**LoginUI.java**

import javax.swing.\*;

import java.awt.\*;

import java.awt.event.\*;

import java.sql.\*;

public class LoginUI extends JFrame implements ActionListener

{

JLabel lblTitle, lblEmail, lblPwd;

JTextField txtEmail;

JButton btnSubmit,btnCancel,btnNewUser;

JPasswordField pwd;

LoginUI()

{

setTitle("Login Page");

setSize(800, 800);

setLayout(null);

setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

lblTitle = new JLabel("Welcome to Student Management Portal");

lblTitle.setForeground(Color.blue);

lblTitle.setFont(new Font("Serif", Font.BOLD, 20));

lblEmail = new JLabel("Enter NJIT Email:");

lblPwd = new JLabel("Enter Password:");

txtEmail = new JTextField();

pwd = new JPasswordField();

btnSubmit = new JButton("Submit");

btnCancel = new JButton("Cancel");

btnNewUser = new JButton("Register");

lblTitle.setBounds(250, 30, 400, 30);

lblEmail.setBounds(80, 70, 200, 30);

lblPwd.setBounds(80, 110, 200, 30);

txtEmail.setBounds(300, 70, 200, 30);

pwd.setBounds(300, 110, 200, 30);

btnSubmit.setBounds(150, 160, 100, 30);

btnCancel.setBounds(300, 160, 100, 30);

btnNewUser.setBounds(450, 160, 100, 30);

add(lblTitle);

add(lblEmail);

add(txtEmail);

add(lblPwd);

add(pwd);

add(btnSubmit);

add(btnCancel);

add(btnNewUser);

btnSubmit.addActionListener(this);

btnCancel.addActionListener(this);

btnNewUser.addActionListener(this);

setVisible(true);

}

public void actionPerformed(ActionEvent e)

{

if(e.getSource() == btnSubmit)

{

if(txtEmail.getText().trim().equals("admin") && pwd.getText().trim().equals("admin"))

{

new AdministratorUI().display();

}

else if(txtEmail.getText().trim().isEmpty() || pwd.getText().trim().isEmpty())

{

JOptionPane.showMessageDialog(null," Please Enter the Username or Password","Error",JOptionPane.ERROR\_MESSAGE);

}

else

{

showData();

}

}

else if(e.getSource() == btnCancel)

{

System.exit(0);

}

else

{

new RegistrationUI();

}

}

public void showData()

{

JFrame frm = new JFrame();

JLabel lbll, lbl2;

String str1 = txtEmail.getText();

char[] p = pwd.getPassword();

String str2 = new String(p);

try

{

Class.forName("com.mysql.jdbc.Driver");

Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3306/student", "root", "root");

PreparedStatement ps = con.prepareStatement("select stuname from stud where email=? and pwd=?");

ps.setString(1, str1);

ps.setString(2, str2);

ResultSet rs = ps.executeQuery();

if (rs.next())

{

frm.setVisible(true);

frm.setSize(600, 600);

frm.setLayout(null);

lbll = new JLabel();

lbl2 = new JLabel("You have logged in successfully");

lbl2.setForeground(Color.blue);

lbl2.setFont(new Font("Serif", Font.BOLD, 30));

lbll.setBounds(60, 50, 400, 30);

lbl2.setBounds(60, 100, 400, 40);

frm.add(lbll);

frm.add(lbl2);

lbll.setText("Welcome " + rs.getString(1));

lbll.setForeground(Color.red);

lbll.setFont(new Font("Serif", Font.BOLD, 30));

}

else

{

JOptionPane.showMessageDialog(null,

"Incorrect Email Id or password");

}

}

catch (Exception ex)

{

System.out.println(ex);

}

}

public static void main(String arr[])

{

new LoginUI();

}

}

**RegistrationUI.java**

import javax.swing.\*;

import java.awt.\*;

import java.awt.event.\*;

import java.sql.\*;

public class RegistrationUI extends JFrame implements ActionListener

{

JLabel lblTitle, lblName, lblEmail, lblCrePwd, lblConfPwd, lblId, lblDept, lblPhone;

JTextField txtName, txtEmail, txtId, txtDept, txtPhone;

JButton btnSubmit, btnReset, btnExit, btnBack;

JPasswordField pwdCreate, pwdConfirm;

RegistrationUI()

{

setSize(800, 800);

setLayout(null);

setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

setTitle("User Registration Form");

lblTitle = new JLabel("Welcome to NJIT Student Registration:");

lblTitle.setForeground(Color.red);

lblTitle.setFont(new Font("Serif", Font.BOLD, 20));

lblTitle.setHorizontalAlignment(JLabel.CENTER);

lblName = new JLabel("Name:");

lblEmail = new JLabel("Email-ID:");

lblCrePwd = new JLabel("Create Password:");

lblConfPwd = new JLabel("Confirm Password:");

lblId = new JLabel("NJIT ID:");

lblDept = new JLabel("Department:");

lblPhone = new JLabel("Phone No:");

txtName = new JTextField();

txtEmail = new JTextField();

pwdCreate = new JPasswordField();

pwdConfirm = new JPasswordField();

txtId = new JTextField();

txtDept = new JTextField();

txtPhone = new JTextField();

btnSubmit = new JButton("Submit");

btnReset = new JButton("Clear");

btnExit = new JButton("Exit");

btnBack = new JButton("Login Page");

btnSubmit.addActionListener(this);

btnReset.addActionListener(this);

btnExit.addActionListener(this);

btnBack.addActionListener(this);

lblTitle.setBounds(200, 30, 400, 30);

lblName.setBounds(80, 70, 200, 30);

lblEmail.setBounds(80, 110, 200, 30);

lblCrePwd.setBounds(80, 150, 200, 30);

lblConfPwd.setBounds(80, 190, 200, 30);

lblId.setBounds(80, 230, 200, 30);

lblDept.setBounds(80, 270, 200, 30);

lblPhone.setBounds(80, 310, 200, 30);

txtName.setBounds(300, 70, 200, 30);

txtEmail.setBounds(300, 110, 200, 30);

pwdCreate.setBounds(300, 150, 200, 30);

pwdConfirm.setBounds(300, 190, 200, 30);

txtId.setBounds(300, 230, 200, 30);

txtDept.setBounds(300, 270, 200, 30);

txtPhone.setBounds(300, 310, 200, 30);

btnSubmit.setBounds(150, 350, 100, 30);

btnReset.setBounds(300, 350, 100, 30);

btnExit.setBounds(450, 350, 100, 30);

btnBack.setBounds(600, 350, 100, 30);

add(lblTitle);

add(lblName);

add(txtName);

add(lblEmail);

add(txtEmail);

add(lblCrePwd);

add(pwdCreate);

add(lblConfPwd);

add(pwdConfirm);

add(lblId);

add(txtId);

add(lblDept);

add(txtDept);

add(lblPhone);

add(txtPhone);

add(btnSubmit);

add(btnReset);

add(btnExit);

add(btnBack);

setVisible(true);

}

public void actionPerformed(ActionEvent ae)

{

if (ae.getSource() == btnSubmit)

{

if(txtName.getText().trim().isEmpty() || txtEmail.getText().trim().isEmpty() || txtId.getText().trim().isEmpty() || txtPhone.getText().trim().isEmpty() || txtDept.getText().trim().isEmpty())

{

JOptionPane.showMessageDialog(null," Please Enter All fields","Error",JOptionPane.ERROR\_MESSAGE);

}

else

{

int num = 0;

String name = txtName.getText();

String email = txtEmail.getText();

char[] pwdcrt = pwdCreate.getPassword();

char[] pwdconf = pwdConfirm.getPassword();

String strpwdcrt = new String(pwdcrt);

String strpwdconf = new String(pwdconf);

String country = txtId.getText();

String dept = txtDept.getText();

String phone = txtPhone.getText();

if (strpwdcrt.equals(strpwdconf))

{

try

{

Class.forName("com.mysql.jdbc.Driver");

Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3306/student", "root", "root");

PreparedStatement ps = con.prepareStatement("insert into stud values(?,?,?,?,?,?)");

ps.setString(1, name);

ps.setString(2, email);

ps.setString(3, strpwdcrt);

ps.setString(4, country);

ps.setString(5, dept);

ps.setString(6, phone);

int rs = ps.executeUpdate();

num++;

if (num > 0)

{

JOptionPane.showMessageDialog(btnSubmit, "Data Inserted Successfully");

}

}

catch (Exception e)

{

System.out.println(e);

}

}

else

{

JOptionPane.showMessageDialog(btnSubmit, "Entered Passwords Does Not Match");

}

}

}

else

{

txtName.setText("");

txtEmail.setText("");

pwdCreate.setText("");

pwdConfirm.setText("");

txtId.setText("");

txtDept.setText("");

txtPhone.setText("");

}

if(ae.getSource() == btnExit)

{

System.exit(0);

}

if(ae.getSource() == btnBack)

{

new LoginUI();

}

}

}

**AdministratorUI.java**

import java.io.\*;

import java.awt.\*;

import javax.swing.\*;

import java.awt.event.\*;

import java.sql.\*;

import java.util.\*;

class AdministratorUI {

JFrame frame;

JPanel panel1, panel2, panel3;

JTabbedPane tp;

JLabel lName1, lEmail1, lId, lDept, lPhNo,lIdDel,lIdEdit, lEmailEdit, lDeptEdit, lPhNoEdit, lblCrePwd,lblConfPwd;

JTextField tf1, tf2, tf3, tf4, tf5, tf6, tf7, tf8, tf9, tf10,tf11;

JScrollPane sp1;

JPasswordField pwdCreate, pwdConfirm;

JButton btnAdd, btnReset, btnSave, btnDel;

AdministratorUI() {

frame = new JFrame("Admin Portal");

panel1 = new JPanel(new GridLayout(9, 2));

panel2 = new JPanel(new GridLayout(5, 2));

panel3 = new JPanel(new GridLayout(2, 2));

tp = new JTabbedPane();

lName1 = new JLabel("Student Name:");

lEmail1 = new JLabel("NJIT Email:");

lId = new JLabel("NJIT ID:");

lDept = new JLabel("Department:");

lPhNo = new JLabel("Phone Number:");

lblCrePwd = new JLabel("Create Password:");

lblConfPwd = new JLabel("Confirm Password:");

lIdDel = new JLabel("Enter NJIT ID to delete record:");

lIdEdit = new JLabel("NJIT ID:");

lEmailEdit = new JLabel("NJIT Email:");

lDeptEdit = new JLabel("Department:");

lPhNoEdit = new JLabel("Phone Number:");

tf1 = new JTextField(12);

tf2 = new JTextField(12);

tf3 = new JTextField(12);

tf4 = new JTextField(12);

tf5 = new JTextField(12);

tf6 = new JTextField(12);

tf7 = new JTextField(12);

tf8 = new JTextField(12);

tf9 = new JTextField(12);

tf10 = new JTextField(12);

tf11 = new JTextField(12);

pwdCreate = new JPasswordField();

pwdConfirm = new JPasswordField();

btnAdd = new JButton("Add");

btnReset = new JButton("Reset");

btnSave = new JButton("Save");

btnDel = new JButton("Delete");

panel1.add(lName1);

panel1.add(tf1);

panel1.add(lEmail1);

panel1.add(tf2);

panel1.add(lblCrePwd);

panel1.add(pwdCreate);

panel1.add(lblConfPwd);

panel1.add(pwdConfirm);

panel1.add(lId);

panel1.add(tf3);

panel1.add(lDept);

panel1.add(tf4);

panel1.add(lPhNo);

panel1.add(tf11);

panel1.add(btnAdd);

panel1.add(btnReset);

panel2.add(lIdEdit);

panel2.add(tf7);

panel2.add(lEmailEdit);

panel2.add(tf8);

panel2.add(lDeptEdit);

panel2.add(tf9);

panel2.add(lPhNoEdit);

panel2.add(tf10);

panel2.add(btnSave);

panel3.add(lIdDel);

panel3.add(tf5);

panel3.add(btnDel);

btnReset.addActionListener(new ActionListener() {

public void actionPerformed(ActionEvent ae) {

tf1.setText("");

tf2.setText("");

tf3.setText("");

tf4.setText("");

tf11.setText("");

pwdCreate.setText("");

pwdConfirm.setText("");

}

});

btnAdd.addActionListener(new ActionListener() {

public void actionPerformed(ActionEvent ae) {

String value1 = tf1.getText();

String value2 = tf2.getText();

String value3 = tf3.getText();

String value4 = tf4.getText();

String value11 = tf11.getText();

char[] pwdcrt = pwdCreate.getPassword();

char[] pwdconf = pwdConfirm.getPassword();

String value12 = new String(pwdcrt);

String value13 = new String(pwdconf);

System.out.println(value1 + value2 + value12 + value13 + value3 + value4 + value11);

if (value12.equals(value13))

{

try {

Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3306/student", "root", "root");

Class.forName("com.mysql.jdbc.Driver");

if(value1.isEmpty() || value2.isEmpty() || value3.isEmpty() || value4.isEmpty() || value11.isEmpty())

{

JOptionPane.showMessageDialog(null," Please Enter All fields","Error",JOptionPane.ERROR\_MESSAGE);

}

else

{

PreparedStatement st = con.prepareStatement("insert into stud(stuname,email,pwd,id,dept,phno) values(?,?,?,?,?,?)");

st.setString(1, value1);

st.setString(2, value2);

st.setString(3, value12);

st.setString(4, value3);

st.setString(5, value4);

st.setString(6, value11);

st.executeUpdate();

JOptionPane.showMessageDialog(panel1, "Data is successfully inserted into database.");

con.close();

}

} catch (Exception e) {

JOptionPane.showMessageDialog(panel1, "Error in submitting data!");

}

}

else

{

JOptionPane.showMessageDialog(btnAdd, "Entered Passwords Does Not Match");

}

}

});

btnDel.addActionListener(new ActionListener() {

public void actionPerformed(ActionEvent ae) {

String value1 = tf5.getText();

try {

Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3306/student", "root", "root");

Class.forName("com.mysql.jdbc.Driver");

if(value1.isEmpty())

{

JOptionPane.showMessageDialog(null,"Please Enter the NJIT ID","Error",JOptionPane.ERROR\_MESSAGE);

}

else

{

PreparedStatement st = con.prepareStatement("DELETE FROM stud WHERE id =?");

st.setString(1, value1);

int rowsDeleted = st.executeUpdate();

if(rowsDeleted > 0)

{

JOptionPane.showMessageDialog(panel3, "Record is deleted successfully.");

con.close();

}

else

{

JOptionPane.showMessageDialog(panel3, "Error in deleting record.");

}

}

}

catch (Exception exp3)

{

JOptionPane.showMessageDialog(panel3, "Error in deleting record.");

}

}

});

btnSave.addActionListener(new ActionListener() {

public void actionPerformed(ActionEvent ae) {

try {

Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3306/student", "root", "root");

Class.forName("com.mysql.jdbc.Driver");

int x = JOptionPane.showConfirmDialog(panel2, "Confirm edit? All data will be replaced");

if (x == 0) {

try {

String value1 = tf7.getText();

String value2 = tf8.getText();

String value3 = tf9.getText();

String value4 = tf10.getText();

if(value1.isEmpty() || value2.isEmpty() || value3.isEmpty() || value4.isEmpty())

{

JOptionPane.showMessageDialog(null," Please Enter All fields","Error",JOptionPane.ERROR\_MESSAGE);

}

else

{

Statement st = con.createStatement();

st.executeUpdate("update stud set email='" + value2 + "', dept='" + value3 + "', phno='" + value4 + "' where id='" + value1 + "'");

JOptionPane.showMessageDialog(panel2, "Updated successfully");

con.close();

}

}

catch (Exception ex) {

JOptionPane.showMessageDialog(panel2, "Error in updating edit fields");

}

}

} catch (Exception ex) {

JOptionPane.showMessageDialog(panel2, "Error");

}

}

});

}

void display() {

frame.getContentPane().add(tp);

tp.addTab("Add Record", panel1);

tp.addTab("Edit Record", panel2);

tp.addTab("Delete Record", panel3);

frame.setSize(450, 330);

frame.setVisible(true);

frame.setResizable(true);

}

}

**Database.sql**

create database student

use student

create table stud (stuname varchar(30), email varchar(30), pwd varchar(30), id varchar(30) primary key, dept varchar(30), phno varchar(30))

Select \* from stud;