

```
Imports System
```

```
Imports System.IO.Ports
```

```
Public Class Form1
```

```
    Dim comPORT As String
```

```
    Dim receivedData As String = ""
```

```
    Dim command_app_1 As String = "T,1,500,500>"
```

```
    Dim command_app_2 As String = "T,2,500,500>"
```

```
    Dim Stop_command As String = "E"
```

```
    Dim Start_command As String = "S"
```

```
    Dim hulp1 As String = ""
```

```
    Dim name2 As String
```

```
    Dim name1 As String
```

```
    Dim name3 As String
```

```
    Dim testpos As Integer
```

```
    Dim iFileNo As Integer
```

```
    Dim command(20) As String
```

```
    Dim picture(20) As String
```

```
    Dim sexe(20) As Integer
```

```
    Public Property ImageLocation As String
```

```
    Dim ktest As Integer = 0
```

```
    Dim numRec As Integer = 0
```

```
    Dim OutArduino(20) As String
```

```
    Dim FirstCharacter As Integer
```

```
    Dim keuze(20) As Integer
```

```
    Dim correct As Integer = 0
```

```
    ''Dim SecondForm As New Form
```

```
Private Sub Form1_Load(sender As Object, e As EventArgs) Handles MyBase.Load
```

```
    Timer1.Enabled = False
```

```
    comPORT = ""
```

```
    For Each sp As String In My.Computer.Ports.SerialPortNames  
        ComboBox1.Items.Add(sp)
```

```
    Next
```

```
    OutArduino(1) = "Arduino output"
```

```
    For k = 1 To 20
```

```
        OutArduino(k) = "Arduino"
```

```
    Next
```

```
End Sub
```

```
Private Sub ComboBox1_SelectedIndexChanged(sender As Object, e As EventArgs) ↗
```

```
    Handles ComboBox1.SelectedIndexChanged
```

```
    If (ComboBox1.SelectedItem <> "") Then
```

```
        comPORT = ComboBox1.SelectedItem
```

```
        Label1.Text = comPORT
```

```
    End If
```

```
End Sub
```

```
Private Sub Button1_Click(sender As Object, e As EventArgs) Handles ↗
```

```
    Button1.Click
```

```
    If (Button1.Text = "Connect") Then
```

```
        If (comPORT <> "") Then
```

```
            SerialPort1.Close()
```

```
            SerialPort1.PortName = comPORT
```

```
            SerialPort1.BaudRate = 9600
```

```
        SerialPort1.DataBits = 8
        SerialPort1.Parity = Parity.None
        SerialPort1.StopBits = StopBits.One
        SerialPort1.Handshake = Handshake.None
        SerialPort1.Encoding = System.Text.Encoding.Default
        SerialPort1.ReadTimeout = 10000
        SerialPort1.Open()
        SerialPort1.Write("C>")
        Button1.Text = "Dis-connect"
        Timer1.Enabled = True
        Label2.Text = "Timer: ON"
        Label2.Text = command_app_1
        Label3.Text = command_app_2
    Else
        MsgBox("Select a COM port first")
    End If
Else
    SerialPort1.Close()
    Button1.Text = "Connect"
    Timer1.Enabled = False
    Label2.Text = "Timer: OFF"
End If

End Sub

Private Sub Timer1_Tick(sender As Object, e As EventArgs) Handles Timer1.Tick
    receivedData = ReceiveSerialData()
    RichTextBox1.Text &= receivedData
    FirstCharacter = receivedData.IndexOf("OutArd:")
    If (FirstCharacter <> -1 And ktest > 0) Then
        Label10.Text = receivedData.Substring(FirstCharacter) "'First
            Character on: " + Str(FirstCharacter)
        OutArduino(ktest) = Label10.Text
    End If
    ' OutArduino(ktest) = RTrim(receivedData)
    ' If
End Sub

Function ReceiveSerialData() As String
    Dim Incoming As String
    Try
        Incoming = SerialPort1.ReadExisting()
        If Incoming Is Nothing Then
            Return "nothing" & vbCrLf
        Else
            Return Incoming
        End If
    Catch ex As TimeoutException
        Return "Error: Serial Port read timed out."
    End Try
End Function

Private Sub Button3_Click(sender As Object, e As EventArgs) Handles
    Button3.Click
        SerialPort1.Write(command_app_1)
End Sub
```

```
Private Sub Button4_Click(sender As Object, e As EventArgs) Handles Button4.Click
    SerialPort1.Write(command_app_2)
End Sub

Private Sub Button5_Click(sender As Object, e As EventArgs) Handles Button5.Click
    SerialPort1.Write(Stop_command)
End Sub

Private Sub Button6_Click(sender As Object, e As EventArgs) Handles Button6.Click
    SerialPort1.Close()
    Application.Exit()
End Sub

Private Sub Button2_Click(sender As Object, e As EventArgs) Handles Button2.Click
    RichTextBox1.Text = ""
End Sub

Private Sub Button7_Click(sender As Object, e As EventArgs) Handles Button7.Click
    OpenFileDialog1.ShowDialog()
    name2 = OpenFileDialog1.SafeFileName
    name1 = OpenFileDialog1.FileName
    testpos = InStr(name1, name2, CompareMethod.Text)
    Label14.Text = name2
    Label15.Text = name1
    '' Label16.Text = Str(testpos)
    Label16.Text = name1.Substring(0, testpos - 1)
    name3 = name1.Substring(0, testpos - 1)
End Sub

Private Sub Button8_Click(sender As Object, e As EventArgs) Handles Button8.Click
    Dim sFileText As String = " "

    Dim k As Integer = 0
    Dim kk As Integer = 0

    iFileNo = FreeFile()
    FileOpen(iFileNo, name1, OpenMode.Input)

    Do While Not EOF(iFileNo)
        If kk = 0 Then k = k + 1
        kk = kk + 1
        Input(iFileNo, sFileText)
        If kk = 1 Then command(k) = sFileText
        If kk = 2 Then picture(k) = sFileText
        If kk = 3 Then sexe(k) = Int(sFileText)
        RichTextBox1.Text &= sFileText + vbCrLf
        If kk = 3 Then kk = 0
    Loop
    numRec = k
    Label17.Text = "aantal records: " + Str(k)
```

```
FileClose(iFileNo)
End Sub

Private Sub Button9_Click(sender As Object, e As EventArgs) Handles Button9.Click ➤
    ktest = ktest + 1
    If ktest > numRec Then Button10.Visible = False
    PictureBox1.ImageLocation = picture(ktest) + ".jpg"
    PictureBox1.Load()
    Label8.Text = picture(ktest) + ".jpg"
    Threading.Thread.Sleep(700) ' even wachten
    Button10.Visible = True

End Sub

Private Sub Button11_Click(sender As Object, e As EventArgs) Handles Button11.Click ➤
    Button11.Visible = False
    Button12.Visible = False
    Button10.Visible = True
    keuze(ktest) = 1
    If keuze(ktest) = sexe(ktest) Then
        correct = correct + 1
    End If
    ktest = ktest + 1
    If ktest > numRec Then
        Button10.Visible = False
        PictureBox1.Visible = False
    Else
        PictureBox1.ImageLocation = picture(ktest) + ".jpg"
        PictureBox1.Load()
        Label8.Text = picture(ktest) + ".jpg"
        'Threading.Thread.Sleep(700) ' even wachten
    End If
End Sub

Private Sub Button12_Click(sender As Object, e As EventArgs) Handles Button12.Click ➤
    Button11.Visible = False
    Button12.Visible = False
    Button10.Visible = True
    keuze(ktest) = 2
    If keuze(ktest) = sexe(ktest) Then
        correct = correct + 1
    End If
    ktest = ktest + 1
    If ktest > numRec Then
        Button10.Visible = False
        PictureBox1.Visible = False
    Else
        PictureBox1.ImageLocation = picture(ktest) + ".jpg"
        PictureBox1.Load()
        Label8.Text = picture(ktest) + ".jpg"
        'Threading.Thread.Sleep(500) ' even wachten
    End If
End Sub
```

```

Private Sub Button10_Click(sender As Object, e As EventArgs) Handles Button10.Click
    ' start commando geven voor de Arduino
    SerialPort1.Write(command(ktest))
    SerialPort1.Write("S")
    'SerialPort1.Write("C>")
    'Threading.Thread.Sleep(500) ' even wachten
    Label19.Text = Str(ktest)
    Button10.Visible = False
    Button11.Visible = True
    Button12.Visible = True

```

End Sub

```

Private Sub Button13_Click(sender As Object, e As EventArgs) Handles Button13.Click
    Dim sFileText As String = " "
    Dim hulp As String = " "
    Dim k As Integer = 0
    Dim kk As Integer = 0
    Dim DQ As String
    DQ = Chr(34)

    iFileNo = FreeFile()

    hulp1 = Date.Now.ToString("dd-MM-yyyy HH:mm")
    hulp1 = Replace(hulp1, ":", "-")
    hulp1 = Replace(hulp1, " ", "T")
    hulp1 = Replace(hulp1, " ", "")

    FileOpen(iFileNo, name3 + "Output.txt", OpenMode.Output)

    PrintLine(iFileNo, "Out" + hulp1)

    For k = 1 To numRec
        hulp = Str(sexe(k)) + "," + Str(keuze(k)) + "," + command(k) + "," +
            picture(k) + "," + OutArduino(k)
        hulp.Replace(vbCr, "").Replace(vbLf, "")
        'hulp = Replace(hulp, DQ, "")
        'WriteLine(iFileNo, hulp)
        Print(iFileNo, hulp & vbLf)
        Label10.Text = Str(Len(hulp))
        hulp = " "
    Next
    Print(iFileNo, "Total: " + Str(numRec) + " Uitgevoerd: " + Str(ktest - 1) +
        " Correct: " + Str(correct))
    Label11.Text = "Total: " + Str(numRec) + " Uitgevoerd: " + Str(ktest - 1) +
        " Correct: " + Str(correct)
    FileClose(iFileNo)
    Label19.Text = "Wegschrijven klaar"

```

End Sub

```

Private Sub RichTextBox1_TextChanged(sender As Object, e As EventArgs) Handles RichTextBox1.TextChanged

```

End Sub
End Class

