

```
1 using System;
2 using System.Collections.Generic;
3 using System.ComponentModel;
4 using System.Data;
5 using System.Drawing;
6 using System.IO.Ports;
7 using System.Linq;
8 using System.Text;
9 using System.Threading.Tasks;
10 using System.Windows.Forms;
11
12 namespace TFG_SERIAL_TO_CSV
13 {
14
15     public partial class Form1 : Form
16     {
17         string[] Port_Names;
18         string[] BaudRateItems = { "300", "600", "1200", "2400", "4800",
19             "9600", "14400", "19200",
20             "22800", "38400", "57600", "115200" };
21         string[] Colores = { "IR_970", "IR_850", "Rojo", "Naranja",
22             "Amarillo", "Verde", "Azul", "UV" };
23         string Data_Received;
24         delegate void StringArgReturningVoidDelegate(string text);
25         public Form1()
26         {
27             InitializeComponent();
28         }
29
30         private void Form1_Load(object sender, EventArgs e)
31         {
32             BaudRateCombo.Items.AddRange(BaudRateItems);
33         }
34
35         private void Seleccion_Puerto_SelectedIndexChanged(object sender,
36             EventArgs e)
37         {
38
39         }
40
41         private void PuertoCombo_DropDown(object sender, EventArgs e)
42         {
43             Port_Names = SerialPort.GetPortNames();
44             PuertoCombo.Items.Clear();
45             PuertoCombo.Items.AddRange(Port_Names);
46         }
47
48         private void BaudRateCombo_SelectedIndexChanged(object sender,
49             EventArgs e)
50         {
51
52         }
53
54         private void Start_Click(object sender, EventArgs e)
```

```
53     {
54         try
55         {
56             Puerto_Serie.Close();
57             Puerto_Serie.PortName = PuertoCombo.SelectedItem.ToString();
58             Puerto_Serie.BaudRate = Convert.ToInt32
59                 (BaudRateCombo.SelectedItem.ToString());
60             Puerto_Serie.Open();
61             if (Puerto_Serie.IsOpen)
62                 Puerto_Serie.Write("Start");
63             Puerto_Serie.DiscardInBuffer();
64             Data_Received = "";
65         }
66         catch (Exception error)
67         {
68         }
69     }
70
71     private void Puerto_Serie_DataReceived(object sender,
72         SerialDataReceivedEventArgs e)
73     {
74         Data_Received+= Puerto_Serie.ReadLine();
75         if (Data_Received == "OK\r")
76         {
77             Data_Received = "";
78             Puerto_Serie.Write(textBox1.Text);
79         }
80         if (Data_Received.Contains("Finished"))
81         {
82             SetText("Guardar");
83         }
84     }
85
86
87     private void Parar_Click(object sender, EventArgs e)
88     {
89         Puerto_Serie.Close();
90         if (Data_Received.Contains("Finished"))
91         {
92             Explorer.Guardar(Data_Received);
93             Parar.Text = "Parar";
94         }
95     }
96
97
98     private void textBox1_TextChanged(object sender, EventArgs e)
99     {
100         try
101         {
102             Convert.ToInt32(textBox1.Text);
103         }
104         catch (Exception Error)
105         {
106             MessageBox.Show(this, "El valor introducido no es un
```

```
        numero" ,"Error", MessageBoxButtons.OK,  
        MessageBoxIcon.Error);  
107     textBox1.Text = "0";  
108     }  
109 }  
110 private void SetText(string text)  
111 {  
112     // InvokeRequired required compares the thread ID of the  
113     // calling thread to the thread ID of the creating thread.  
114     // If these threads are different, it returns true.  
115     if (textBox1.InvokeRequired)  
116     {  
117         StringArgReturningVoidDelegate d = new  
118             StringArgReturningVoidDelegate(SetText);  
119         Invoke(d, new object[] { text });  
120     }  
121     else  
122     {  
123         Parar.Text = text;  
124     }  
125 }  
126 }  
127
```