import javax.swing.\*;  
import javax.swing.table.DefaultTableModel;  
import java.awt.\*;  
import java.awt.event.\*;  
import java.sql.\*;

public class RegistrationForm extends JFrame {  
    private JTextField idField, nameField, addressField, contactField;  
    private JRadioButton maleBtn, femaleBtn;  
    private JButton registerBtn, exitBtn;  
    private DefaultTableModel tableModel;  
    private JTable dataTable;  
    private ButtonGroup genderGroup;

    public RegistrationForm() {  
        setTitle("Registration Form");  
        setSize(800, 400);  
        setLayout(new BorderLayout());  
        setDefaultCloseOperation(EXIT\_ON\_CLOSE);

        // Left Form Panel  
        JPanel formPanel = new JPanel(new GridLayout(6, 2, 10, 10));  
        idField = new JTextField();  
        nameField = new JTextField();  
        addressField = new JTextField();  
        contactField = new JTextField();  
        maleBtn = new JRadioButton("Male");  
        femaleBtn = new JRadioButton("Female");  
        genderGroup = new ButtonGroup();  
        genderGroup.add(maleBtn);  
        genderGroup.add(femaleBtn);

        formPanel.add(new JLabel("ID"));  
        formPanel.add(idField);  
        formPanel.add(new JLabel("Name"));  
        formPanel.add(nameField);  
        formPanel.add(new JLabel("Gender"));  
        JPanel genderPanel = new JPanel(new FlowLayout());  
        genderPanel.add(maleBtn);  
        genderPanel.add(femaleBtn);  
        formPanel.add(genderPanel);  
        formPanel.add(new JLabel("Address"));  
        formPanel.add(addressField);  
        formPanel.add(new JLabel("Contact"));  
        formPanel.add(contactField);

        registerBtn = new JButton("Register");  
        exitBtn = new JButton("Exit");  
        formPanel.add(registerBtn);  
        formPanel.add(exitBtn);

        add(formPanel, BorderLayout.WEST);

        // Right Table Panel  
        tableModel = new DefaultTableModel(new String[]{"ID", "Name", "Gender", "Address", "Contact"}, 0);  
        dataTable = new JTable(tableModel);  
        add(new JScrollPane(dataTable), BorderLayout.CENTER);

        // Event Handling  
        registerBtn.addActionListener(e -> saveToDatabase());  
        exitBtn.addActionListener(e -> System.exit(0));

        setVisible(true);  
    }

    private void saveToDatabase() {  
        String id = idField.getText();  
        String name = nameField.getText();  
        String gender = maleBtn.isSelected() ? "Male" : femaleBtn.isSelected() ? "Female" : "";  
        String address = addressField.getText();  
        String contact = contactField.getText();

        try {  
            Connection conn = DriverManager.getConnection(  
                "jdbc:mysql://localhost:3306/registration\_database", "root", ""  
            );  
            String sql = "INSERT INTO users (id, name, gender, address, contact) VALUES (?, ?, ?, ?, ?)";  
            PreparedStatement stmt = conn.prepareStatement(sql);  
            stmt.setString(1, id);  
            stmt.setString(2, name);  
            stmt.setString(3, gender);  
            stmt.setString(4, address);  
            stmt.setString(5, contact);  
            stmt.executeUpdate();

            tableModel.addRow(new Object[]{id, name, gender, address, contact});  
            JOptionPane.showMessageDialog(this, "Registration successful!");

            // Clear fields  
            idField.setText("");  
            nameField.setText("");  
            genderGroup.clearSelection();  
            addressField.setText("");  
            contactField.setText("");  
        } catch (SQLException ex) {  
            JOptionPane.showMessageDialog(this, "Database error: " + ex.getMessage());  
        }  
    }

    public static void main(String[] args) {  
        SwingUtilities.invokeLater(() -> new RegistrationForm());  
    }  
}