

Project Skynet

Software Code : Project_Skynet/FormMain.cs



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

namespace Project_Skynet
{
    public partial class FormMain : Form
    {
        private int CK = 0;
        private FormLoading frmLoad = null;
        private FormControl frmControl = null;
        public int z;

        public FormMain()
        {
            InitializeComponent();
            this.HideForm();
        }

        private void FormMain_Load(object sender, EventArgs e)
        {
            this.startLoad(); //start loading
            panel3.Visible = false;
            timer2.Enabled = true;
            btn_Disconnect.Enabled = false;
            string[] Ports = SerialPort.GetPortNames();
            foreach(string port in Ports) {
                combo_PortName.Items.Add(port);
            }

            txt_CMD.AppendText(Environment.NewLine + "S K Y N E T - V1.0");
            txt_CMD.AppendText(Environment.NewLine + "Net-Based Device Controlling System");
            txt_CMD.AppendText(Environment.NewLine + "This program was coded by Tyler Kim");
            txt_Serial.AppendText(Environment.NewLine + "S K Y N E T - V1.0");
            txt_Serial.AppendText(Environment.NewLine + "Net-Based Device Controlling System");
            txt_Serial.AppendText(Environment.NewLine + "This program was coded by Tyler Kim");
        }

        private void timer1_Tick(object sender, EventArgs e)
        {
            blackscreen();
        }
    }
}
```

```
        if (CK == 0) //the very first
        {
            this.startLoad();
            timer1.Enabled = false;
        }
        else if (CK == 1) //after loading has completed
        {
            this.endLoad();
            //this.Visible = true;
            timer1.Enabled = false;
        }
        else if (CK == 2)
        {
            Thread.Sleep(1000);
            this.frmControl = new FormControl(this); //send "this" form to control form
            frmControl.WindowState = FormWindowState.Maximized; //controls form control
            frmControl.Show();
            panel3.Visible = false;
            timer1.Enabled = false;
        }
    }

    private void timer2_Tick(object sender, EventArgs e)
    {
        txt_Date.Text = DateTime.Now.ToString("yyyy-MM-dd");
        txt_Time.Text = DateTime.Now.ToString("tt hh:mm:ss");
    }

    private void frmLoad_frmLoad_FormLoadProgressCompleted(object sender,
        FormLoadProgressCompletedEventArgs e)
    {
        CK = 1;
        timer1.Interval = 1000;
        timer1.Enabled = true; //causes the form to close
        this.WindowState = FormWindowState.Maximized;
        this.FormBorderStyle = System.Windows.Forms.FormBorderStyle.None;
        //this.TopMost = true;
    }

    private void btn_Connect_Click(object sender, EventArgs e)
    {
        try
        {
            if (combo_PrgMode.Text != "" || combo_PortName.Text != "")
            {
                blackscreen();

                btn_Connect.Enabled = false;
                panel3.Visible = true;
                pb_loading.Image = Image.FromFile("aperture.gif");
            }
        }
    }
}
```

```
        CK = 2;
        timer1.Interval = 3000;
        timer1.Enabled = true;
        btn_Disconnect.Enabled = true;
        if (combo_PrgMode.Text == "ON")
        {
            z = 1;
            lb_PrgMode.Text = "ON";
        }
        else if (combo_PrgMode.Text == "OFF")
        {
            z = 0;
            lb_PrgMode.Text = "OFF";
        }
    }
    else
    {
        MessageBox.Show("Please Set Your Programming Mode.");
    }
}
catch (Exception ex)
{
    redscreen();
    txt_CMD.AppendText(Environment.NewLine + "ERROR >>" + ex.Message);
}
}

private void btn_Disconnect_Click(object sender, EventArgs e)
{
    blackscreen();
    if (this.frmControl != null)
    {
        this.frmControl.Disconn();
    }
}

private void combo_Device_SelectedIndexChanged(object sender, EventArgs e)
{
    if (combo_Device.Text == "T-33")
    {
        combo_PortName.Text = "COM5";
        txt_BaudRate.Text = "57600";
    }
    else
    {
        combo_PortName.Text = "Error";
        txt_BaudRate.Text = "Error";
    }
}

private void FormMain_MouseClick(object sender, MouseEventArgs e)
{
    blackscreen();
}
```



```
}

private void btn_Close_Click(object sender, EventArgs e)
{
    this.Close();
}

#region Methods
private void startLoad()
{
    if (this.frmLoad == null)
    {
        frmLoad = new FormLoading();
        frmLoad.FormLoadProgressCompleted +=
            frmLoad_frmLoad_FormLoadProgressCompleted; //make it available to get
        event
        frmLoad.WindowState = FormWindowState.Normal;
        frmLoad.Show(); //start to load ->go to Loading form
    }
}

private void endLoad()
{
    if (this.frmLoad != null)
    {
        frmLoad.Close();
        frmLoad = null; //close the load form
    }
}

private void hideForm()
{
    this.WindowState = FormWindowState.Minimized;
}

public void blackscreen()
{
    txt_CMD.BackColor = Color.Black;
    txt_Serial.BackColor = Color.Black;
}

public void redscreen()
{
    txt_CMD.BackColor = Color.Red;
    txt_Serial.BackColor = Color.Red;
}

#endregion

public void WriteCMD(string str)
{
    txt_CMD.AppendText(str + Environment.NewLine);
}

public void ConnectWithPortName(string str)
```

```
{
    str = combo_PortName.Text;

}
public void WriteSerial(string str)
{
    txt_Serial.AppendText(DateTime.Now + ">>" + str + Environment.NewLine);
}

public int CheckPrgMode()
{
    if (combo_PrgMode.Text == "ON")
    {
        z = 1;
        return z;
    }
    else if (combo_PrgMode.Text == "OFF")
    {
        z = 0;
        return z;
    }
    else
    {
        return z;
    }
}

}

}
```