10738 AYESHA ANJUM

Quiz 3 Date: 21-04-2022

Code SS:

Server:

```
⊙ → ○ 👸 → 🔄 🖺 🛂 🥠 → 🤍 → Debug → Any CPU
                                                   - ▶ Start - ♬ 🚚 🔚 暗 🖫 🖫 🤰 🦄 🦄 💂
Form1.cs + X Server.cs SmtpSer.cs
                                                                                                                   olution Explorer
                                                                                                                   0 0 A = - 0 - 5 C 7 1 | F =
              using System.Windows.Forms;
       10
                                                                                                                   Solution 'Server-Quiz3' (1 project)
            □namespace Server_Quiz3
                                                                // Multiple Forms Connnections
       11
                                                                                                                   12

    ▶ Properties
    ▶ ■ References

                   public partial class Form1 : Form
       14
                                                                                                                        App.config
                       public Form1()
       15

■ Form1.cs

       16
                                                                                                                       Form1.Designer.cs
       17
                           InitializeComponent();
       18
                                                                                                                     ▲ ■ Server.cs
       19
                                                                                                                       ▶ Mary Server.Designer.cs
                       private void Form1_Load(object sender, EventArgs e)...
       20
                                                                                                                          ? Server.resx
        24
                                                                                                                     25
                       private void button1_Click(object sender, EventArgs e)
                                                                                                                         SmtpSer.Designer.cs
SmtpSer.resx
       26
       27
                           Server aSr = new Server();
                           aSr.Show();
        28
       29
                           this.Hide();
        30
        31
                       private void button2_Click(object sender, EventArgs e)
        33
        34
                           SmtpSer sSr = new SmtpSer();
        35
                           sSr.Show();
                           this.Hide();
        37
        38
                       private void button3_Click(object sender, EventArgs e)
        39
       41
                           Application.Exit();
       42
        43
```

Client

```
- ▶ Start - ♬ _ 등 등 情 = 2 | ■ 위 게 게 _
   Form1.cs +2 × Client.cs SmtpCl.cs Form1.cs [Design]
                                                                                                                                 Solution Explorer
                                           ▼ Client_Quiz3.Form1
   C≡ Client-Ouiz3

→ Ø Form10
                                                                                                                                 ○ ○ ☆ # - \ To - $ C #
                using System.Net:
        10
                                                                                                                                 Search Solution Explorer (Ctrl+;)
        11
                using System.Net.Sockets;
                                                                                                                                 Solution 'Client-Quiz3' (1 project)
Client-Quiz3
        12
                using System.Net.Mail;
        13

    ▶ Properties
    ▶ ■ References

             =namespace Client_Quiz3
                                                            // Multiple Forms Connection
        14
        15
                                                                                                                                      App.config
                     public partial class Form1 : Form

▲ Client.cs

        17
                                                                                                                                        ** Client.Designer.cs
                         public Form1()

    Client.resx
    ☐ Form1.cs
    ☐

        18
        19
        20
                             InitializeComponent();
                                                                                                                                        컴 Form1.Designer.cs
                                                                                                                                        Form1.resx
        21
                                                                                                                                    22
                         private void Form1_Load(object sender, EventArgs e)...
                                                                                                                                        🐾 Program
        23
                                                                                                                                   27
                                                                                                                                     ▶ ☼ SmtpCl.Designer.cs
☼ SmtpCl.resx
        28
                         private void button1_Click(object sender, EventArgs e)
        29
                             Client aCl = new Client();
        30
        31
                             aCl.Show();
        32
                             this.Hide();
        33
        34
        35
                         private void button2_Click(object sender, EventArgs e)
        36
                             SmtpCl sCl = new SmtpCl();
        37
        38
                             sCl.Show();
                             this.Hide();
        40
        41
                         private void button3 Click(object sender, EventArgs e)
        42
        43
        44
                             Application.Exit();
        45
```

Server Async:

```
O → O | 👸 → 🔄 💾 🔐 | 🤊 → 🦿 → | Debug → Any CPU
                                                                                          - ▶ Start - | ♬ 🛫 🔚 作 🖫 🖫 🥞 🦏 🦄 🦄 💂
                                                                    Form1.cs [Design]
                                                                                                  Server.cs [Design]
                                                                                                                                  SmtpSer.cs [Design]
                                                                                                                                    → Ø Server(
      C# Server-Ouiz3
                                                                                                                                                                                                           G O 🔐 🛗 + 👩 + 🕏 🖒 🗗 📵 🔷 🔑
                     pamespace Server_Quiz3
            15
16
17
                   Ī
                             public partial class Server : Form
                                                                                                                                                                                                           Solution 'Server-Quiz3' (1 project)

    ✓ Server-Quiz3
    ✓ Properties
    ✓ References
                   Ė
                                  public Server()
            18
            19
            20
                                        InitializeComponent();
                                                                                                                                                                                                                  App.config
                                                                                                                                                                                                             Form1.cs

Torm1.cs

Torm1.csx

Program.cs
            22
23
24
25
                                  Dictionary<string, TcpClient> ListCLient = new Dictionary<string, TcpClient>();
byte[] b = new byte[1024];
                                  private void ClientConnect(IAsyncResult ar)
                                                                                                                                                                                                              26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
                                                                                                                                                                                                                 Server.Designer.cs
Server.resx
                                        TcpListener lis = (TcpListener)ar.AsyncState;
                                        Teptisener is = (cptisteneryar.asyncstat
Teptient cl = lis.EndaceptTeptilent(ar);
NetworkStream ns = cl.GetStream();
object[] a = new object[2];
a[0] = ns;
a[0] = ns;
a[1] = cl;

    SmtpSer.Designer.cs
    SmtpSer.resx

                                        ns.BeginRead(b, 0, b.Length, new AsyncCallback(ReadMsg), a);
lis.BeginAcceptTcpClient(new AsyncCallback(ClientConnect), lis);
                                  private void ReadMsg(IAsyncResult ar)
                                        object[] a = (object[])ar.AsyncState;
                                        NetworkStream ns = (NetworkStream)a[0];
TopClient cl = (TopClient)a[1];
int count = ns.EndRead(ar);
string msg = ASCIIEncoding.ASCII.GetString(b, 0, count);
            41
42
43
44
45
46
47
                                        if (msg.Contains("@name@"))
                                               string name = msg.Replace("@name@", "");
                                              ListCLient.Add(name, cl);
lstbxclient.Items.Add(name);
            48
            49
            50
51
                                         else
                                              txtDisplay.Text += msg + Environment.NewLine;

→ Form1.resx

C* Program.cs

            54
55
56
57
                                        ns.BeginRead(b, 0, b.Length, new AsyncCallback(ReadMsg), a);
                                                                                                                                                                                                                   ■ Server.cs
▶ ★ Server.Designer.cs
                                  private void button1_Click(object sender, EventArgs e)
                                                                                                                                                                                                                        Server.resx
            59

■ SmtpSer.cs

            60
                                        foreach (var item in ListCLient.Values)
                                                                                                                                                                                                                       SmtpSer.Designer.cs
SmtpSer.resx
            61
62
                                               NetworkStream ns = item.GetStream();
                                              StreamWriter sw = new StreamWriter(ns);

string textToSend = "Server Says to all: " + txtMsg.Text;

txtDisplay.Text = textToSend + Environment.NewLine;

sw.WriteLine(textToSend);
            63
64
65
66
67
                                              sw.Flush();
            68
69
            70
            71
72
73
74
75
76
77
78
79
80
                                  private void button2_Click_1(object sender, EventArgs e)
                                        TcpClient cl = (TcpClient)ListCLient[lstbxclient.SelectedItem.ToString()];
                                        NetworkStream ns = c1.GetStream();
StreamWriter sw = new StreamWriter(ns);
string textToSend = "Server Says: " + txtMsg.Text;
sw.WriteLine(textToSend);
                                        txtDisplay.Text += textToSend + Environment.NewLine;
sw.Flush();
```

Client Async:

```
🕝 🗝 🏻 📸 🕶 💾 🛂 🤧 🗸 🤻 🗸 Debug 🕝 Any CPU
                  Client.cs ⇒ × SmtpCl.cs
                                                Form1.cs [Design]
                                                                      Client.cs [Design]
     # Client-Ouiz3
                                                     Client_Quiz3.Client
                                                                                                                                                          ○ ○ 🟠 🗂 - │ To - ≒ 🖒 🗊
                □namespace Client_Quiz3
         15
                                                                                                                                                         Search Solution Explorer (Ctrl+;
         16
                                                                                                                                                          Solution 'Client-Quiz3' (1 project)
                      public partial class Client : Form
              þ
         17
         18
                                                                                                                                                         þ
                           public Client()
                                                                                                                                                            ▶ Properties
▶ ■■ References
         19
                                                                                                                                                               App.config
         21
                               InitializeComponent():
                                                                                                                                                               22
23
                          byte[] b = new byte[1024];
TcpClient cl = new TcpClient();
                                                                                                                                                                 † Client.Designer.cs
         24
                                                                                                                                                                  Client.resx
         25
                                                                                                                                                            26
27
                           private void button1_Click(object sender, EventArgs e)
                                                                                                                                                                  ** Form1.Designer.cs
                                                                                                                                                                  ** Form1.resx
         28
29
                               CheckForIllegalCrossThreadCalls = false;
                                                                                                                                                               C# Program.cs
                               cl.Connect(IPAddress.Loopback, 11000);
                                                                                                                                                               🕨 🐾 Program
         30
31
                                NetworkStream ns = cl.GetStream();
                                                                                                                                                            StreamWriter sw = new StreamWriter(ns);
sw.WriteLine("@name@" + textName.Text);
                                                                                                                                                              > ** SmtpCl.Designer.cs
** SmtpCl.resx
         32
                               sw.Flush();
ns.BeginRead(b, 0, b.Length, ReadMsg, ns);
         33
34
         35
36
         37
                           private void ReadMsg(IAsyncResult ar)
         38
         39
40
                               NetworkStream ns = (NetworkStream)ar.AsyncState;
                               int count = ns.EndRead(ar);
                               textBox2.Text += ASCIIEncoding.ASCII.GetString(b, 0, count);
ns.BeginRead(b, 0, b.Length, ReadMsg, ns);
         41
         42
         43
         44
         45
                           private void button2_Click(object sender, EventArgs e)
         46
                               NetworkStream ns = c1.GetStream();
StreamWriter sw = new StreamWriter(ns);
sw.WriteLine(textName.Text + " Says: " + txtMsg.Text);
         47
         48
         49
                               sw.Flush():
```

Server SMTP:

```
🏻 😉 ▼ 🗇 | 👸 ▼ 當 🖺 🛂 | 🤊 ▼ 🤍 ▼ | Debug 🔻 | Any CPU
                                                                                                                                              - ▶ Start - | ♬ 🛫 🛅 🖫 🖫 🧐 게 세 💂
                                                                              SmtpSer.cs

→ Ø SmtpSer()

                                                                                                                                                                                                                                                                                                                                                 14
                                                 amespace Server_Quiz3
                                                                                                                                                                                                                                                                                                                                            earch Solution Explorer (Ctrl+;
                      15
                                                                                                                                                                                                                                                                                                                                            Solution 'Server-Quiz3' (1 project)
                      16
                                                        public partial class SmtpSer : Form
                                                                                                                                                                                                                                                                                                                                            ▲ C Server-Quiz3
                      17

    ▶ Properties
    ▶ ■ References

                      18
                                                                    public SmtpSer()
                      19
                                                                                                                                                                                                                                                                                                                                                       App.config
                      20
                                                                              InitializeComponent();
                      21
                                                                                                                                                                                                                                                                                                                                                       Form1.Designer.cs
                      22
                                                                                                                                                                                                                                                                                                                                                               Torm1.resx
                      23
                                                                   private void button1_Click(object sender, EventArgs e)
                                                                                                                                                                                                                                                                                                                                                       C# Program.cs
                                                                                                                                                                                                                                                                                                                                                       ■ Server.cs
                      24
                                                                                                                                                                                                                                                                                                                                                              Server.Designer.cs
                      25
                                                                                                                                                                                                                                                                                                                                                               Server.resx
                      26

    SmtpSer.cs
    ↑ SmtpSer.Designer.cs
    ↑ SmtpSer.Designer.c
                      27
                                                                                           MailMessage mail = new MailMessage();
                                                                                          SmtpClient sCl = new SmtpClient("smtp.gmail.com");
mail.From = new MailAddress("ayeshaanjum737@gmail.com");
                      28
                                                                                                                                                                                                                                                                                                                                                                SmtpSer.resx
                      29
                       30
                                                                                           mail.To.Add(textBox1.Text.ToString());
                      31
                                                                                           mail.Subject = textBox2.Text.ToString();
                      32
                                                                                          mail.Body = textBox3.Text.ToString();
                      33
                                                                                           System.Net.Mail.Attachment attachment;
                      35
                                                                                           attachment = new System.Net.Mail.Attachment(textBox4.Text.ToString());
                      36
                                                                                           mail.Attachments.Add(attachment);
                      37
                      38
                      39
                                                                                           sCl.Credentials = new System.Net.NetworkCredential("ayeshaanjum737@gmail.com",
                      40
                                                                                           sCl.EnableSsl = true;
                      41
                                                                                           sCl.Send(mail);
                      42
                                                                                           MessageBox.Show("Mail Send");
                      43
                      44
                                                                               catch (Exception ex)
                      45
                                                                                           MessageBox.Show(ex.ToString());
```

Client SMTP:

```
🌡 🖸 ▼ 🔘 📸 ▼ 🚰 💾 🛂 🥠 ▼ 🤻 ▼ | Debug 🔻 Any CPU 💮 ▶ Start ▼ 🎜 🛫 陆 幅 | 置 🧏 📕 領 利 利 利 및
                                                                                                                               ○ 🖒 🛱 - | To - ≒ 🖒
                namespace Client_Quiz3
        14
                                                                                                                               earch Solution Explorer (Ctrl+;) 🔑
        15
                                                                                                                              Solution 'Client-Quiz3' (1 project)
        16
                     public partial class SmtpCl : Form
                                                                                                                                C# Client-Quiz3
        17
                                                                                                                                18
                          public SmtpCl()

√ App.config

☐ Client.cs

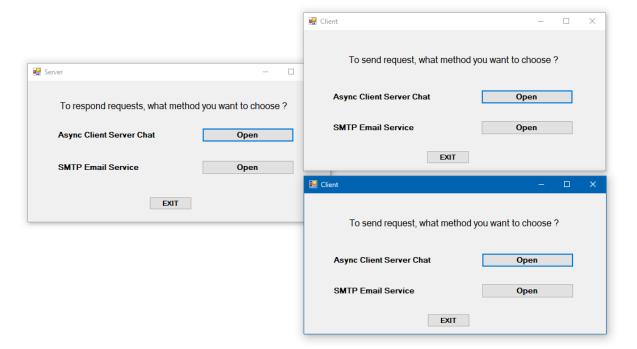
        19
                              InitializeComponent();
        20
                                                                                                                                  Client.Designer.cs
        21
        22
                                                                                                                                 Form1.cs
Form1.Designer.cs
                         private void button1_Click(object sender, EventArgs e)
        23
        24
                                                                                                                                     Form1.resx
                                                                                                                                  C# Program.cs
        25
                                                                                                                                26
                                  MailMessage mail = new MailMessage();
SmtpClient sCl = new SmtpClient("smtp.gmail.com");
        27

↑ SmtpCl.Designer.cs
 ↑ SmtpCl.resx

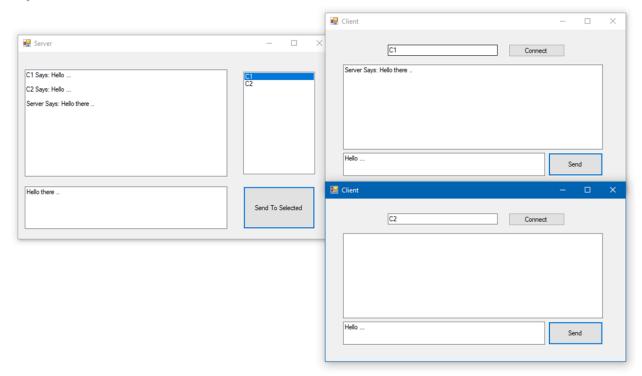
        28
                                  mail.From = new MailAddress("mirzaayesha3773@gmail.com");
        29
                                  mail.To.Add(textBox1.Text.ToString());
        30
        31
                                  mail.Subject = textBox2.Text.ToString();
                                  mail.Body = textBox3.Text.ToString();
        32
        33
        34
                                  sCl.Port = 587;
                                   sCl.Credentials = new System.Net.NetworkCredential("mirzaayesha3773@gmail.com"
        35
        36
                                   sCl.EnableSsl = true;
        37
                                   sCl.Send(mail);
                                  MessageBox.Show("Mail Send");
        38
        39
        40
                              catch (Exception ex)
        41
        42
                                   MessageBox.Show(ex.ToString());
```

Outputs:

Select Client Server Communication Type



Async Client Server Chat



SMTP Client Server Email Sending

