```csharp
1   /*
2    * Author  : Dubas Loïc
3    * Class   : I.FA-P3B
4    * School  : CFPT-I
5    * Date    : June 2018
6    * Descr.  : edit the current loaded position
7    * Version : 1.0
8    * Ext. dll: LeapCSharp.NET4.5
9    */
10
11  using System;
12  using System.Collections.Generic;
13  using System.ComponentModel;
14  using System.Data;
15  using System.Drawing;
16  using System.Linq;
17  using System.Text;
18  using System.Threading.Tasks;
19  using System.Windows.Forms;
20
21  namespace fingers_cloner
22  {
23      public partial class frmEdit : Form
24      {
25          #region initialization
26          // name and picture of the modele
27          string nameHandToEdit;
28          string imageHandToEdit;
29          // the hand to edit and the updated picture
30          MyHand handToEdit;
31          Bitmap loadedPicture;
32          string imageAsString;
33
34          // Initialize serialization functions
35          Serialization serialization;
36          #endregion
37
38          /// <summary>
39          /// default constructor
40          /// </summary>
41          /// <param name="modelHand">the position to edit</param>
42          public frmEdit(MyHand modelHand)
43          {
44              InitializeComponent();
45
46              handToEdit = modelHand;
47              nameHandToEdit = modelHand.Name;
48              imageHandToEdit = modelHand.Image;
49
50              serialization = new Serialization();
51
52              tbxName.Text = modelHand.Name;
53              tbxDescription.Text = modelHand.Description;
54          }
55
56          /// <summary>
```

```
57              /// validation is possible only if the textbox of the name isn't empty
58              /// </summary>
59              /// <param name="sender"></param>
60              /// <param name="e"></param>
61              private void tbxName_TextChanged(object sender, EventArgs e)
62              {
63                  if (tbxName.Text.Length <= 0)
64                  {
65                      btnValidate.Enabled = false;
66                  }
67                  else
68                  {
69                      btnValidate.Enabled = true;
70                  }
71              }
72
73              /// <summary>
74              /// validation is possible only if the textbox of the description
                  isn't empty
75              /// </summary>
76              /// <param name="sender"></param>
77              /// <param name="e"></param>
78              private void tbxDescription_TextChanged(object sender, EventArgs e)
79              {
80                  if (tbxDescription.Text.Length <= 0)
81                  {
82                      btnValidate.Enabled = false;
83                  }
84                  else
85                  {
86                      btnValidate.Enabled = true;
87                  }
88              }
89
90              /// <summary>
91              /// open file dialog choose a picture and transform it in string
92              /// </summary>
93              /// <param name="sender"></param>
94              /// <param name="e"></param>
95              private void btnImage_Click(object sender, EventArgs e)
96              {
97                  OpenFileDialog ofd = new OpenFileDialog();
98
99                  ofd.InitialDirectory = "C:\\Users";
100                 ofd.Filter = "Image files (*.png, *.jpg, *.jpeg, *.gif, *.bmp)|
                     *.png;*.jpg;*.jpeg;*.gif;*.bmp";
101
102                 if (ofd.ShowDialog() == DialogResult.OK)
103                 {
104                     loadedPicture = new Bitmap(ofd.FileName);
105                     lblFileName.Text = ofd.SafeFileName;
106                     lblFileName.Visible = true;
107                     TypeConverter converter = TypeDescriptor.GetConverter(typeof
                         (Bitmap));
108                     imageAsString = Convert.ToBase64String((Byte[])
                         converter.ConvertTo(loadedPicture, typeof(Byte[])));
```

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109            }
110        }
111
112        /// <summary>
113        /// edit the hand
114        /// </summary>
115        /// <param name="sender"></param>
116        /// <param name="e"></param>
117        private void btnValidate_Click(object sender, EventArgs e)
118        {
119            handToEdit.Name = tbxName.Text;
120            handToEdit.Description = tbxDescription.Text;
121            if (loadedPicture == null)
122            {
123                imageAsString = imageHandToEdit;
124            }
125            else
126            {
127                handToEdit.Image = imageAsString;
128            }
129
130            serialization.deletePosition(nameHandToEdit);
131            serialization.serialize(handToEdit);
132        }
133    }
134 }
135
```