import java.awt.\*;

import java.awt.event.\*;

import java.sql.\*;

import javax.swing.\*;

public class MDI extends JFrame implements ActionListener {

  Connection con;

  Statement stmt;

  JDesktopPane desktop;

  JMenuItem menuCreate;

  JMenuItem menuInsert;

  JMenuItem menuConsult;

  JMenuItem menuRemove;

  JMenuItem menuExit;

  WindowConsult WindowConsult;

  public MDI() {

    super("Multiple Document Interface");

    setExtendedState(JFrame.MAXIMIZED\_BOTH);

    setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

    desktop = new JDesktopPane();

    add(desktop);

    setJMenuBar(createMenu());

    initBD();

    WindowConsult = new WindowConsult(desktop, con);

    desktop.add(WindowConsult);

    WindowConsult.setVisible(false);

    setVisible(true);

  }

  JMenuBar createMenu() {

    JMenuBar menuBar = new JMenuBar();

    menuCreate = new JMenuItem("Criar Tabela");

    menuBar.add(menuCreate);

    menuCreate.addActionListener(this);

    menuInsert = new JMenuItem("Inserir Dados");

    menuBar.add(menuInsert);

    menuInsert.addActionListener(this);

    menuConsult = new JMenuItem("Consultar Tabela");

    menuBar.add(menuConsult);

    menuConsult.addActionListener(this);

    menuRemove = new JMenuItem("Remover Dados");

    menuBar.add(menuRemove);

    menuRemove.addActionListener(this);

    menuExit = new JMenuItem("Termina");

    menuBar.add(menuExit);

    menuExit.addActionListener(this);

    return menuBar;

  }

  public void actionPerformed(ActionEvent e) {

    if (e.getSource() == menuCreate) {

      try {

        stmt.executeUpdate(

            "CREATE TABLE ANIMES (NAME VARCHAR(30), RELEASEDATE VARCHAR(30), SCORE INTEGER, WATCHED VARCHAR(30))");

        JOptionPane.showMessageDialog(null, "Tabela criada com sucesso!", "Sucesso", JOptionPane.INFORMATION\_MESSAGE);

      } catch (SQLException erro) {

        JOptionPane.showMessageDialog(desktop, "Error: " + erro, "Erro", JOptionPane.ERROR\_MESSAGE);

      } catch (NullPointerException erro) {

        JOptionPane.showMessageDialog(desktop, "Error: " + erro, "Erro", JOptionPane.ERROR\_MESSAGE);

      }

    } else if (e.getSource() == menuInsert) {

      new WindowInsert(desktop, con);

    } else if (e.getSource() == menuConsult) {

      WindowConsult.setVisible(true);

    } else if (e.getSource() == menuRemove) {

      new WindowRemove(desktop, con);

    } else if (e.getSource() == menuExit) {

      System.exit(0);

    }

  }

  void initBD() {

    try {

      Class.forName("org.hsql.jdbcDriver");

      con = DriverManager.getConnection("jdbc:HypersonicSQL:http://127.0.0.1", "sa", "");

      stmt = con.createStatement();

    } catch (ClassNotFoundException erro) {

      JOptionPane.showMessageDialog(null, "Error: " + erro, "Erro", JOptionPane.ERROR\_MESSAGE);

      System.exit(1);

    } catch (SQLException erro) {

      JOptionPane.showMessageDialog(null, "Error: " + erro, "Erro", JOptionPane.ERROR\_MESSAGE);

      System.exit(1);

    }

  }

  public void terminate() {

    try {

      stmt.close();

      con.close();

    } catch (SQLException erro) {

      JOptionPane.showMessageDialog(desktop, "Error: " + erro, "Erro", JOptionPane.ERROR\_MESSAGE);

    }

  }

  public static void main(String[] args) {

    try {

      UIManager.setLookAndFeel(UIManager.getSystemLookAndFeelClassName());

    } catch (Exception erro) {

    }

    new MDI();

  }

}

class WindowInsert extends JInternalFrame {

  PreparedStatement pStmt;

  JDesktopPane desktop;

  JButton bt1;

  JTextField tf1, tf2, tf3, tf4;

  public WindowInsert(JDesktopPane d, Connection con) {

    super("Inserir dados na tabela Anime", true, true, false, true);

    desktop = d;

    try {

      pStmt = con.prepareStatement("INSERT INTO ANIMES VALUES (?, ?, ?, ?)");

      JPanel panel = new JPanel(new GridLayout(4, 2));

      panel.add(new JLabel("Nome: "));

      panel.add(tf1 = new JTextField(30));

      panel.add(new JLabel("data de lançamento: "));

      panel.add(tf2 = new JTextField(10));

      panel.add(new JLabel("Nota: "));

      panel.add(tf3 = new JTextField(5));

      panel.add(new JLabel("Assistiu? (sim/nao)"));

      panel.add(tf4 = new JTextField(5));

      add(panel, BorderLayout.NORTH);

      add(bt1 = new JButton("inserir"), BorderLayout.SOUTH);

      pack();

      setDefaultCloseOperation(JFrame.DISPOSE\_ON\_CLOSE);

      setVisible(true);

      desktop.add(this);

      bt1.addActionListener(new ActionListener() {

        public void actionPerformed(ActionEvent e) {

          try {

            pStmt.setString(1, tf1.getText());

            pStmt.setString(2, tf2.getText());

            pStmt.setInt(3, Integer.parseInt(tf3.getText()));

            pStmt.setString(4, tf4.getText());

            tf1.setText("");

            tf2.setText("");

            tf3.setText("");

            tf4.setText("");

            pStmt.executeUpdate();

            JOptionPane.showMessageDialog(null, "Dado inserido com sucesso!", "Sucesso",

                JOptionPane.INFORMATION\_MESSAGE);

          } catch (Exception erro) {

            JOptionPane.showMessageDialog(desktop, "erro: " + erro, "Erro", JOptionPane.ERROR\_MESSAGE);

          }

        }

      });

    } catch (Exception erro) {

      JOptionPane.showMessageDialog(desktop, "erro: " + erro, "Erro", JOptionPane.ERROR\_MESSAGE);

    }

  }

  public void terminate() {

    try {

      pStmt.close();

    } catch (SQLException erro) {

      JOptionPane.showMessageDialog(null, "erro: " + erro, "Erro", JOptionPane.ERROR\_MESSAGE);

    }

  }

}

class WindowRemove extends JInternalFrame {

  PreparedStatement pStmt;

  JDesktopPane desktop;

  JButton bt1;

  JTextField tf1, tf2, tf3, tf4;

  public WindowRemove(JDesktopPane d, Connection con) {

    super("Remover dados da tabela Anime", true, true, false, true);

    desktop = d;

    try {

      pStmt = con.prepareStatement("DELETE FROM ANIMES WHERE NAME = ?");

      JPanel panel = new JPanel(new FlowLayout());

      panel.add(new JLabel("Nome: "));

      panel.add(tf1 = new JTextField(30));

      setLayout(new GridLayout(2, 1));

      add(panel);

      add(bt1 = new JButton("Remover"));

      pack();

      setDefaultCloseOperation(JFrame.DISPOSE\_ON\_CLOSE);

      setVisible(true);

      desktop.add(this);

      bt1.addActionListener(new ActionListener() {

        public void actionPerformed(ActionEvent e) {

          try {

            pStmt.setString(1, tf1.getText());

            tf1.setText("");

            pStmt.executeUpdate();

            JOptionPane.showMessageDialog(null, "Dado removido com sucesso!", "Sucesso",

                JOptionPane.INFORMATION\_MESSAGE);

          } catch (Exception erro) {

            JOptionPane.showMessageDialog(desktop, "erro: " + erro, "Erro", JOptionPane.ERROR\_MESSAGE);

          }

        }

      });

    } catch (Exception erro) {

      JOptionPane.showMessageDialog(desktop, "erro; " + erro, "Erro", JOptionPane.ERROR\_MESSAGE);

    }

  }

  public void terminate() {

    try {

      pStmt.close();

    } catch (SQLException erro) {

      JOptionPane.showMessageDialog(null, "erro: " + erro, "Erro", JOptionPane.ERROR\_MESSAGE);

    }

  }

}

class WindowConsult extends JInternalFrame implements ActionListener {

  PreparedStatement pStmt;

  JDesktopPane desktop;

  JButton bt1;

  JTextField tf1;

  JTextArea ta1;

  Connection test;

  public WindowConsult(JDesktopPane d, Connection con) {

    super("Consultando dados da tabela Animes", true, true, false, true);

    desktop = d;

    try {

      test = con;

      JPanel p1 = new JPanel(new GridLayout(1, 3));

      p1.add(new JLabel("Nome (digite 'tudo' para consultar todos os dados): "));

      p1.add(tf1 = new JTextField(30));

      p1.add(bt1 = new JButton("Pesquisar"));

      add(p1, BorderLayout.NORTH);

      add(new JLabel("-----------------------------------------------------------------"), BorderLayout.CENTER);

      JScrollPane scrollPane = new JScrollPane(ta1 = new JTextArea(5, 30));

      add(scrollPane, BorderLayout.SOUTH);

      bt1.addActionListener(this);

      pack();

      setDefaultCloseOperation(HIDE\_ON\_CLOSE);

    } catch (Exception erro) {

      JOptionPane.showMessageDialog(desktop, "erro: " + erro, "Erro", JOptionPane.ERROR\_MESSAGE);

    }

  }

  public void actionPerformed(ActionEvent e) {

    try {

      ta1.setText("");

      if (tf1.getText().toString().equals("tudo") == true) {

        pStmt = test.prepareStatement("SELECT \* FROM ANIMES");

      } else {

        pStmt = test.prepareStatement("SELECT \* FROM ANIMES WHERE NAME LIKE ?");

        pStmt.setString(1, tf1.getText());

      }

      ResultSet rs = pStmt.executeQuery();

      while (rs.next()) {

        String s1 = rs.getString(1);

        String s2 = rs.getString(2);

        String s3 = rs.getString(3);

        String s4 = rs.getString(4);

        ta1.append(

            "|Nome: " + s1 + "|   |Data de lançamento: " + s2 + "|   |Nota: " + s3 + "|   |Assistiu? " + s4 + "|\n");

      }

      tf1.selectAll();

    } catch (Exception erro) {

      JOptionPane.showMessageDialog(desktop, "erro: " + erro, "Erro", JOptionPane.ERROR\_MESSAGE);

    }

  }

  public void terminate() {

    try {

      pStmt.close();

    } catch (SQLException erro) {

      JOptionPane.showMessageDialog(desktop, "erro: " + erro, "Erro", JOptionPane.ERROR\_MESSAGE);

    }

  }

}