



## Bài Tập Chương 3 - ádasdads

Hệ điều hành (Trường Đại học Sư phạm Kỹ thuật Thành phố Hồ Chí Minh)

## ASSIGNMENT

1. Viết chương trình kết nối CSDL SQL Server theo mô hình Client-Server bằng C#.

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Data.SqlClient;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace Connection_to_Database
{
    public partial class Form1 : Form
    {
        public Form1()
        {
            InitializeComponent();
        }

        private void Form1_Load(object sender, EventArgs e)
        {
            rdbWindows.Checked = true;
            txtMatKhai.ReadOnly = true;
            txtTaiKhoan.ReadOnly = true;
        }

        private void rdbWindows_CheckedChanged(object sender, EventArgs e)
        {
            txtTaiKhoan.ReadOnly = true;
            txtMatKhai.ReadOnly = true;
            txtTenDb.ReadOnly = false;
            txtTenServer.ReadOnly = false;
        }

        private void rdbSQL_CheckedChanged(object sender, EventArgs e)
        {
            txtTaiKhoan.ReadOnly = false;
        }
    }
}
```

```

        txtMatKhou.ReadOnly = false;
        txtTenDb.ReadOnly = false;
        txtTenServer.ReadOnly = false;
    }

    private void btnCancel_Click(object sender, EventArgs e)
    {
        DialogResult dg = MessageBox.Show("Bạn có muốn thoát?", "Thông báo",
        MessageBoxButtons.OKCancel, MessageBoxIcon.Question);
        if(dg == DialogResult.OK)
        {
            Application.Exit();
        }
    }

    private void btnConnect_Click(object sender, EventArgs e)
    {
        try
        {
            SqlConnection conn = new SqlConnection();
            string connectionString = "";
            if (rdbWindows.Checked == true)
            {
                connectionString = "server=" + txtTenServer.Text;
                connectionString += ";database=" + txtTenDb.Text;
                connectionString += ";integrated security=true";
                conn.ConnectionString = connectionString;
            }
            else
            {
                connectionString = "server=" + txtTenServer.Text;
                connectionString += ";database=" + txtTenDb.Text;
                connectionString += ";uid=" + txtTaiKhoan.Text;
                connectionString += ";pwd=" + txtMatKhou.Text;
                conn.ConnectionString = connectionString;
            }
            conn.Open();
            MessageBox.Show("ket noi thanh cong");
            conn.Close();
        }
        catch (Exception ex)
        {
            MessageBox.Show(ex.Message);
        }
    }
}

```

```
}  
}
```

2. Viết chương trình kết nối CSDL SQL Server trên thiết bị di động sử dụng hệ điều hành Android.

**.xml :**

```
<?xml version="1.0" encoding="utf-8"?>  
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  
    xmlns:app="http://schemas.android.com/apk/res-auto"  
    xmlns:tools="http://schemas.android.com/tools"  
    android:layout_width="match_parent"  
    android:layout_height="match_parent"  
    android:orientation="vertical"  
    android:padding="16dp"  
    tools:context=".MainActivity">  
  
    <Button  
        android:id="@+id/connectButton"  
        android:layout_width="wrap_content"  
        android:layout_height="wrap_content"  
        android:text="Connect to Database" />  
  
    <TextView  
        android:id="@+id/resultTextView"  
        android:layout_width="wrap_content"  
        android:layout_height="wrap_content"  
        android:layout_marginTop="16dp"  
        android:text="Result:" />  
</LinearLayout>
```

**.java :**

```
import android.os.AsyncTask;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.TextView;  
import androidx.appcompat.app.AppCompatActivity;  
import java.sql.Connection;  
import java.sql.ResultSet;
```

```

import java.sql.Statement;
import java.sql.SQLException;

public class MainActivity extends AppCompatActivity {
    private Button connectButton;
    private TextView resultTextView;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        connectButton = findViewById(R.id.connectButton);
        resultTextView = findViewById(R.id.resultTextView);

        connectButton.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                ConnectDBTask task = new ConnectDBTask();
                task.execute();
            }
        });
    }

    private class ConnectDBTask extends AsyncTask<Void, Void, String> {
        @Override
        protected String doInBackground(Void... voids) {
            try {
                Connection conn = SQLConnector.connect();
                Statement stmt = conn.createStatement();
                ResultSet rs = stmt.executeQuery("SELECT * FROM
your_table_name");

                StringBuilder result = new StringBuilder();

                while (rs.next()) {
                    String data = rs.getString("column_name");
                    result.append(data).append("\n");
                }

                rs.close();
                stmt.close();
                conn.close();

                return result.toString();
            } catch (SQLException e) {
                e.printStackTrace();
            }
        }
    }
}

```

```
        } catch (SQLException e) {  
            e.printStackTrace();  
            return "Error: " + e.getMessage();  
        }  
    }  
    @Override  
    protected void onPostExecute(String s) {  
        super.onPostExecute(s);  
        resultTextView.setText("Result:\n" + s);  
    }  
}
```