Base de données - TP6 - Rapport

JDBCTest.java

```java
import java.awt.*;
import java.awt.event.*;
import java.sql.*;

public class JDBCTest extends Panel
implements ActionListener
{
    TextField nomDriver;
    TextField urlConnection;
    TextField nomLogin;
    TextField motPasse;
    Button boutonConnection;
    TextField requeteSQL;
    List resultatRequete;
    Button boutonExecuter;

    Connection conn;

    public JDBCTest()
    {
        Panel haut;
        Panel bas;

        haut = new Panel();
        bas = new Panel();

        boutonConnection = new Button("Connection");
        boutonConnection.addActionListener(this);

        boutonExecuter = new Button("Execution");
        boutonExecuter.addActionListener(this);

        Panel p1 = new Panel();
        p1.setLayout(new GridLayout(4, 2));
        p1.add(new Label("Driver :"));
        p1.add(nomDriver = new TextField("com.mysql.jdbc.Driver", 32));
        p1.add(new Label("URL jdbc :"));
        p1.add(urlConnection = new TextField("jdbc:mysql:///parc",32));
        p1.add(new Label("login :"));
        p1.add(nomLogin = new TextField(32));
        p1.add(new Label("password :"));
```

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        p1.add(motPasse = new TextField(32));

        haut.setLayout(new BorderLayout());
        haut.add(p1, BorderLayout.NORTH);
        haut.add(boutonConnection, BorderLayout.SOUTH);

        Panel p2 = new Panel();
        p2.setLayout(new BorderLayout());
        p2.add(new Label("requete"), BorderLayout.WEST);
        p2.add(requeteSQL = new TextField(32), BorderLayout.CENTER);

        Panel p3 = new Panel();
        p3.setLayout(new BorderLayout());
        p3.add(p2, BorderLayout.NORTH);
        p3.add(boutonExecuter, BorderLayout.SOUTH);

        bas.setLayout(new BorderLayout());
        bas.add(p3, BorderLayout.NORTH);
        bas.add(resultatRequete = new List(20));

        setLayout(new BorderLayout());
        add(haut, BorderLayout.NORTH);
        add(bas, BorderLayout.CENTER);
    }

    public void actionPerformed(ActionEvent evt)
    {
        Button source = (Button)evt.getSource();
        if(source == this.boutonConnection) {
            try
            {
                Class.forName(this.nomDriver.getText());
                this.conn = DriverManager.getConnection(
                        this.urlConnection.getText(),
                        this.nomLogin.getText(), this.motPasse.getText());
                resultatRequete.add("Connected");

            }
            catch (ClassNotFoundException e)
            {
                resultatRequete.add("erreur a l'execution : Driver");
                e.printStackTrace();
            }
            catch (SQLException e)
            {
                resultatRequete.add("erreur a l'execution : Connexion");
```

```java
                    e.printStackTrace();
                }
            }
            else if(source == this.boutonExecuter) {
                if(this.conn == null) {
                    resultatRequete.add("erreur a l'execution : aucune connexion");
                }
                else {
                    try
                    {
                        Statement stmt = this.conn.createStatement();
                        String request = this.requeteSQL.getText();
                        stmt.execute(request);
                        resultatRequete.add("Requete executee");
                    }
                    catch (SQLException e)
                    {
                        resultatRequete.add("erreur a l'execution : Requete");
                        e.printStackTrace();
                    }
                }
            }
        }

    public static void main(String[] arg)
    {
        JDBCTest test;

        Frame f = new Frame();
        f.setSize(500, 400);
        test = new JDBCTest( );

        f.add(test, BorderLayout.CENTER);
        f.addWindowListener(new WindowAdapter() {
            public void windowClosing(WindowEvent e)
            {
                System.exit(0);
            }} );
        f.setVisible(true);
    }
}
```

JDBCExo.java

```java
import java.sql.*;
import java.util.ArrayList;

public class JDBCExo
{
    private static Connection con;

    private static ArrayList<ArrayList<String>> getSalles() throws SQLException {
        ArrayList<ArrayList<String>> list = new ArrayList<ArrayList<String>>();

        Statement stmt = con.createStatement();
        String s = "SELECT * FROM Salle";
        ResultSet rs = stmt.executeQuery(s);
        ResultSetMetaData rsmd = rs.getMetaData();
        int columnsNumber = rsmd.getColumnCount();
        list.add(new ArrayList<String>());
        for(int i = 1; i <= columnsNumber; i++) {
            list.add(new ArrayList<String>());

            String str = rsmd.getColumnName(i);
            if(i > 1) {
                str = "     "+str;
            }
            list.get(0).add(str);
        }
        while(rs.next()) {
            for(int i = 1; i <= columnsNumber; i++) {
                String columnValue = rs.getString(i);
                list.get(i).add(columnValue);
            }
        }
        return list;
    }

    private static void deleteSalle(int index) throws SQLException {
        Statement stmt = con.createStatement();
        String s = "SELECT * FROM Salle";
        ResultSet rs = stmt.executeQuery(s);
        if(rs.absolute(index))
            rs.deleteRow();
    }

    public static void main(String[] args)
    {
```

```java
        try {
            Class.forName("com.mysql.jdbc.Driver");
            JDBCExo.con = DriverManager.getConnection("jdbc:mysql:///parc");
            ArrayList<ArrayList<String>> list = JDBCExo.getSalles();

            for (ArrayList<String> arrayList : list)
            {
                for (String s : arrayList)
                {
                    System.out.print(s + "     ");
                }
                System.out.println("");
            }

            deleteSalle(-1);
        }
        catch (ClassNotFoundException e)
        {
            System.out.println("erreur a l'execution : Driver");
            e.printStackTrace();
        }
        catch (SQLException e)
        {
            System.out.println("erreur a l'execution :");
            e.printStackTrace();
        }
    }
}
```