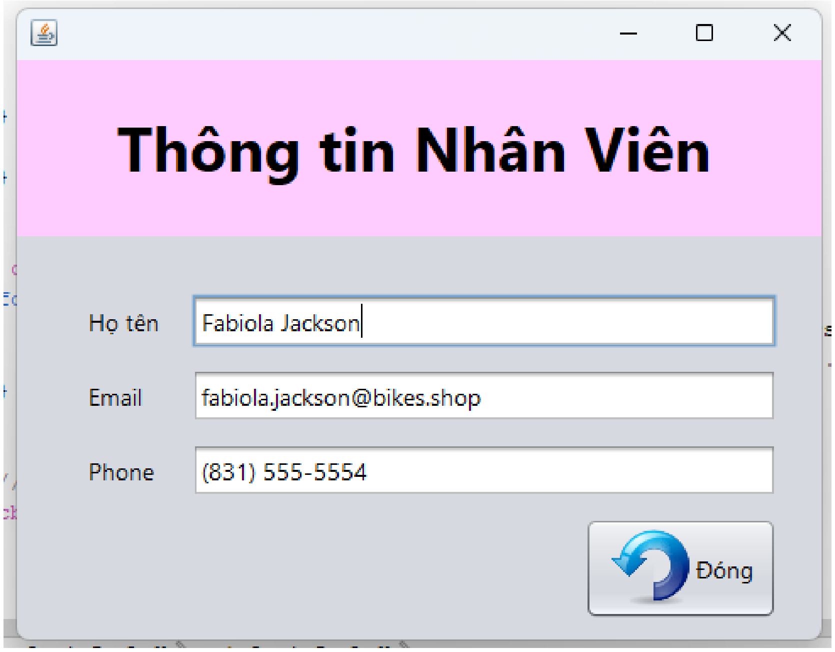
- **Viết chương trình load dữ liệu từ database lên combo box:**



Demo Combo Box

Staff Name: Fabiola Jackson



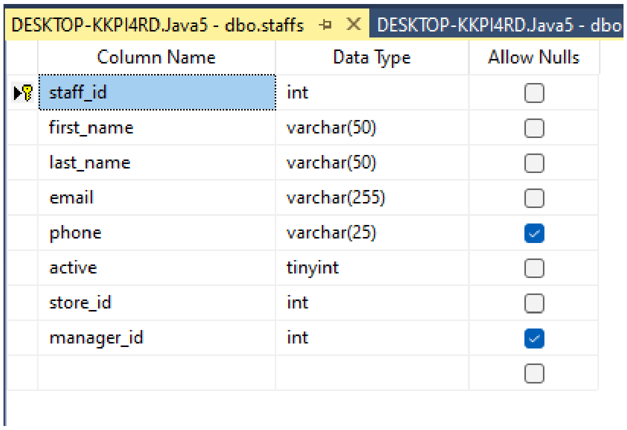
Thông tin Nhân Viên

Họ tên: Fabiola Jackson

Email: fabiola.jackson@bikes.shop

Phone: (831) 555-5554

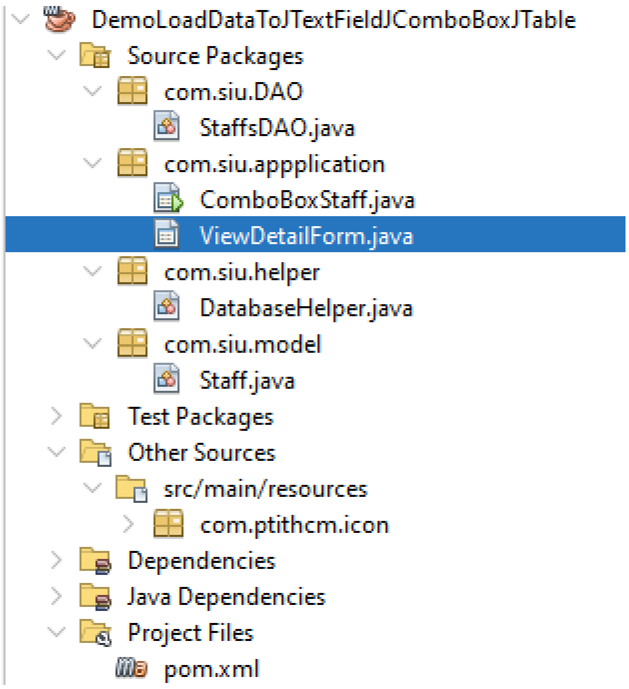
- Tạo database tên staffs như bên dưới:



DESKTOP-KKPI4RD.Java5 - dbo.staffs | DESKTOP-KKPI4RD.Java5 - dbo

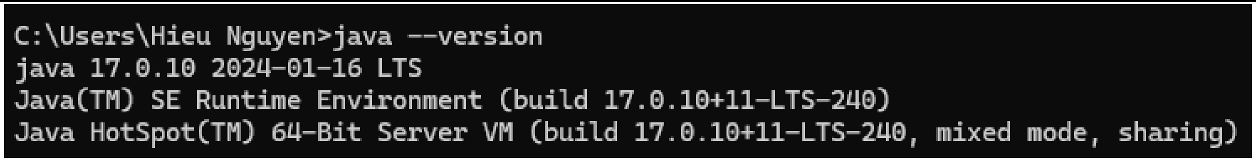
| Column Name | Data Type | Allow Nulls |
|---|---|---|
| staff_id | int | □ |
| first_name | varchar(50) | □ |
| last_name | varchar(50) | □ |
| email | varchar(255) | □ |
| phone | varchar(25) | ☑ |
| active | tinyint | □ |
| store_id | int | □ |
| manager_id | int | ☑ |
| | | □ |

❖ Tạo project với cấu trú như bên dưới:



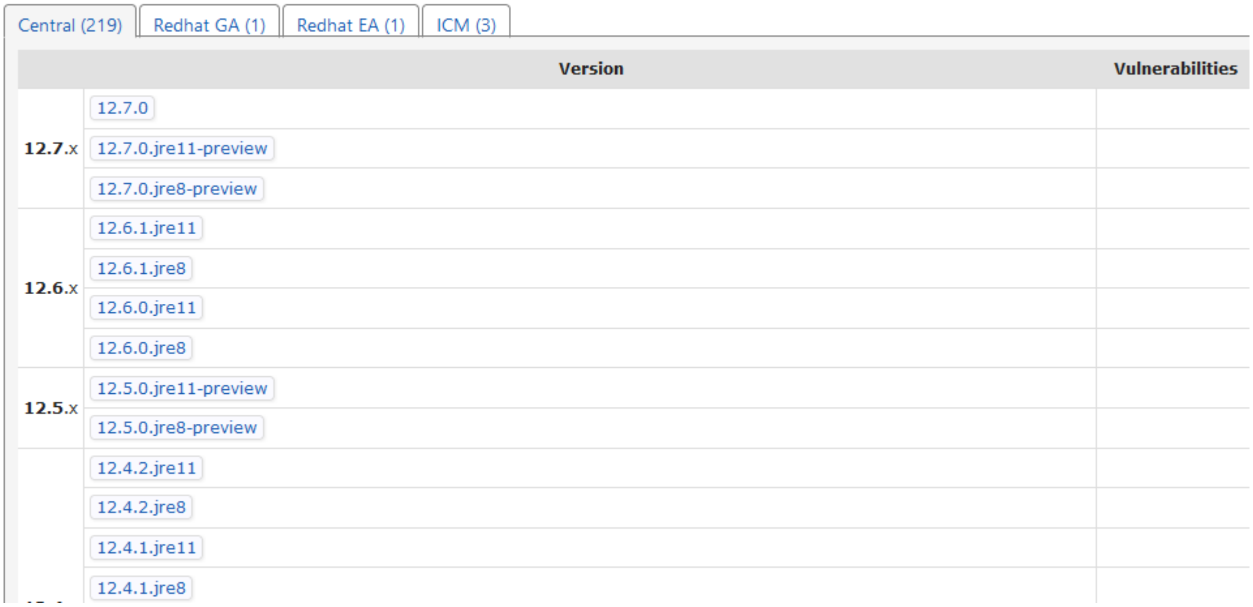
```
DemoLoadDataToJTextFieldJComboBoxJTable
    Source Packages
        com.siu.DAO
            StaffsDAO.java
        com.siu.appplication
            ComboBoxStaff.java
            ViewDetailForm.java
        com.siu.helper
            DatabaseHelper.java
        com.siu.model
            Staff.java
    Test Packages
    Other Sources
        src/main/resources
            com.ptithcm.icon
    Dependencies
    Java Dependencies
    Project Files
        pom.xml
```

❖ Kiểm tra version java

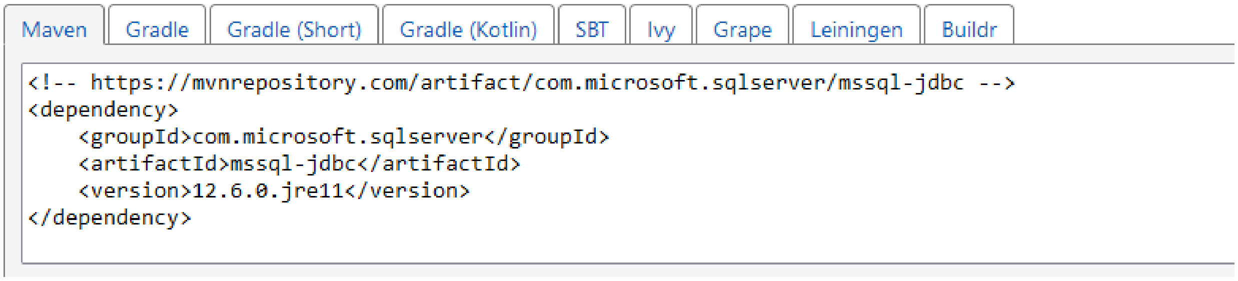


```
C:\Users\Hieu Nguyen>java --version
java 17.0.10 2024-01-16 LTS
Java(TM) SE Runtime Environment (build 17.0.10+11-LTS-240)
Java HotSpot(TM) 64-Bit Server VM (build 17.0.10+11-LTS-240, mixed mode, sharing)
```

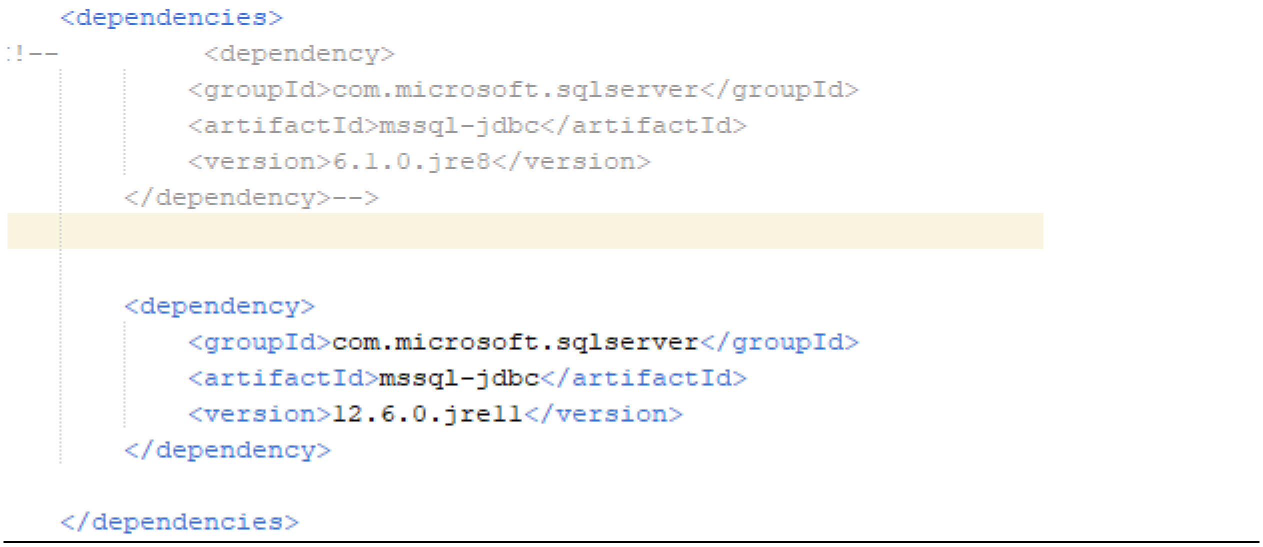
Search mssql-jdbc trên: https://mvnrepository.com



| | Version | Vulnerabilities |
|---|---|---|
| 12.7.x | 12.7.0 | |
| | 12.7.0.jre11-preview | |
| | 12.7.0.jre8-preview | |
| 12.6.x | 12.6.1.jre11 | |
| | 12.6.1.jre8 | |
| | 12.6.0.jre11 | |
| | 12.6.0.jre8 | |
| 12.5.x | 12.5.0.jre11-preview | |
| | 12.5.0.jre8-preview | |
| | 12.4.2.jre11 | |
| | 12.4.2.jre8 | |
| | 12.4.1.jre11 | |
| | 12.4.1.jre8 | |

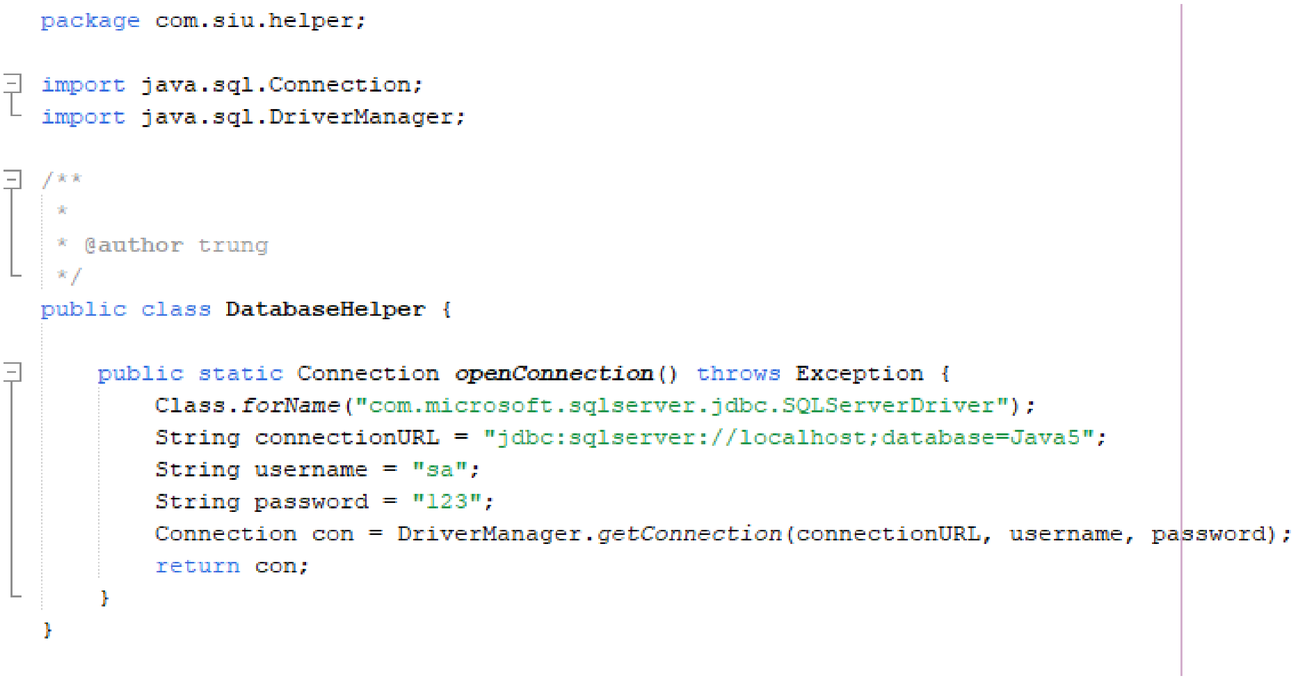


```xml
<!-- https://mvnrepository.com/artifact/com.microsoft.sqlserver/mssql-jdbc -->
<dependency>
    <groupId>com.microsoft.sqlserver</groupId>
    <artifactId>mssql-jdbc</artifactId>
    <version>12.6.0.jre11</version>
</dependency>
```



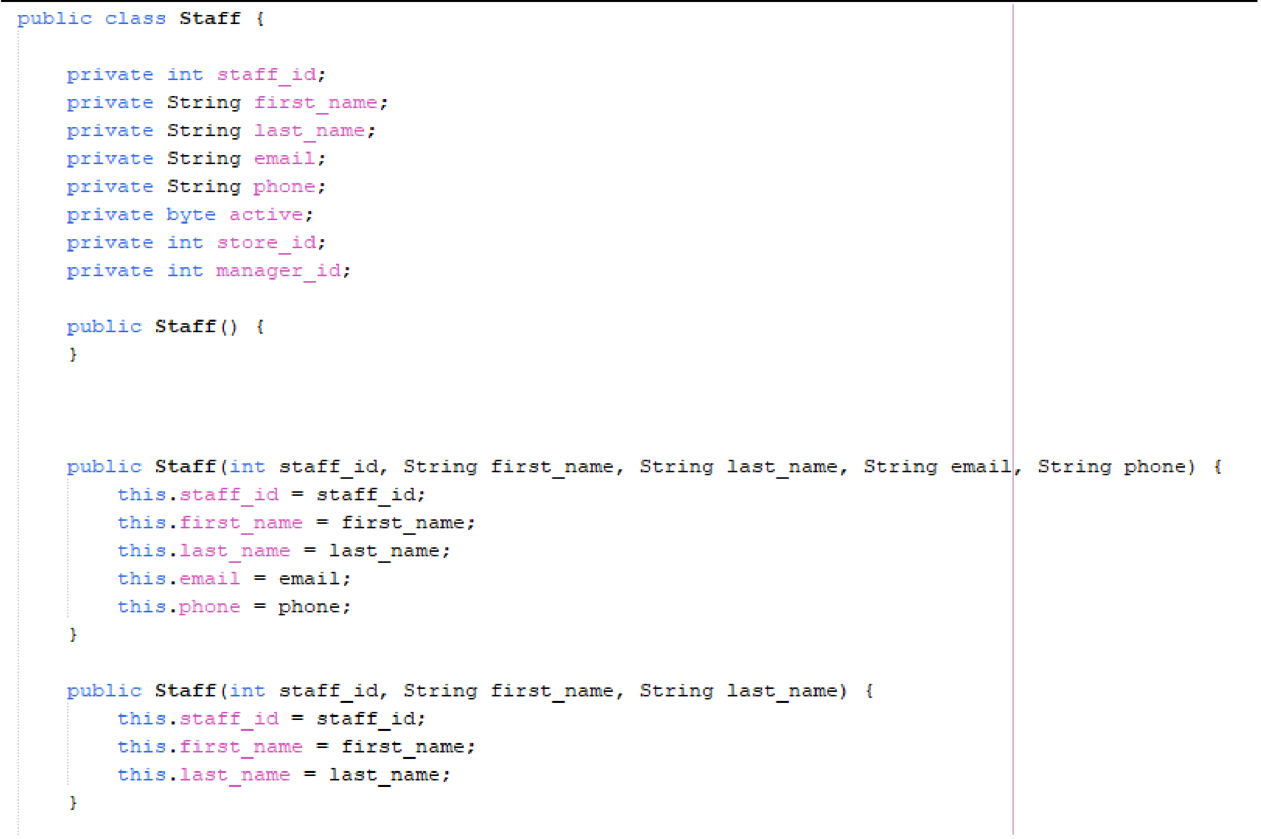
```xml
    <dependencies>
<!--            <dependency>
            <groupId>com.microsoft.sqlserver</groupId>
            <artifactId>mssql-jdbc</artifactId>
            <version>6.1.0.jre8</version>
        </dependency>-->


        <dependency>
            <groupId>com.microsoft.sqlserver</groupId>
            <artifactId>mssql-jdbc</artifactId>
            <version>12.6.0.jre11</version>
        </dependency>

    </dependencies>
```

❖ Tạo package helper để connect database:

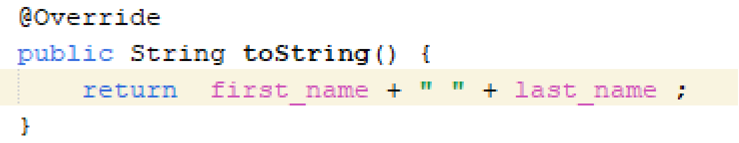


```java
package com.siu.helper;

import java.sql.Connection;
import java.sql.DriverManager;

/**
 *
 * @author trung
 */
public class DatabaseHelper {

    public static Connection openConnection() throws Exception {
        Class.forName("com.microsoft.sqlserver.jdbc.SQLServerDriver");
        String connectionURL = "jdbc:sqlserver://localhost;database=Java5";
        String username = "sa";
        String password = "123";
        Connection con = DriverManager.getConnection(connectionURL, username, password);
        return con;
    }
}
```

❖ **Tạo đối tượng Staff:**

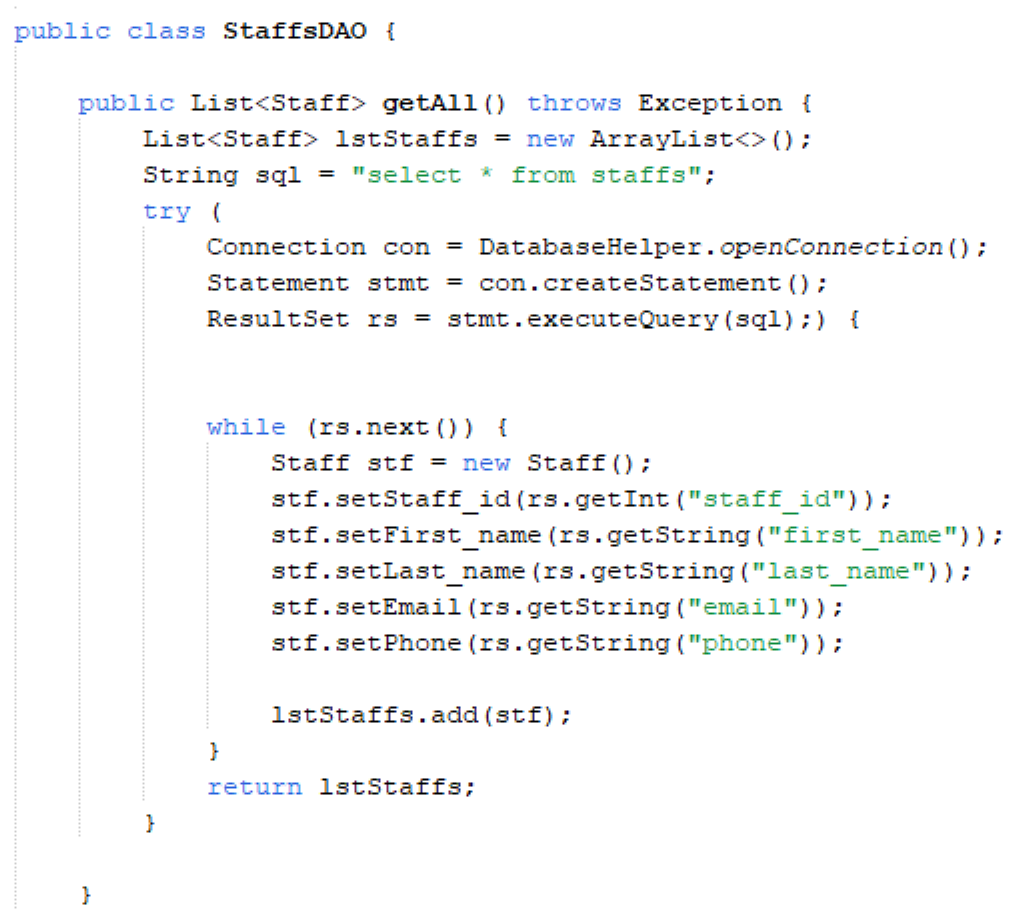


```java
public class Staff {

    private int staff_id;
    private String first_name;
    private String last_name;
    private String email;
    private String phone;
    private byte active;
    private int store_id;
    private int manager_id;

    public Staff() {
    }



    public Staff(int staff_id, String first_name, String last_name, String email, String phone) {
        this.staff_id = staff_id;
        this.first_name = first_name;
        this.last_name = last_name;
        this.email = email;
        this.phone = phone;
    }

    public Staff(int staff_id, String first_name, String last_name) {
        this.staff_id = staff_id;
        this.first_name = first_name;
        this.last_name = last_name;
    }
```

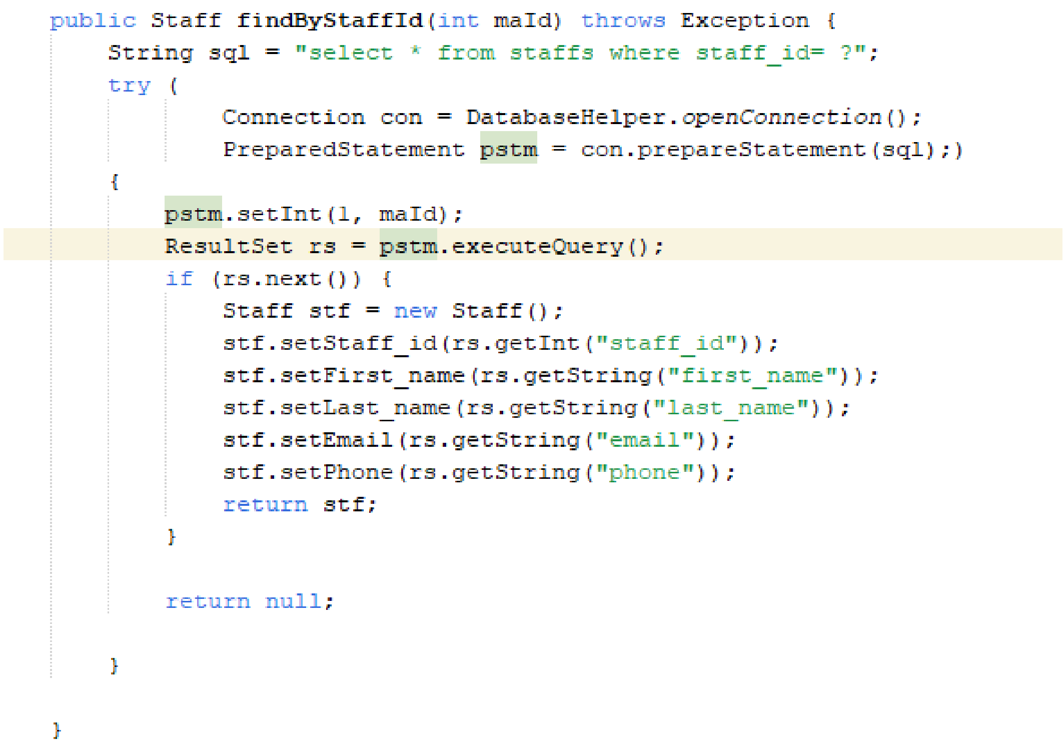


```java
@Override
public String toString() {
    return  first_name + " " + last_name ;
}
```

❖ Tạo class DAO của đối tượng Staff:

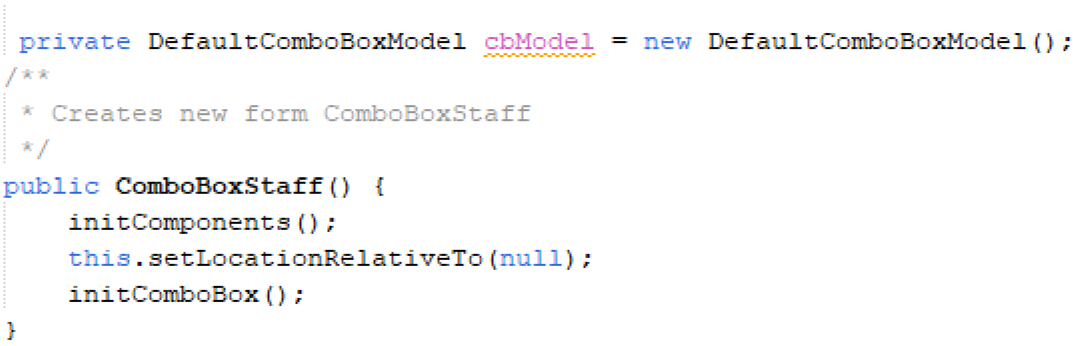


```java
public class StaffsDAO {

    public List<Staff> getAll() throws Exception {
        List<Staff> lstStaffs = new ArrayList<>();
        String sql = "select * from staffs";
        try (
            Connection con = DatabaseHelper.openConnection();
            Statement stmt = con.createStatement();
            ResultSet rs = stmt.executeQuery(sql);) {


            while (rs.next()) {
                Staff stf = new Staff();
                stf.setStaff_id(rs.getInt("staff_id"));
                stf.setFirst_name(rs.getString("first_name"));
                stf.setLast_name(rs.getString("last_name"));
                stf.setEmail(rs.getString("email"));
                stf.setPhone(rs.getString("phone"));

                lstStaffs.add(stf);
            }
            return lstStaffs;
        }

    }
```

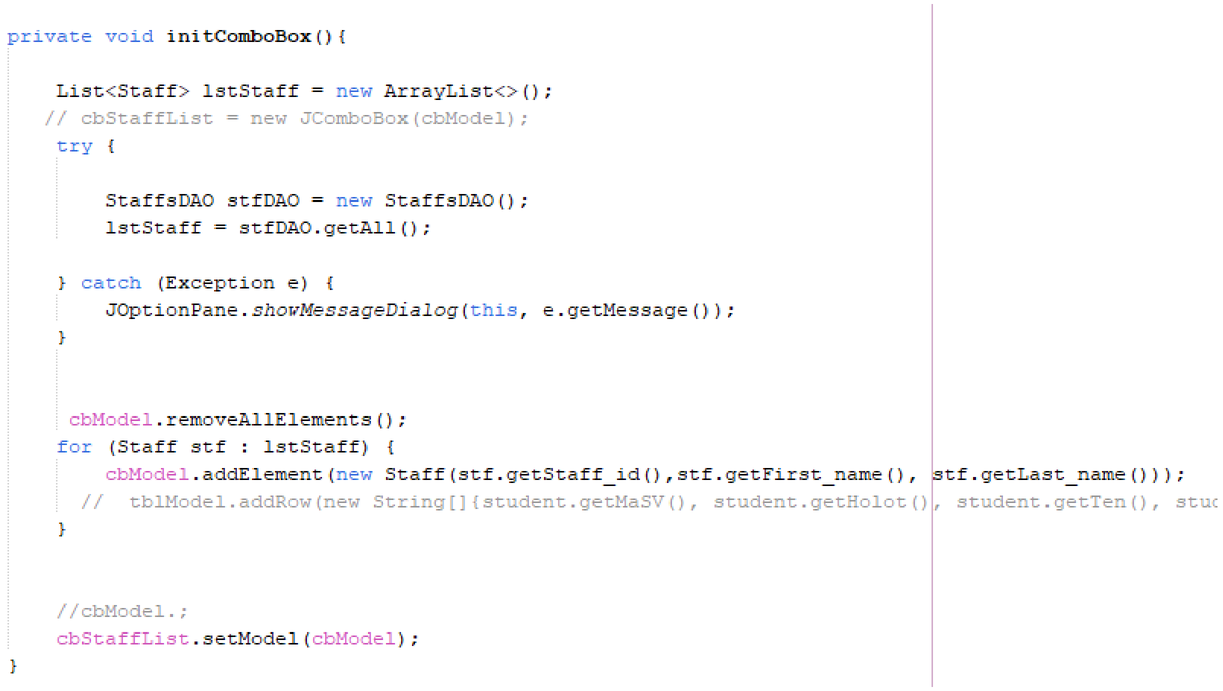


```java
public Staff findByStaffId(int maId) throws Exception {
    String sql = "select * from staffs where staff_id= ?";
    try (
            Connection con = DatabaseHelper.openConnection();
            PreparedStatement pstm = con.prepareStatement(sql);)
    {
        pstm.setInt(1, maId);
        ResultSet rs = pstm.executeQuery();
        if (rs.next()) {
            Staff stf = new Staff();
            stf.setStaff_id(rs.getInt("staff_id"));
            stf.setFirst_name(rs.getString("first_name"));
            stf.setLast_name(rs.getString("last_name"));
            stf.setEmail(rs.getString("email"));
            stf.setPhone(rs.getString("phone"));
            return stf;
        }

        return null;

    }

}
```

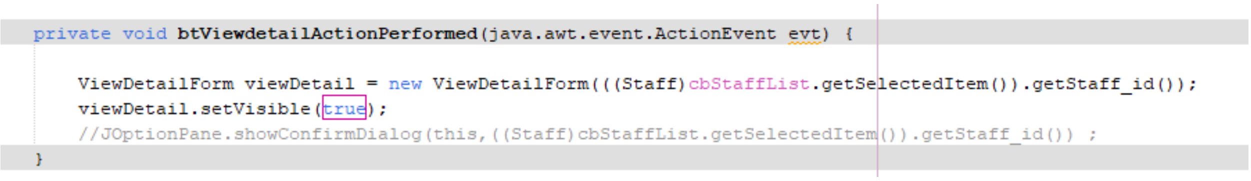
- **Tạo Jframe ComboBox:**



```
 private DefaultComboBoxModel cbModel = new DefaultComboBoxModel();
/**
 * Creates new form ComboBoxStaff
 */
public ComboBoxStaff() {
    initComponents();
    this.setLocationRelativeTo(null);
    initComboBox();
}
```

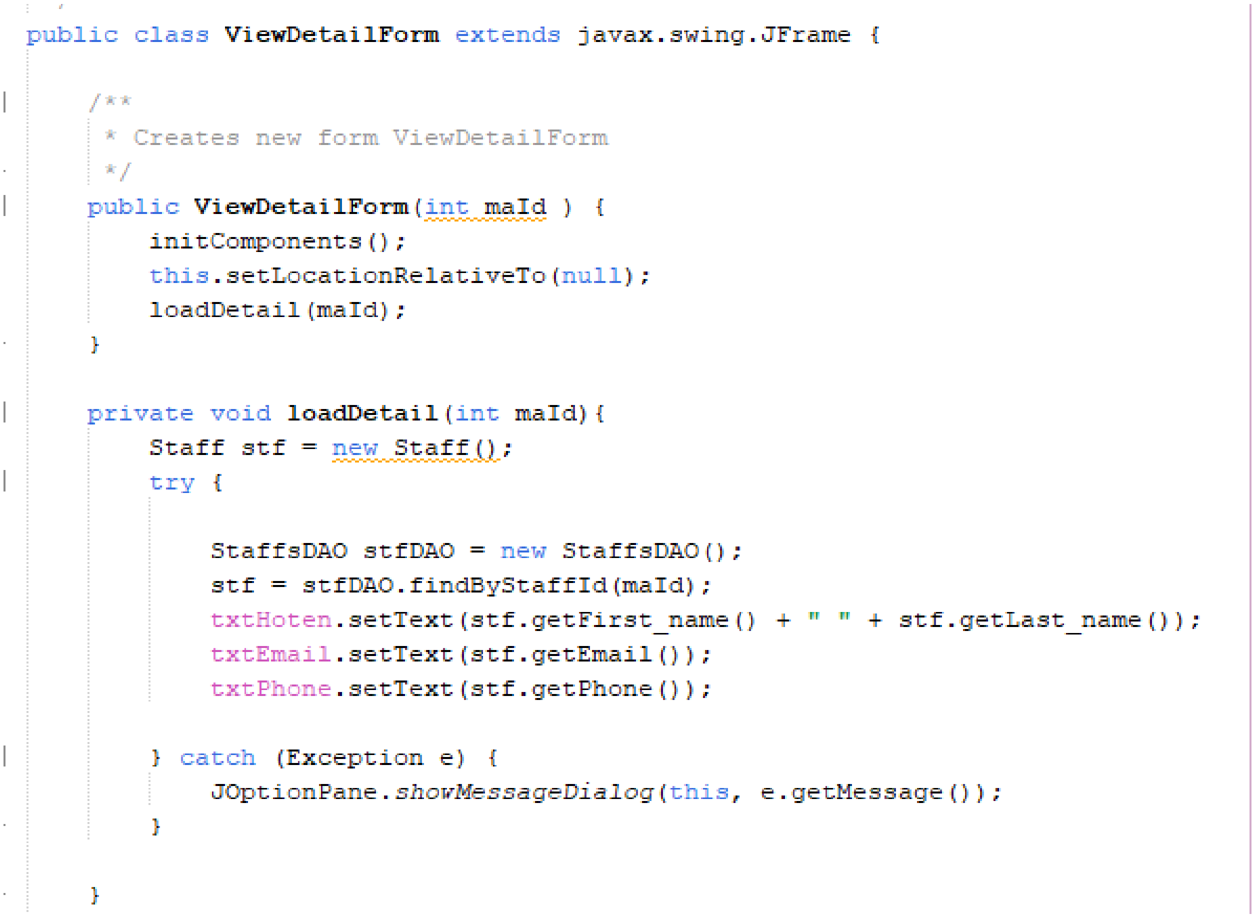


```
private void initComboBox(){

    List<Staff> lstStaff = new ArrayList<>();
  // cbStaffList = new JComboBox(cbModel);
    try {

        StaffsDAO stfDAO = new StaffsDAO();
        lstStaff = stfDAO.getAll();

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


     cbModel.removeAllElements();
    for (Staff stf : lstStaff) {
        cbModel.addElement(new Staff(stf.getStaff_id(),stf.getFirst_name(), stf.getLast_name()));
      //  tblModel.addRow(new String[]{student.getMaSV(), student.getHolot(), student.getTen(), stuc
    }


    //cbModel.;
    cbStaffList.setModel(cbModel);
}
```

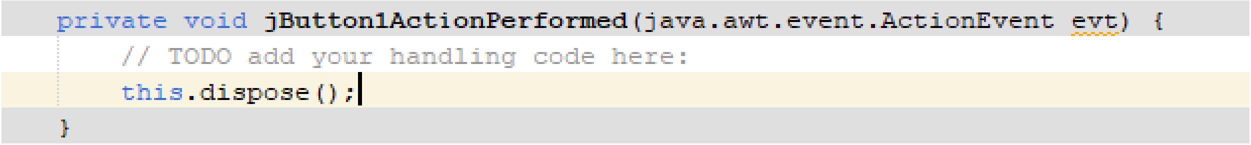


```
private void btViewdetailActionPerformed(java.awt.event.ActionEvent evt) {

    ViewDetailForm viewDetail = new ViewDetailForm(((Staff)cbStaffList.getSelectedItem()).getStaff_id());
    viewDetail.setVisible(true);
    //JOptionPane.showConfirmDialog(this,((Staff)cbStaffList.getSelectedItem()).getStaff_id()) ;
}
```

- Tạo Jframe view detail cho Staff:



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

    /**
     * Creates new form ViewDetailForm
     */
    public ViewDetailForm(int maId ) {
        initComponents();
        this.setLocationRelativeTo(null);
        loadDetail(maId);
    }

    private void loadDetail(int maId){
        Staff stf = new Staff();
        try {

            StaffsDAO stfDAO = new StaffsDAO();
            stf = stfDAO.findByStaffId(maId);
            txtHoten.setText(stf.getFirst_name() + " " + stf.getLast_name());
            txtEmail.setText(stf.getEmail());
            txtPhone.setText(stf.getPhone());

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

    }
```



```
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    this.dispose();
}
```