﻿using System;

using System.Collections.Generic;

using System.ComponentModel;

using System.Data;

using System.Drawing;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

using System.Windows.Forms;

using System.Net;

using System.Net.Sockets;

using System.IO;

namespace ServerClient

{

public partial class Form1 : Form

{

private TcpClient client;

public StreamReader STR;

public StreamWriter STW;

public string receive;

public String text\_to\_send;

public Form1()

{

InitializeComponent();

IPAddress[] localIP = Dns.GetHostAddresses(Dns.GetHostName()); // my IP

foreach (IPAddress address in localIP)

{

if (address.AddressFamily == AddressFamily.InterNetwork)

{

textBox3.Text = address.ToString();

}

}

}

private void button2\_Click(object sender, EventArgs e) //method for START SERVER

{

TcpListener listener = new TcpListener(IPAddress.Any, int.Parse(textBox4.Text));

listener.Start();

client = listener.AcceptTcpClient();

STR = new StreamReader(client.GetStream());

STW = new StreamWriter(client.GetStream());

STW.AutoFlush = true;

backgroundWorker1.RunWorkerAsync();

backgroundWorker2.WorkerSupportsCancellation = true;

}

private void backgroundWorker1\_DoWork(object sender, DoWorkEventArgs e) // receive data

{

while (client.Connected)

{

try

{

receive = STR.ReadLine();

this.textBox2.Invoke(new MethodInvoker(delegate () { textBox2.AppendText("You : " + receive + "\n"); }));

receive = "";

}

catch (Exception x)

{

MessageBox.Show(x.Message.ToString());

}

}

}

private void backgroundWorker2\_DoWork(object sender, DoWorkEventArgs e) // send data

{

if (client.Connected)

{

STW.WriteLine(text\_to\_send);

this.textBox2.Invoke(new MethodInvoker(delegate () { textBox2.AppendText("Me : " + text\_to\_send + "\n"); }));

}

else

{

MessageBox.Show("Send Failed!");

}

backgroundWorker2.CancelAsync();

}

private void button3\_Click(object sender, EventArgs e)

{

client = new TcpClient();

IPEndPoint IP\_End = new IPEndPoint(IPAddress.Parse(textBox5.Text), int.Parse(textBox6.Text));

try

{

client.Connect(IP\_End);

if (client.Connected)

{

textBox2.AppendText("Connected to Server Successfully..." + "\n");

STW = new StreamWriter(client.GetStream());

STR = new StreamReader(client.GetStream());

STW.AutoFlush = true;

backgroundWorker1.RunWorkerAsync();

backgroundWorker2.WorkerSupportsCancellation = true;

}

}

catch (Exception x)

{

MessageBox.Show(x.Message.ToString());

}

}

private void button1\_Click(object sender, EventArgs e) // SEND button

{

if (textBox1.Text != "")

{

text\_to\_send = textBox1.Text;

backgroundWorker2.RunWorkerAsync();

}

textBox1.Text = "";

}

}

}