description of the application.

This desktop application is for a HR company that allows the admin "nura" to check on the applicants that applied to said company.

motivation / purpose

I chose this app because I have interest in the way companies choose workers and how their system work. And this for me is a very simple way to show it.

Brief explanation of the logic

The logic behind this application is using most used link ways between jFrames and Sql data base

To get and take information from both sides. :

the steps for the application :

firstly the the MAIN frame will open two options (admin loginpage , workers infopage)

the admin will open his page using the name and password then he will be directed to the workers listpage.

The workers will open the the infopage to add their application to the DATABASE

ResultSet res :

ResultSet getList

Statement st

Connection con

PrepareStatement

savewok

Source codes

Worker class

```java
package homework;


public class workers {

        String name,surname,branch,cities;

        String gender,position;

        int age;

}
```

LoginPage :

```java
package homework;

import java.awt.BorderLayout;

import java.awt.EventQueue;

import javax.swing.JFrame;

import javax.swing.JPanel;

import javax.swing.border.EmptyBorder;

import javax.swing.JLabel;

import java.awt.Font;

import javax.swing.JTextField;

import javax.swing.JPasswordField;

import javax.swing.JButton;

import java.awt.Color;

import java.awt.event.ActionListener;

import java.sql.SQLException;

import java.awt.event.ActionEvent;

public class LoginPage extends JFrame {

        private JPanel contentPane;

        private JTextField txtusername;
```

```java
        private JPasswordField passwordField;
        public static void main(String[] args) {
                EventQueue.invokeLater(new Runnable() {
                        public void run() {
                                try {
                                        LoginPage frame = new LoginPage();
                                        frame.setVisible(true);
                                } catch (Exception e) {
                                        e.printStackTrace();
                                }
                        }
                });
        }
        public LoginPage() {
                setForeground(Color.PINK);
                setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
                setBounds(100, 100, 410, 457);
                contentPane = new JPanel();
                contentPane.setBackground(Color.LIGHT_GRAY);
                contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));
                setContentPane(contentPane);
                contentPane.setLayout(null);
                JLabel lbllogo = new JLabel("Welcome to the system\r\n please login");
                lbllogo.setFont(new Font("SimSun-ExtB", Font.BOLD, 17));
                lbllogo.setBounds(24, 28, 362, 77);
                contentPane.add(lbllogo);
                txtusername = new JTextField();
                txtusername.setBounds(222, 142, 96, 19);
                contentPane.add(txtusername);
                txtusername.setColumns(10);
                passwordField = new JPasswordField();
```

```java
                passwordField.setBounds(222, 203, 96, 19);

                contentPane.add(passwordField);


                JLabel lblusername = new JLabel("username");

                lblusername.setFont(new Font("Tahoma", Font.BOLD, 12));

                lblusername.setBounds(76, 145, 78, 13);

                contentPane.add(lblusername);

                JLabel lblpassword = new JLabel("password");

                lblpassword.setFont(new Font("Tahoma", Font.BOLD, 12));

                lblpassword.setBounds(76, 205, 78, 13);

                contentPane.add(lblpassword);

                JButton btnNewButton = new JButton("LOGIN");

                btnNewButton.addActionListener(new ActionListener() {

                        public void actionPerformed(ActionEvent e) {

                                if(txtusername.getText().equals("nura") &&
        passwordField.getText().equals("12345")) {

                                        ListPage Lpage = new ListPage();

                                        Lpage.setVisible(true);

                                }

                        }

                });

                btnNewButton.setFont(new Font("Tahoma", Font.BOLD, 14));

                btnNewButton.setBounds(139, 285, 112, 30);

                contentPane.add(btnNewButton);

                JButton btnback = new JButton("Back");

                btnback.addActionListener(new ActionListener() {

                        public void actionPerformed(ActionEvent e) {

                                dispose();

                        }

                });

                btnback.setFont(new Font("Tahoma", Font.BOLD, 12));
```

```java
            btnback.setBounds(301, 389, 85, 21);

            contentPane.add(btnback);

    }}
```

Main :

```java
package homework;

import java.awt.BorderLayout;

import java.awt.EventQueue;

import javax.swing.JFrame;

import javax.swing.JPanel;

import javax.swing.border.EmptyBorder;

import javax.swing.JButton;

import java.awt.event.ActionListener;

import java.sql.SQLException;

import java.awt.event.ActionEvent;

import java.awt.Font;

import java.awt.Color;

public class Main extends JFrame {

    private JPanel contentPane;

    public static void main(String[] args) {

        EventQueue.invokeLater(new Runnable() {

            public void run() {

                try {

                    Main frame = new Main();

                    frame.setVisible(true);

                } catch (Exception e) {

                    e.printStackTrace();

                }

            }
```

```java
			});
		}
	public Main() {
		setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
		setBounds(100, 100, 357, 427);
		contentPane = new JPanel();
		contentPane.setBackground(Color.LIGHT_GRAY);
		contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));
		setContentPane(contentPane);
		contentPane.setLayout(null);
		JButton btnlop = new JButton("Admin LoginPage");
		btnlop.setFont(new Font("Verdana Pro", Font.BOLD, 15));
		btnlop.addActionListener(new ActionListener() {
			public void actionPerformed(ActionEvent e) {
				LoginPage lpage = new LoginPage();
				lpage.setVisible(true);
			}
		});
		btnlop.setBounds(61, 91, 214, 54);
		contentPane.add(btnlop);


		JButton btnip = new JButton("Workers InfoPage");
		btnip.setFont(new Font("Verdana Pro", Font.BOLD, 15));
		btnip.addActionListener(new ActionListener() {
			public void actionPerformed(ActionEvent e) {
				InfoPage Ipage = new InfoPage();
				Ipage.setVisible(true);
			}
		});
		btnip.setBounds(61, 165, 214, 54);
		contentPane.add(btnip);
```

```java
                    JButton btnexit = new JButton("Exit");

                    btnexit.addActionListener(new ActionListener() {

                            public void actionPerformed(ActionEvent e) {

                                    System.exit(0);

                            }

                    });

                    btnexit.setFont(new Font("Tahoma", Font.BOLD, 11));

                    btnexit.setBounds(248, 359, 85, 21);

                    contentPane.add(btnexit);

            }

    }
```

InfoPage

```java
package homework;


import java.awt.BorderLayout;

import java.awt.EventQueue;

import java.awt.Font;

import java.awt.event.ActionEvent;

import java.awt.event.ActionListener;

import java.sql.SQLException;

import java.util.ArrayList;

import javax.swing.ButtonGroup;

import javax.swing.DefaultComboBoxModel;

import javax.swing.JButton;

import javax.swing.JCheckBox;

import javax.swing.JComboBox;

import javax.swing.JFrame;

import javax.swing.JLabel;

import javax.swing.JOptionPane;
```

```java
import javax.swing.JPanel;

import javax.swing.JRadioButton;

import javax.swing.JTextField;

import javax.swing.border.EmptyBorder;



import java.awt.Color;


public class InfoPage extends JFrame {


        private JPanel contentPane;

        private JTextField txtSurname;

        private JTextField textName;

        private JTextField txtName;


        public static void main(String[] args) {

                EventQueue.invokeLater(new Runnable() {

                        public void run() {

                                try {

                                        InfoPage frame = new InfoPage();

                                        frame.setVisible(true);

                                } catch (Exception e) {

                                        e.printStackTrace();

                                }

                        }

                });

        }

        public InfoPage() {

                setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);

                setBounds(100, 100, 492, 405);

                contentPane = new JPanel();
```

```java
contentPane.setBackground(Color.LIGHT_GRAY);

contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));

setContentPane(contentPane);

contentPane.setLayout(null);

JLabel lblName = new JLabel("Name");

lblName.setFont(new Font("Tahoma", Font.BOLD, 11));

lblName.setBounds(30, 26, 58, 22);

contentPane.add(lblName);


txtName = new JTextField();

txtName.setBounds(89, 28, 96, 19);

contentPane.add(txtName);

txtName.setColumns(10);


JLabel lblSurname = new JLabel("Surname");

lblSurname.setFont(new Font("Tahoma", Font.BOLD, 11));

lblSurname.setBounds(26, 78, 58, 13);

contentPane.add(lblSurname);


txtSurname = new JTextField();

txtSurname.setBounds(89, 75, 96, 19);

contentPane.add(txtSurname);

txtSurname.setColumns(10);


JLabel lblage = new JLabel("Age");

lblage.setFont(new Font("Tahoma", Font.BOLD, 11));

lblage.setBounds(30, 139, 45, 13);

contentPane.add(lblage);


final JComboBox cbage = new JComboBox();

cbage.setBounds(89, 130, 50, 30);
```

```java
contentPane.add(cbage);

for (int i = 20; i<=70;  i++) {

        cbage.addItem(i+"");

}

JLabel lblGender = new JLabel("Gender");

lblGender.setFont(new Font("Tahoma", Font.BOLD, 11));

lblGender.setBounds(30, 192, 45, 13);

contentPane.add(lblGender);

JRadioButton rdbtnMale = new JRadioButton("Male");

rdbtnMale.setFont(new Font("Tahoma", Font.BOLD, 10));

rdbtnMale.setBounds(89, 188, 80, 21);

contentPane.add(rdbtnMale);

rdbtnMale.setActionCommand("Male");

JRadioButton rdbtnFemale = new JRadioButton("Female");

rdbtnFemale.setFont(new Font("Tahoma", Font.BOLD, 10));

rdbtnFemale.setBounds(89, 211, 80, 21);

contentPane.add(rdbtnFemale);

rdbtnFemale.setActionCommand("Female");

// so only one gender get selected

final ButtonGroup genderGroup = new ButtonGroup();

genderGroup.add(rdbtnMale);

genderGroup.add(rdbtnFemale);

JLabel lblLang = new JLabel("Position");

lblLang.setFont(new Font("Tahoma", Font.BOLD, 11));

lblLang.setBounds(258, 139, 58, 13);
```

```java
contentPane.add(lblLang);

JCheckBox chckbxman = new JCheckBox("Manager");
chckbxman.setFont(new Font("Tahoma", Font.BOLD, 10));
chckbxman.setBounds(338, 135, 93, 21);
contentPane.add(chckbxman);
chckbxman.setActionCommand("Manger");

JCheckBox chckbxsup = new JCheckBox("Supervisor");
chckbxsup.setFont(new Font("Tahoma", Font.BOLD, 10));
chckbxsup.setBounds(338, 158, 93, 21);
contentPane.add(chckbxsup);
chckbxsup.setActionCommand("Supervisor");

JCheckBox chckbxas = new JCheckBox("Assistant");
chckbxas.setFont(new Font("Tahoma", Font.BOLD, 10));
chckbxas.setBounds(338, 181, 93, 21);
contentPane.add(chckbxas);
chckbxas.setActionCommand("Assistant");

final ArrayList<JCheckBox> boxes = new ArrayList<JCheckBox>();
boxes.add(chckbxman);
boxes.add(chckbxsup);
boxes.add(chckbxas);




JLabel lblBranch = new JLabel("Branch");
lblBranch.setFont(new Font("Tahoma", Font.BOLD, 11));
lblBranch.setBounds(258, 31, 80, 13);
contentPane.add(lblBranch);
```

```java
JLabel lblcities = new JLabel("cities");

lblcities.setFont(new Font("Tahoma", Font.BOLD, 11));

lblcities.setBounds(258, 78, 58, 13);

contentPane.add(lblcities);


DefaultComboBoxModel branch_model = new  DefaultComboBoxModel();

branch_model.addElement("US");

branch_model.addElement("CANADA");


final    DefaultComboBoxModel<String> us_course= new DefaultComboBoxModel<String>
();

us_course.addElement("NEWYORK");

us_course.addElement("LOS ANGELES");

us_course.addElement("SAN DIEGO");


final    DefaultComboBoxModel<String> canada_course= new
DefaultComboBoxModel<String> ();

canada_course.addElement("TORONTO");

canada_course.addElement("QUEBEC");

canada_course.addElement("MONTREAL");


 final JComboBox<String> cbbranch = new JComboBox(branch_model);

            cbbranch.setBounds(338, 27, 96, 21);

contentPane.add(cbbranch);


final  JComboBox<String> cbcities = new JComboBox();

cbcities.setBounds(338, 74, 96, 21);

contentPane.add(cbcities);


JButton btnBack = new JButton("Back");

btnBack.setFont(new Font("Tahoma", Font.BOLD, 12));
```

```java
btnBack.addActionListener(new ActionListener() {

        public void actionPerformed(ActionEvent e) {

                dispose();

        }

});


btnBack.setBounds(201, 294, 85, 21);

contentPane.add(btnBack);


JButton btnsave = new JButton("Save");

btnsave.addActionListener(new ActionListener() {

        public void actionPerformed(ActionEvent e) {



                workers wok = new workers();

        wok.name = txtName.getText();

        wok.surname = txtSurname.getText();

        wok.age = Integer.parseInt(cbage.getSelectedItem().toString());

        wok.branch = cbbranch.getSelectedItem().toString();

        wok.cities = cbcities.getSelectedItem().toString();

        wok.gender = genderGroup.getSelection().getActionCommand();


        String position = " ";

        for (JCheckBox chckbox : boxes) {

          if (chckbox.isSelected()) {

                position+=chckbox.getActionCommand()+"\n";


          }

        }

        wok.position = position;

   //   Main.worker(wok);
```

```java
                JOptionPane.showMessageDialog(contentPane,"worker saved !");

                DBclass dc = new DBclass();

                    try {


                            dc.savewok(wok);


                    } catch (SQLException e1)

                    {

                            e1.printStackTrace();

                    }



                    }
            });



            btnsave.setFont(new Font("Tahoma", Font.BOLD, 12));

            btnsave.setBounds(201, 263, 85, 21);

            contentPane.add(btnsave);


            cbbranch.addActionListener(new ActionListener() {

                    public void actionPerformed(ActionEvent e) {

                            if(cbbranch.getSelectedItem().toString().equals("US")) {

                                    cbcities.setModel(us_course);

                            }

                            if(cbbranch.getSelectedItem().toString().equals("CANADA")) {

                            cbcities.setModel(canada_course);

                    }}

            });

    }}
```

DBclass

```java
package homework;

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.PreparedStatement;

import java.sql.ResultSet;

import java.sql.SQLException;

import java.sql.Statement;


public class DBclass {


        public Connection getConnection() throws SQLException{

        Connection con =
DriverManager.getConnection("jdbc:mysql://localhost/workers","root","00251911");

        Statement st = con.createStatement();

        ResultSet rs = st.executeQuery("Select * from worker ");

        while (rs.next()) {


        }
return con;

    }


        public void savewok(workers wok) throws SQLException{

            String query = "insert into worker (name, surname, age,
gender,branch,cities,position) values (?,?,?,?,?,?,?)";

            PreparedStatement ps = getConnection().prepareStatement(query);

            ps.setString(1, wok.name);
```

```java
                        ps.setString(2, wok.surname);

                        ps.setLong(3, wok.age);

                        ps.setString(4, wok.gender);

                        ps.setString(5, wok.branch);

                        ps.setString(6, wok.cities);

                        ps.setString(7, wok.position);

                        ps.executeUpdate();


            }


    }
```

ListPage

```java
package homework;


import java.awt.BorderLayout;

import java.awt.EventQueue;

import javax.swing.JFrame;

import javax.swing.JPanel;

import javax.swing.border.EmptyBorder;

import javax.swing.table.DefaultTableCellRenderer;

import javax.swing.table.DefaultTableModel;

import javax.swing.JScrollPane;

import javax.swing.JTable;

import javax.swing.JButton;

import java.awt.event.ActionListener;

import java.sql.ResultSet;

import java.sql.SQLException;

import java.awt.event.ActionEvent;

import java.awt.Font;

import javax.swing.JTextField;

import javax.swing.JLabel;
```

```java
import java.awt.Color;

public class ListPage extends JFrame {

    private JPanel contentPane;
    private JTable table;

    public static void main(String[] args) {
        EventQueue.invokeLater(new Runnable() {
            public void run() {
                try {
                    ListPage frame = new ListPage();
                    frame.setVisible(true);
                } catch (Exception e) {
                    e.printStackTrace();
                }}
        });
    }
    public ListPage()   {
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        setBounds(100, 100, 650, 408);
        contentPane = new JPanel();
        contentPane.setBackground(Color.LIGHT_GRAY);
        contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));
        setContentPane(contentPane);
        contentPane.setLayout(null);

        JScrollPane scrollPane = new JScrollPane();
        scrollPane.setBounds(38, 28, 548, 217);
        contentPane.add(scrollPane);
```

```java
DefaultTableModel model = new  DefaultTableModel();

model.setColumnIdentifiers(new String []
{"Name","Surname","Age","Gender","branch","City","Position"});


DefaultTableCellRenderer center = new DefaultTableCellRenderer();

center.setHorizontalAlignment(JLabel.CENTER);




table = new JTable();

table.setModel(model);

table.setDefaultRenderer(String.class, center);

scrollPane.setViewportView(table);


DBclass dc = new DBclass();



for (int i=0;i< model.getColumnCount();i++ ) {

        table.getColumnModel().getColumn(i).setCellRenderer(center);
}

JButton btnNewButton = new JButton("Show Workers");

btnNewButton.setFont(new Font("Tahoma", Font.BOLD, 12));

btnNewButton.addActionListener(new ActionListener() {

        public void actionPerformed(ActionEvent e) {

        }
});

btnNewButton.setBounds(230, 267, 170, 42);

contentPane.add(btnNewButton);
```

```java
JButton btnNewButton_1 = new JButton("Exit");
btnNewButton_1.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        System.exit(0);
    }
});
btnNewButton_1.setFont(new Font("Tahoma", Font.BOLD, 12));
btnNewButton_1.setBounds(317, 324, 75, 23);
contentPane.add(btnNewButton_1);


JButton btnNewButton_2 = new JButton("Back");
btnNewButton_2.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        dispose();
    }
});
btnNewButton_2.setFont(new Font("Tahoma", Font.BOLD, 12));
btnNewButton_2.setBounds(240, 324, 75, 23);
contentPane.add(btnNewButton_2);
    }
}
```