```
1 /*-----*\
    * Author
 2
               : Salvi Cyril
 3
    * Date
               : 8th juny 2017
 4
    * Diploma : RaspiHome
 5
    * Classroom : T.IS-E2B
 6
    * Description:
 7
 8
           RaspiHomeTabletWindows is a program
 9
        compatible with the Windows tablet. It's a
10
        program that can be use as tactil graphic
        interface to order the component linked with
11
12
        the other Raspberry Pi.
   \*-----*/
13
14
15  namespace RaspiHomeTabletWindows.Menu
16 {
17
       public class MenuModel : PropertyChangedBase
18
       {
19
           #region Fields
20
           #region Constants
21
           #endregion
22
23
           #region Variables
24
           private MenuView _view = null;
25
           private CommunicationWithServer _comWithServer = null;
26
27
28
           // Use to store data in the cache
29
           private Windows.Storage.ApplicationDataContainer localSettings =
             Windows.Storage.ApplicationData.Current.LocalSettings;
30
           #endregion
31
           #endregion
32
33
           #region Properties
           public MenuView View
35
           {
36
               get
37
               {
38
                  return _view;
39
               }
40
41
              set
42
               {
43
                  _view = value;
44
45
           }
46
47
           public CommunicationWithServer ComWithServer
48
           {
49
              get
50
               {
51
                  return _comWithServer;
52
               }
53
54
               set
55
               {
```

```
\underline{\dots} e Tablet \verb|Windows| RaspiHomeTablet \verb|Windows| Menu \verb|MenuModel.cs|
```

```
56
                    _comWithServer = value;
57
                }
58
            }
59
            #endregion
60
61
            #region Constructor
62
            /// <summary>
            /// Constructor: Initializer
63
            /// </summary>
64
65
            public MenuModel(MenuView paramView)
66
                // Communication like Model-View
67
68
                this.View = paramView;
69
70
                // Initialize communication with server
71
                this.ComWithServer = new CommunicationWithServer();
72
            }
73
            #endregion
74
75
            #region Methods
76
            #endregion
77
        }
78 }
79
```

```
1
    < Page
 2
        x:Class="RaspiHomeTabletWindows.Menu.MenuView"
 3
        xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"
 4
        xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml"
 5
        xmlns:local="using:RaspiHomeTabletWindows.Menu"
        xmlns:d="http://schemas.microsoft.com/expression/blend/2008"
 6
 7
        xmlns:mc="http://schemas.openxmlformats.org/markup-compatibility/2006"
        mc:Ignorable="d">
 8
 9
        <Grid>
10
            <Grid.ColumnDefinitions>
                <ColumnDefinition Width="10"/>
11
                <ColumnDefinition/>
12
13
                <ColumnDefinition Width="10"/>
14
            </Grid.ColumnDefinitions>
            <Grid.RowDefinitions>
15
16
                <RowDefinition Height="10"/>
17
                <RowDefinition/>
18
                <RowDefinition Height="10"/>
19
            </Grid.RowDefinitions>
20
            <Grid Grid.Column="1" Grid.Row="1">
21
                <Grid.RowDefinitions>
22
                    <RowDefinition Height="*" MinHeight="160"/>
23
24
                    <RowDefinition Height="5*"/>
25
                </Grid.RowDefinitions>
                <!--TOOLBAR-->
26
                <Rectangle Fill="WhiteSmoke" Grid.Row="0"/>
27
28
                <Grid>
29
                    <Grid.ColumnDefinitions>
30
                        <ColumnDefinition/>
31
                        <ColumnDefinition Width="200"/>
32
                    </Grid.ColumnDefinitions>
                    <!--BUTTON TOOLBAR-->
33
                    <StackPanel x:Name="stkMenuToolbar" Orientation="Horizontal"</pre>
34
                      Grid.Column="0"/>
35
                    <!--SOME INFORMATION-->
36
                    <Grid Grid.Column="1">
                        <TextBlock Text="RaspiHome" HorizontalAlignment="Left"
37
                        VerticalAlignment="Center" FontSize="30" Margin="10,0,0,0"/ →
                    </Grid>
38
39
                </Grid>
40
                <!--FRAME EVENT WITH TOOLBAR BUTTON-->
41
                <Grid x:Name="grdFrame" Grid.Row="1" Background="White">
42
                    <Frame x:Name="frmMenu"/>
43
44
                </Grid>
            </Grid>
45
46
        </Grid>
47
   </Page>
48
```

```
...letWindows\RaspiHomeTabletWindows\Menu\MenuView.xaml.cs
    /*-----*\
 1
 2
    * Author
              : Salvi Cyril
 3
     * Date
                : 8th juny 2017
 4
    * Diploma : RaspiHome
 5
    * Classroom : T.IS-E2B
 6
 7
     * Description:
 8
            RaspiHomeTabletWindows is a program
 9
         compatible with the Windows tablet. It's a
10
         program that can be use as tactil graphic
11
         interface to order the component linked with
12
         the other Raspberry Pi.
13 \*-----
14
using RaspiHomeTabletWindows.Menu.MenuToolbar;
    using RaspiHomeTabletWindows.Modules.GlobalSetup;
17 using RaspiHomeTabletWindows.Modules.Home;
18 using RaspiHomeTabletWindows.Modules.Information;
19 using RaspiHomeTabletWindows.Modules.Setting;
20 using System;
21 using System.Collections.Generic;
22 using System.Linq;
23 using Windows.UI.Xaml;
24 using Windows.UI.Xaml.Controls;
26 // The User Control item template is documented at http://go.microsoft.com/
      fwlink/?LinkId=234236
27
28 namespace RaspiHomeTabletWindows.Menu
29
30
        public sealed partial class MenuView : Page
31
        {
32
            #region Fields
33
            #region Constants
            #endregion
34
35
36
            #region Variables
37
            private MenuModel _model = null;
38
39
            private ToolbarButtonView _btnToolbarView = null;
40
            private string frameAlreadyChoose = "";
41
            private Dictionary<string, Dictionary<string, string>>
42
              _buttonInformation = new Dictionary<string, Dictionary<string,
              string>>() {
                { "Home", new Dictionary<string,string>() { { "Retourner à
43
                  l'accueil" , "Home.png" } } },
                { "Global setup", new Dictionary<string,string>() { { "Visualiser →
44
                  l'ensemble des modules", "GlobalSetup.png" } } },
45
                { "Information", new Dictionary<string,string>() { { "Regarder les →
                   information du système", "Information.png" } } },
                { "Setting", new Dictionary<string,string>() { { "Parametrage de
46
                  l'application", "Setting.png" } } }
47
            };
48
```

private List<string> \_listChoise = null;

49

```
50
 51
             private List<ToolbarButtonData> _lstToolbarButtonData = null;
 52
             private List<ToolbarButtonView> _lstToolbarButton = null;
 53
             #endregion
             #endregion
 54
 55
             #region Properties
 56
 57
             public MenuModel Model
 58
 59
                 get
60
                 {
 61
                      return _model;
 62
                 }
 63
 64
                 set
 65
                 {
                      _model = value;
 66
                 }
 67
 68
             }
 69
 70
             public string FrameAlreadyChoose
 71
 72
                 get
 73
                 {
 74
                      return _frameAlreadyChoose;
 75
                 }
 76
 77
                 set
 78
 79
                      _frameAlreadyChoose = value;
 80
                 }
             }
 81
 82
 83
             public List<string> LstChoise
 84
 85
                 get
                 {
 86
 87
                      return _listChoise;
 88
                 }
 89
 90
                 set
 91
                 {
 92
                      _listChoise = value;
93
                 }
             }
 94
 95
 96
             public List<ToolbarButtonData> LstToolbarButtonData
 97
 98
                 get
 99
                 {
100
                      return _lstToolbarButtonData;
101
                 }
102
103
                 set
104
                 {
105
                      _lstToolbarButtonData = value;
```

```
...letWindows\RaspiHomeTabletWindows\MenuView.xaml.cs
```

```
3
```

```
106
107
             }
108
109
             public List<ToolbarButtonView> LstToolbarButton
110
                 get
111
112
                 {
113
                     return _lstToolbarButton;
114
                 }
115
116
                 set
117
                 {
                     lstToolbarButton = value;
118
119
                 }
120
             }
121
             #endregion
122
123
             #region Constructor
124
             /// <summary>
125
             /// Constructor: Initializer
126
             /// </summary>
127
             public MenuView()
128
129
                 this.InitializeComponent();
130
                 this.Loaded += UserControl_Loaded;
131
132
                 this.Model = new MenuModel(this);
133
134
                 InitializeToolbarButton();
135
136
             }
137
             #endregion
138
139
             #region Event
             private void UserControl_Loaded(object sender, RoutedEventArgs e)
140
141
             {
                 UpdateMenuToolbar();
142
143
             }
144
145
             private void MenuToolbarButton_Click(object sender, EventArgs e)
146
147
                 foreach (var toolbarButton in this.LstToolbarButton)
148
                 {
149
                     toolbarButton.IsSelected = false;
150
151
                 switch (((ToolbarButtonView)sender).WhoseButtonClicked)
152
153
154
                     case "Home":
155
                         this.frmMenu.Content = null;
156
                         this.frmMenu.Navigate(typeof(HomeView));
157
                         break;
158
                     case "Global setup":
159
                         this.frmMenu.Content = null;
160
                         this.frmMenu.Navigate(typeof(GlobalSetupView));
161
                         break;
```

```
...letWindows\RaspiHomeTabletWindows\MenuView.xaml.cs
```

```
Δ
```

```
162
                     case "Information":
163
                         this.frmMenu.Content = null;
164
                         this.frmMenu.Navigate(typeof(InformationView));
165
                         break;
                     case "Setting":
166
                         this.frmMenu.Content = null;
167
168
                         this.frmMenu.Navigate(typeof(SettingView));
169
                         break;
170
                 }
171
                 ((ToolbarButtonView)sender).IsSelected = true;
172
173
             }
             #endregion
174
175
             #region Methods
176
177
             private void InitializeToolbarButton()
178
                 this.LstToolbarButtonData = new List<ToolbarButtonData>();
179
180
                 this.LstToolbarButton = new List<ToolbarButtonView>();
                 this.LstChoise = new List<string>();
181
182
                 foreach (var keyInfo in this._buttonInformation.Keys)
183
184
                 {
185
                     this.LstToolbarButtonData.Add(new ToolbarButtonData(keyInfo,
                         this._buttonInformation[keyInfo].Keys.FirstOrDefault(),
186
                         this._buttonInformation[keyInfo][this._buttonInformation
187
                         [keyInfo].Keys.FirstOrDefault()]));
188
                     this.LstChoise.Add(keyInfo);
189
                 }
             }
190
191
192
             private void UpdateMenuToolbar()
193
194
                 //foreach (ToolbarButtonView t in this.stkMenuToolbar.Children)
                       t. click -= MenuToolbarButton Click;
195
196
                 this.stkMenuToolbar.Children.Clear();
197
                 this.LstToolbarButton.Clear();
198
                 foreach (ToolbarButtonData t in this.LstToolbarButtonData)
199
200
                     this._btnToolbarView = new ToolbarButtonView(t.FrameChoose,
                       t.Description, t.IconLink);
                     this. btnToolbarView.Tag = t;
201
202
                     this. btnToolbarView. click += MenuToolbarButton Click;
203
                     this.stkMenuToolbar.Children.Add(this. btnToolbarView);
204
                     this.LstToolbarButton.Add(this. btnToolbarView);
205
                 }
206
             }
207
             #endregion
208
209
         }
210
    }
211
```

```
1 /*-----*\
 2
   * Author : Salvi Cyril
   * Date : 8th juny 2017
 3
 4
   * Diploma : RaspiHome
 5
   * Classroom : T.IS-E2B
 6
   * Description:
 7
8
           RaspiHomeTabletWindows is a program
9
        compatible with the Windows tablet. It's a
10
        program that can be use as tactil graphic
11
       interface to order the component linked with
12
        the other Raspberry Pi.
13 \*-----*/
14
15 using System;
16 using System.Collections.Generic;
17 using System.Linq;
18 using System.Threading.Tasks;
19 using Windows.Networking;
20 using Windows.Networking.Sockets;
21 using Windows.Storage.Streams;
22 using Windows.UI.Xaml;
23
24 namespace RaspiHomeTabletWindows
25 {
       public class CommunicationWithServer
26
27
       {
28
           #region Fields
29
           #region Constants
           // Default information to connect on the server
30
           private const int PORT = 54565;
31
32
           //// Need to be changed fo each configuration
           private const string IPSERVER = "10.134.97.117";// "192.168.2.8";
33
34
           private const string FORMATSTRING = "IPRasp={0};Location=
35
             {1};Component={2}";
           private const string COMMUNICATIONSEPARATOR = "@";
36
37
38
           // Important need to be changed if it's another room!
39
           private const string LOCATION = "Salon";
           private const string COMPONENT = "Tablet";
40
           private const string RPINAME = "Tablet " + LOCATION;
41
42
           private const int MESSAGE_FULL_LENGHT = 512;
43
44
           #endregion
45
46
           #region Variables
47
           private StreamSocket _socket = new StreamSocket();
48
           private StreamSocketListener listener = new StreamSocketListener();
49
           private List<StreamSocket> _connections = new List<StreamSocket>();
           private bool _isConnected = false;
50
           private bool _connecting = false;
51
52
53
           private Windows.Storage.ApplicationDataContainer localSettings =
54
       Windows.Storage.ApplicationData.Current.LocalSettings;
55
```

```
56
             private string messageCommand = "";
 57
 58
             private string _nameButtonClicked = "";
 59
             DispatcherTimer _dTimer = null;
 60
 61
             #endregion
 62
             #endregion
 63
 64
             #region Properties
 65
             public StreamSocket Socket
 66
 67
                  get
 68
 69
                  {
 70
                      return _socket;
 71
                  }
 72
 73
                  set
 74
                  {
 75
                      _socket = value;
 76
                  }
 77
             }
 78
 79
             public StreamSocketListener Listener
 80
             {
 81
                  get
 82
                  {
 83
                      return _listener;
 84
                  }
 85
 86
                  set
 87
                  {
 88
                      _listener = value;
 89
                  }
 90
             }
 91
             public List<StreamSocket> Connections
 92
 93
 94
                  get
 95
                  {
 96
                      return _connections;
 97
                  }
 98
 99
                  set
100
                  {
                      _connections = value;
101
102
                  }
             }
103
104
105
             public bool IsConnected
106
107
                  get
108
                  {
109
                      return _isConnected;
110
                  }
111
```

```
... ndows \verb|\RaspiHomeTabletWindows \verb|\CommunicationWithServer.cs| \\
```

```
3
```

```
112
                 set
113
                 {
114
                      _isConnected = value;
115
                 }
             }
116
117
118
             public bool Connecting
119
                 get
120
121
                 {
122
                      return _connecting;
123
                 }
124
125
                 set
126
                 {
                      _connecting = value;
127
128
                 }
129
             }
130
131
             public string MessageCommand
132
133
                 get
134
                 {
135
                      return _messageCommand;
136
                 }
137
138
                 set
139
140
                      _messageCommand = value;
141
             }
142
143
144
             public string NameButtonClicked
145
146
                 get
147
                 {
148
                      return _nameButtonClicked;
149
                 }
150
151
                 set
152
                 {
153
                      nameButtonClicked = value;
                 }
154
155
             #endregion
156
157
158
             #region Constructors
159
             /// <summary>
160
             /// Constructor: Initializer
161
             /// </summary>
             public CommunicationWithServer()
162
163
164
                 Connect();
165
                 this._dTimer = new DispatcherTimer();
166
167
                 this._dTimer.Interval = new TimeSpan(10);
```

```
...ndows\RaspiHomeTabletWindows\CommunicationWithServer.cs
```

```
Δ
```

```
168
                  this. dTimer.Tick += dTimer Tick;
169
170
                 this._dTimer.Start();
             }
171
172
             #endregion
173
174
             #region Events
175
             private void _dTimer_Tick(object sender, object e)
176
177
                 if (localSettings.Values["SendMessageToServer"] != null)
178
                 {
179
                      var messageToSend = localSettings.Values
                        ["SendMessageToServer"];
180
                      this.SendCommandToServer(messageToSend.ToString());
                      localSettings.Values.Remove("SendMessageToServer");
181
182
                 }
183
             }
184
             #endregion
185
             #region Methods
186
187
             /// <summary>
             \ensuremath{///} Connect the raspberry to the server
188
189
             /// </summary>
190
             private async void Connect()
191
             {
192
                 try
193
                 {
194
                      this.Connecting = true;
195
                      await this.Socket.ConnectAsync(new HostName(IPSERVER),
                        PORT.ToString());
196
                      SendForInitialize();
197
                      this.Connecting = false;
198
                      this.IsConnected = true;
199
                     WaitForData(this.Socket);
200
                 }
201
                 catch (Exception)
202
203
                 {
204
                      this.Connecting = false;
205
                      this.IsConnected = false;
206
                 }
             }
207
208
209
             /// <summary>
210
             /// Listen the traffic on the port
             /// </summary>
211
212
             private async void Listen()
213
214
                 this.Listener.ConnectionReceived += listenerConnectionReceived;
215
                 await this.Listener.BindServiceNameAsync(PORT.ToString());
             }
216
217
218
             void listenerConnectionReceived(StreamSocketListener sender,
               StreamSocketListenerConnectionReceivedEventArgs args)
219
             {
220
                 this.Connections.Add(args.Socket);
```

```
...ndows\RaspiHomeTabletWindows\CommunicationWithServer.cs
```

```
5
```

```
221
222
                 WaitForData(args.Socket);
223
            }
224
225
            /// <summary>
226
            /// Send the message in input to output
            /// </summary>
227
228
            /// <param name="socket"></param>
229
            /// <param name="message"></param>
230
            private async void SendMessage(StreamSocket socket, string message)
231
                 DataWriter dataWriter = new DataWriter(socket.OutputStream);
232
                 var len = dataWriter.MeasureString(message); // Gets the UTF-8
233
                   string length.
234
                 dataWriter.WriteInt32((int)len);
235
                 dataWriter.WriteString(message);
236
                 var ret = await dataWriter.StoreAsync();
237
                 dataWriter.DetachStream();
238
            }
239
            /// <summary>
240
            /// Send to initialize the raspberry to the server
241
242
            /// </summary>
            private void SendForInitialize()
243
244
            {
                 SendMessage(this.Socket, string.Format(COMMUNICATIONSEPARATOR +
245
                   RPINAME + COMMUNICATIONSEPARATOR + "Connection:" + FORMATSTRING, →
                    GetHostName(), LOCATION, COMPONENT));
246
            }
247
            /// <summary>
248
249
            /// Send the command to the server
250
            /// </summary>
251
            public void SendCommandToServer(string message)
252
             {
                 SendMessage(this.Socket, COMMUNICATIONSEPARATOR + "Send:" +
253
                   message);
254
                 this.MessageCommand = message;
255
             }
256
            /// <summary>
257
            /// Wait data readed if exist
258
259
            /// </summary>
260
            /// <param name="socket"></param>
261
            private async void WaitForData(StreamSocket socket)
262
             {
263
                 DataReader dataReader = new DataReader(socket.InputStream);
264
                 dataReader.InputStreamOptions = InputStreamOptions.Partial;
265
                 var messageLenght = dataReader.UnconsumedBufferLength;
266
                 uint stringBytes = messageLenght;
267
268
                 try
269
                 {
270
                     // Read modification in the stream
                     stringBytes = await dataReader.LoadAsync(MESSAGE_FULL_LENGHT);
271
272
```

```
... ndows \verb|\RaspiHomeTabletWindows \verb|\CommunicationWithServer.cs| \\
```

```
6
```

```
273
                     // read message
274
                     string messageRead = dataReader.ReadString(stringBytes);
275
276
                     await Task.Delay(TimeSpan.FromMilliseconds(200));
277
                     // Store value
278
                     localSettings.Values["ReceiveMessageFromServer"] =
                       messageRead;
                 }
279
280
                 catch (Exception e)
281
                 {
282
                     string output = e.Message;
283
284
                     if (messageLenght < 1)</pre>
285
                         return;
                 }
286
287
288
                 WaitForData(socket);
289
             }
290
291
             /// <summary>
292
             /// Get the ip of the raspberry
293
             /// </summary>
             /// <returns>return a string like 192.168.1.2</returns>
294
295
             public string GetHostName()
296
             {
297
                 List<string> IpAddress = new List<string>();
298
                 var Hosts =
                   Windows.Networking.Connectivity.NetworkInformation.GetHostNames →
                   ().ToList();
299
                 foreach (var Host in Hosts)
300
                 {
                     string IP = Host.DisplayName;
301
302
                     IpAddress.Add(IP);
303
304
                 return IpAddress.Last();
305
             }
306
             #endregion
307
         }
308 }
309
```

```
1 /*----*\
 2
   * Author : Salvi Cyril
 3
   * Date : 8th juny 2017
   * Diploma : RaspiHome
 4
 5
   * Classroom : T.IS-E2B
 6
 7
    * Description:
8
          RaspiHomeTabletWindows is a program
9
        compatible with the Windows tablet. It's a
10
        program that can be use as tactil graphic
        interface to order the component linked with
11
12
        the other Raspberry Pi.
   \*----*/
13
14
using Windows.UI.Xaml.Media.Imaging;
16
   namespace RaspiHomeTabletWindows.Menu.MenuToolbar
17
18 {
19
       public class ToolbarButtonModel : PropertyChangedBase
20
21
          #region Fields
          #region Constants
22
23
          #endregion
24
25
          #region Variables
          private ToolbarButtonView _view = null;
26
27
          private string _description = "";
28
29
          private string _folderIconName = "";
          private string _iconLink = null;
30
31
          private BitmapImage imgSource = null;
32
          #endregion
33
          #endregion
34
35
          #region Properties
          public ToolbarButtonView View
36
37
38
              get
39
              {
40
                  return _view;
41
              }
42
43
              set
44
              {
45
                  view = value;
46
              }
47
          }
48
49
          public string Description
50
51
              get
52
              {
53
                  return _description;
54
              }
55
56
              set
```

```
\underline{\dots} ome Tablet \verb|Windows\| Menu\| Menu\| Too lbar But ton Model.cs
```

```
2
```

```
57
                      _description = value;
 58
 59
                 }
             }
 60
 61
 62
             public string FolderIconName
 63
 64
                 get
 65
                 {
 66
                      return _folderIconName;
 67
                 }
 68
 69
                 set
 70
                      _folderIconName = value;
 71
 72
                  }
 73
             }
 74
 75
             public string IconLink
 76
 77
                 get
 78
                 {
 79
                      return _iconLink;
 80
                 }
 81
 82
                 set
 83
                 {
                      _iconLink = value;
 84
 85
                 }
             }
 86
 87
             public string IconPath { get; set; }
 88
 89
 90
             public BitmapImage ImgSource
 91
 92
                 get
 93
                 {
 94
                      return imgSource;
 95
                 }
 96
 97
                 set
 98
                 {
 99
                      imgSource = value;
100
                 }
101
              }
102
             #endregion
103
104
             #region Constructor
105
             /// <summary>
106
             /// Constructor: Initializer
107
             /// </summary>
             public ToolbarButtonModel(ToolbarButtonView paramView)
108
109
             {
110
                 this.View = paramView;
111
112
             #endregion
```

```
113
114
             #region Events
115
             #endregion
116
             #region Methods
117
             /// <summary>
118
             \ensuremath{///} Set informations for the button
119
120
             /// </summary>
121
             /// <param name="description"></param>
122
             /// <param name="iconLink"></param>
             public void SetInformation(string description, string iconLink)
123
124
             {
125
                 this.Description = description;
126
                 this.IconLink = iconLink;
127
                 if (iconLink != "")
128
129
                     this.IconPath = "ms-appx:///Icon/" + _iconLink;
130
                 else
                     this.IconPath = "";
131
132
                 ChangeIcon();
133
             }
134
135
136
             /// <summary>
137
             /// Change the icon of the button \,
138
             /// </summary>
             private void ChangeIcon()
139
140
141
                 this.View.ChangeIcon(this.IconPath);
142
             }
143
             #endregion
144
         }
145 }
146
```

```
/*-----*\
1
 2
    * Author : Salvi Cyril
 3
    * Date
                : 8th juny 2017
 4
    * Diploma : RaspiHome
 5
    * Classroom : T.IS-E2B
 6
    * Description:
 7
 8
           RaspiHomeTabletWindows is a program
 9
        compatible with the Windows tablet. It's a
10
        program that can be use as tactil graphic
        interface to order the component linked with
11
12
        the other Raspberry Pi.
13
14
15 namespace RaspiHomeTabletWindows.Menu.MenuToolbar
16
17
       public class ToolbarButtonData
18
       {
19
           #region Variables
20
           private string _frameChoose;
21
           private string _description;
           private string _iconLink;
22
23
           private bool _isSelected = false;
24
           #endregion
25
           #region Properties
26
27
           public string FrameChoose
28
29
               get
30
               {
31
                   return _frameChoose;
32
               }
33
34
               set
35
               {
36
                   _frameChoose = value;
37
38
           }
39
40
           public string Description
41
42
               get
43
               {
44
                   return _description;
45
               }
46
47
               set
48
               {
49
                   _description = value;
50
               }
           }
51
52
53
           public string IconLink
54
55
               get
56
               {
```

```
57
                    return _iconLink;
58
                }
59
60
                set
61
                {
                    _iconLink = value;
62
                }
63
            }
64
65
66
            public bool IsSelected
67
68
                get
69
                {
70
                    return _isSelected;
71
                }
72
73
                set
74
                {
75
                    _isSelected = value;
76
                    this.IsSelected = value;
77
                }
78
            }
79
            #endregion
80
81
            #region Constructor
82
            /// <summary>
            /// Constructor: Initializer
83
84
            /// </summary>
85
            public ToolbarButtonData(string frameChoose, string description, string →
               iconLink)
86
            {
87
                this.FrameChoose = frameChoose;
88
                this.Description = description;
89
                this.IconLink = iconLink;
90
            }
91
            #endregion
92
        }
93 }
94
```

```
<UserControl</pre>
       x:Class="RaspiHomeTabletWindows.Menu.MenuToolbar.ToolbarButtonView"
 2
 3
       xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"
       xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml"
 4
 5
       xmlns:local="using:RaspiHomeTabletWindows.Menu.MenuToolbar"
       xmlns:d="http://schemas.microsoft.com/expression/blend/2008"
 6
 7
       xmlns:mc="http://schemas.openxmlformats.org/markup-compatibility/2006"
       mc:Ignorable="d"
 8
       Height="150" Width="180">
 9
10
       <UserControl.Resources>
11
       </UserControl.Resources>
12
13
       <Button x:Name="btnToolbar" Height="150" Margin="10,0,20,0"</pre>
14
          Style="{StaticResource styleRoundButton}" Background="Gray"
          ToolTipService.ToolTip="{Binding Path=ToolTipMessage}" Width="{Binding
          Height, ElementName=btnToolbar}" Click="btnToolbar_Click">
            <Image x:Name="imgMenuToolbarButton" Height="100" Width="100"/>
15
16
        </Button>
17
   </UserControl>
18
```

```
1 /*-----*\
 2
   * Author : Salvi Cyril
   * Date : 8th juny 2017
 3
 4
   * Diploma : RaspiHome
   * Classroom : T.IS-E2B
 5
 6
 7
    * Description:
8
          RaspiHomeTabletWindows is a program
9
        compatible with the Windows tablet. It's a
10
        program that can be use as tactil graphic
        interface to order the component linked with
11
12
        the other Raspberry Pi.
13 \*-----*/
14
15 using System;
16 using Windows.UI;
17 using Windows.UI.Xaml;
18 using Windows.UI.Xaml.Controls;
19 using Windows.UI.Xaml.Media;
20 using Windows.UI.Xaml.Media.Imaging;
21
22 // The User Control item template is documented at http://go.microsoft.com/
     fwlink/?LinkId=234236
23
24 namespace RaspiHomeTabletWindows.Menu.MenuToolbar
25 {
       public sealed partial class ToolbarButtonView : UserControl
26
27
28
           #region Fields
           #region Constants
29
30
           #endregion
31
           #region Variables
32
33
           private ToolbarButtonModel model = null;
34
           public event EventHandler _click;
35
36
37
           private bool _isSelected = false;
38
           private bool _isPressed = false;
39
           private string whoseButtonClicked = "";
40
           #endregion
41
42
           #endregion
43
44
           #region Properties
           public ToolbarButtonModel Model
45
46
           {
47
              get
48
              {
49
                  return _model;
50
              }
51
52
              set
53
              {
54
                  model = value;
55
              }
```

```
\underline{\dots} ablet \verb|Windows\Menu\Menu| Toolbar \verb|NolbarButtonView.xaml.cs|
```

```
2
```

```
56
 57
 58
             public bool IsSelected
 59
 60
                 get
 61
                 {
 62
                      return _isSelected;
 63
                 }
 64
 65
                 set
 66
                 {
                      isSelected = value;
 67
 68
 69
                     btnToolbar.IsTabStop = _isSelected;
 70
                      if (value)
 71
 72
                      {
                          btnToolbar.BorderThickness = new Thickness(6.5);
 73
 74
                          btnToolbar.BorderBrush = new SolidColorBrush
                                                                                        P
                          (Color.FromArgb(255, 73, 130, 5));
 75
                      }
 76
                      else
 77
                      {
 78
                          btnToolbar.BorderThickness = new Thickness(5);
 79
                          btnToolbar.BorderBrush = new SolidColorBrush
                                                                                        P
                          (Color.FromArgb(255, 76, 74, 75));
 80
                      }
                 }
 81
 82
             }
 83
 84
             public bool IsPressed
 85
86
                 get
 87
                 {
 88
                      return _isPressed;
 89
                 }
 90
 91
                 set
 92
                 {
 93
                      _isPressed = value;
                 }
 94
             }
 95
 96
 97
             public string WhoseButtonClicked
 98
                 get
 99
100
                 {
101
                      return _whoseButtonClicked;
102
                 }
103
104
                 set
105
                 {
                      _whoseButtonClicked = value;
106
107
                 }
108
             }
             #endregion
109
```

```
...abletWindows\MenuToolbar\ToolbarButtonView.xaml.cs
```

```
3
```

```
110
111
             #region Constructor
112
             /// <summary>
113
             /// Constructor: Initializer
114
             /// </summary>
             public ToolbarButtonView(string frameChoose, string description,
115
               string iconLink)
116
117
                 InitializeComponent();
118
                 this.Model = new ToolbarButtonModel(this);
119
120
                 this.WhoseButtonClicked = frameChoose;
121
122
123
                 SetInformation(description, iconLink);
124
             }
125
             #endregion
126
127
             #region Events
             /// <summary>
128
129
             /// Event on the button
130
             /// </summary>
131
             /// <param name="sender"></param>
132
             /// <param name="e"></param>
             private void btnToolbar_Click(object sender, RoutedEventArgs e)
133
134
135
                 if (this. click != null)
136
                     this._click(this, null);
137
                 this.IsPressed = true;
138
             }
139
             #endregion
140
141
             #region Methods
142
             /// <summary>
             /// Set information of the button on the toolbar
143
144
             /// </summary>
             /// <param name="description"></param>
145
146
             /// <param name="iconLink"></param>
147
             private void SetInformation(string description, string iconLink)
148
             {
                 this.Model.SetInformation(description, iconLink);
149
150
             }
151
152
             /// <summary>
153
             /// Change the Icon of the button on the toolbar
154
             /// </summary>
             /// <param name="iconPath"></param>
155
156
             public void ChangeIcon(string iconPath)
157
             {
                 if (iconPath != "")
158
                     this.imgMenuToolbarButton.Source = new BitmapImage(new Uri
159
                       (iconPath));
160
             }
             #endregion
161
162
         }
163 }
```

```
1 /*-----*\
    * Author
 2
                : Salvi Cyril
 3
    * Date
                : 8th juny 2017
 4
    * Diploma : RaspiHome
 5
    * Classroom : T.IS-E2B
 6
 7
    * Description:
 8
           RaspiHomeTabletWindows is a program
 9
        compatible with the Windows tablet. It's a
10
        program that can be use as tactil graphic
        interface to order the component linked with
11
        the other Raspberry Pi.
12
13
14
15  namespace RaspiHomeTabletWindows.Modules.Home
16 {
17
       public class HomeModel
18
       {
19
           #region Fields
20
           #region Constants
21
           #endregion
22
23
           #region Varaibles
24
           private HomeView _view = null;
25
           #endregion
           #endregion
26
27
           #region Properties
28
29
           public HomeView View
30
           {
31
               get
32
               {
33
                   return _view;
34
               }
35
36
               set
37
               {
                   _view = value;
38
39
               }
40
41
           #endregion
42
           #region Constructor
43
44
           /// <summary>
           /// Constructor: Initializer
45
46
           /// </summary>
47
           public HomeModel(HomeView paramView)
48
           {
49
               this.View = paramView;
50
           }
51
           #endregion
52
53
           #region Methods
54
           #endregion
55
       }
56 }
```

```
1
   < Page
 2
        x:Class="RaspiHomeTabletWindows.Modules.Home.HomeView"
 3
        xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"
        xmlns:x="http://schemas.microsoft.com/winfx/2006/xam1"
 4
 5
        xmlns:local="using:RaspiHomeTabletWindows.Modules.Home"
        xmlns:d="http://schemas.microsoft.com/expression/blend/2008"
 6
 7
        xmlns:mc="http://schemas.openxmlformats.org/markup-compatibility/2006"
        mc:Ignorable="d">
 8
 9
10
        <Grid>
            <Grid.RowDefinitions>
11
                <RowDefinition Height="50"/>
12
13
                <RowDefinition/>
            </Grid.RowDefinitions>
14
15
            <StackPanel x:Name="stkLocationButton" Orientation="Horizontal"</pre>
              Grid.Row="0"/>
16
            <Frame x:Name="frmHome" Grid.Row="1"/>
17
        </Grid>
18 </Page>
19
```

```
1 /*----*\
 2
   * Author : Salvi Cyril
    * Date
 3
               : 8th juny 2017
 4
   * Diploma : RaspiHome
 5
    * Classroom : T.IS-E2B
 6
 7
    * Description:
 8
           RaspiHomeTabletWindows is a program
 9
        compatible with the Windows tablet. It's a
10
        program that can be use as tactil graphic
11
        interface to order the component linked with
12
        the other Raspberry Pi.
13 \*----*/
14
using RaspiHomeTabletWindows.Menu.LocationButton;
16 using System;
17 using System.Collections.Generic;
18 using Windows.UI.Xaml;
19 using Windows.UI.Xaml.Controls;
20
21 // The User Control item template is documented at http://go.microsoft.com/
     fwlink/?LinkId=234236
22
23 namespace RaspiHomeTabletWindows.Modules.Home
24 {
       public sealed partial class HomeView : Page
25
26
       {
27
28
           #region Fields
           #region Constants
29
           #endregion
30
31
32
           #region Varaibles
33
           private HomeModel model = null;
34
           private LocationButtonView _btnLocationButtonView = null;
35
36
           private string _frameAlreadyChoose = "";
37
38
           private List<string> _buttonInformation = new List<string>() {
39
               "Maison", "Salon", "Cuisine",
40
           };
41
42
           private List<string> _listChoise = null;
43
44
           private List<LocationButtonData> _lstLocationButtonData = null;
           private List<LocationButtonView> _lstLocationButton = null;
45
46
47
           private Windows.Storage.ApplicationDataContainer localSettings =
             Windows.Storage.ApplicationData.Current.LocalSettings;
48
49
           #endregion
50
           #endregion
51
52
           #region Properties
           public HomeModel Model
53
54
           {
```

```
...ws\RaspiHomeTabletWindows\Modules\Home\HomeView.xaml.cs
```

```
2
```

```
55
                 get
 56
                 {
 57
                      return _model;
                 }
 58
 59
 60
                 set
 61
                 {
                      _model = value;
 62
 63
                 }
 64
             }
 65
             public string FrameAlreadyChoose
 66
 67
                 get
 68
                 {
 69
                      return _frameAlreadyChoose;
 70
 71
                 }
 72
 73
                 set
 74
                 {
 75
                      _frameAlreadyChoose = value;
76
                 }
             }
 77
 78
 79
             public List<string> LstChoise
 80
 81
                 get
                 {
 82
 83
                      return _listChoise;
                 }
 84
 85
 86
                 set
 87
                 {
 88
                      _listChoise = value;
 89
                 }
             }
 90
 91
             public List<LocationButtonData> LstToolbarButtonData
 92
 93
 94
                 get
 95
                 {
 96
                      return _lstLocationButtonData;
 97
                 }
98
 99
                 set
100
                 {
101
                      _lstLocationButtonData = value;
102
                 }
103
             }
104
             public List<LocationButtonView> LstToolbarButton
105
106
107
                 get
108
                 {
109
                      return _lstLocationButton;
110
                 }
```

```
...ws\RaspiHomeTabletWindows\Modules\Home\HomeView.xaml.cs
```

```
3
```

```
111
112
                 set
113
                 {
114
                     _lstLocationButton = value;
115
                 }
116
             }
117
             #endregion
118
119
             #region Constructor
120
             /// <summary>
             /// Constructor: Initializer
121
122
             /// </summary>
             public HomeView()
123
124
             {
125
                 this.InitializeComponent();
126
127
                 this.Loaded += HomeView_Loaded;
128
129
                 this.Model = new HomeModel(this);
130
131
                 InitializeLocationButton();
             }
132
133
             #endregion
134
135
             #region Events
             private void HomeView_Loaded(object sender, RoutedEventArgs e)
136
137
             {
138
                 UpdateMenuToolbar();
139
             }
140
141
             /// <summary>
142
             /// Check the button clicked
143
             /// </summary>
144
             /// <param name="sender"></param>
             /// <param name="e"></param>
145
             private void _btnToolbarView__click(object sender, EventArgs e)
146
147
148
                 foreach (var locationButton in this.LstToolbarButton)
149
                 {
150
                     locationButton.IsSelected = false;
151
                 }
152
153
                 string buttonClicked = ((LocationButtonView)
                   sender).WhoseButtonClicked;
154
                 localSettings.Values["NameButtonClicked"] = buttonClicked;
155
156
157
                 var actualFrameChoose = localSettings.Values["NameButtonClicked"];
158
159
                 switch (buttonClicked)
160
                 {
                     case "Maison":
161
162
                         if ((actualFrameChoose.ToString() != "Maison") ||
                         (actualFrameChoose == null))
                             localSettings.Values.Remove("NameButtonClicked");
163
164
```

```
...ws\RaspiHomeTabletWindows\Modules\Home\HomeView.xaml.cs
165
                         localSettings.Values["NameButtonClicked"] = buttonClicked;
166
                         this.frmHome.Content = null;
167
                         this.frmHome.Navigate(typeof(Location.House.RoomView));
168
                         break;
                     case "Salon":
169
                         if ((actualFrameChoose.ToString() != "Salon") ||
170
                         (actualFrameChoose == null))
171
                              localSettings.Values.Remove("NameButtonClicked");
172
173
                         localSettings.Values["NameButtonClicked"] = buttonClicked;
                         this.frmHome.Content = null;
174
175
                         this.frmHome.Navigate(typeof
                                                                                      P
                         (Location.OtherRoom.RoomView));
176
                         break;
                     case "Cuisine":
177
                         if ((actualFrameChoose.ToString() != "Cuisine") ||
178
                         (actualFrameChoose == null))
                              localSettings.Values.Remove("NameButtonClicked");
179
180
                         localSettings.Values["NameButtonClicked"] = buttonClicked;
181
182
                         this.frmHome.Content = null;
                         this.frmHome.Navigate(typeof
183
                         (Location.OtherRoom.RoomView));
184
                         break:
185
                     case "Bureau":
                         if ((actualFrameChoose.ToString() != "Bureau") ||
186
                         (actualFrameChoose == null))
                              localSettings.Values.Remove("NameButtonClicked");
187
188
                         localSettings.Values["NameButtonClicked"] = buttonClicked;
189
190
                         this.frmHome.Content = null;
191
                         this.frmHome.Navigate(typeof
                         (Location.OtherRoom.RoomView));
192
                         break;
                 }
193
194
                 ((LocationButtonView)sender).IsSelected = true;
195
196
             }
197
             #endregion
198
             #region Methods
199
             /// <summary>
200
             /// Initialize the button on the toolbar
201
202
             /// </summary>
203
             private void InitializeLocationButton()
204
             {
                 this.LstToolbarButtonData = new List<LocationButtonData>();
205
206
                 this.LstToolbarButton = new List<LocationButtonView>();
207
                 this.LstChoise = new List<string>();
208
                 foreach (var buttonName in this._buttonInformation)
209
210
                     this.LstToolbarButtonData.Add(new LocationButtonData
211
                       (buttonName, buttonName));
                     this.LstChoise.Add(buttonName);
212
213
                 }
```

```
...ws\RaspiHomeTabletWindows\Modules\HomeView.xaml.cs
```

```
214
215
216
             /// <summary>
             /// Update the toolbar item
217
218
             /// </summary>
219
             private void UpdateMenuToolbar()
220
             {
                 this.stkLocationButton.Children.Clear();
221
222
                 this.LstToolbarButton.Clear();
223
                 foreach (LocationButtonData t in this.LstToolbarButtonData)
224
                     this. btnLocationButtonView = new LocationButtonView
225
                       (t.FrameChoose, t.Description);
226
                     this._btnLocationButtonView.Tag = t;
227
                     this._btnLocationButtonView._click += _btnToolbarView__click;
228
                     this.stkLocationButton.Children.Add
                       (this._btnLocationButtonView);
                     this.LstToolbarButton.Add(this._btnLocationButtonView);
229
230
                 }
231
             }
232
             #endregion
233
         }
234
    }
235
```

```
1 /*-----*\
    * Author
 2
                : Salvi Cyril
 3
    * Date
                : 8th juny 2017
 4
    * Diploma : RaspiHome
 5
    * Classroom : T.IS-E2B
 6
    * Description:
 7
 8
           RaspiHomeTabletWindows is a program
 9
        compatible with the Windows tablet. It's a
10
        program that can be use as tactil graphic
        interface to order the component linked with
11
12
        the other Raspberry Pi.
13
14
15 namespace RaspiHomeTabletWindows.Menu.LocationButton
16 {
17
       public class LocationButtonModel : PropertyChangedBase
18
       {
19
           #region Fields
20
           #region Constants
21
           #endregion
22
23
           #region Variables
24
           private LocationButtonView view = null;
25
           private string _description = "";
26
           private string _folderProjectName = "";
27
28
           #endregion
29
           #endregion
30
31
           #region Properties
32
33
           public LocationButtonView View
34
           {
35
               get
36
               {
37
                   return _view;
38
               }
39
40
               set
41
               {
                   _view = value;
42
43
               }
44
           }
45
46
           public string FolderProjectName
47
           {
48
               get
49
               {
50
                   return _folderProjectName;
51
               }
52
53
               set
54
               {
55
                   _folderProjectName = value;
56
               }
```

```
... ablet \verb|Windows\Menu\LocationButton\LocationButtonModel.cs|
57
58
59
            public string LocationName
60
61
                get
62
                {
63
                    return _description;
64
                }
65
66
                set
67
                {
68
                     description = value;
69
                    OnPropertyChanged("LocationName");
70
                }
71
72
            #endregion
73
74
            #region Constructor
75
            /// <summary>
76
            /// Constructor: Initializer
77
            /// </summary>
78
            public LocationButtonModel(LocationButtonView paramView)
79
            {
80
                this.View = paramView;
81
            }
82
            #endregion
83
84
            #region Methods
            /// <summary>
85
86
            /// Set information name
87
            /// </summary>
88
            /// <param name="description"></param>
89
            public void SetInformation(string description)
90
            {
91
                this.LocationName = description;
92
            }
93
            #endregion
```

94

95 }96

}

```
/*-----*\
1
    * Author
 2
                : Salvi Cyril
 3
    * Date
                : 8th juny 2017
 4
    * Diploma : RaspiHome
 5
    * Classroom : T.IS-E2B
 6
    * Description:
 7
 8
           RaspiHomeTabletWindows is a program
 9
        compatible with the Windows tablet. It's a
10
        program that can be use as tactil graphic
        interface to order the component linked with
11
        the other Raspberry Pi.
12
13
14
15 namespace RaspiHomeTabletWindows.Menu.LocationButton
16 {
17
       public class LocationButtonData
18
       {
19
           #region Fields
20
           #region Constants
21
           #endregion
22
23
           #region Variables
24
           private string _frameChoose;
25
           private string _description;
26
           private bool _isSelected = false;
27
           #endregion
28
           #endregion
29
30
           #region Properties
31
32
           public string FrameChoose
33
           {
34
               get
35
               {
36
                   return _frameChoose;
37
               }
38
39
               set
40
               {
41
                   frameChoose = value;
42
               }
43
           }
44
           public string Description
45
46
           {
47
               get
48
               {
49
                   return _description;
50
               }
51
52
               set
53
               {
54
                   _description = value;
55
               }
56
           }
```

```
57
58
            public bool IsSelected
59
            {
60
                get
61
                {
62
                    return _isSelected;
63
                }
64
65
                set
66
                {
67
                    _isSelected = value;
                    this.IsSelected = value;
68
69
                }
70
            }
71
            #endregion
72
            #region Constructor
73
74
            /// <summary>
75
            /// Constructor: Initializer
76
            /// </summary>
77
            public LocationButtonData(string frameChoose, string description)
78
            {
79
                this.FrameChoose = frameChoose;
80
                this.Description = description;
81
            }
            #endregion
82
83
84
            #region Methods
            #endregion
85
86
        }
87 }
88
```

```
<UserControl</pre>
        x:Class="RaspiHomeTabletWindows.Menu.LocationButton.LocationButtonView"
 2
 3
        xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"
        xmlns:x="http://schemas.microsoft.com/winfx/2006/xam1"
 4
 5
        xmlns:local="using:RaspiHomeTabletWindows.Menu.LocationButton"
        xmlns:d="http://schemas.microsoft.com/expression/blend/2008"
 6
 7
        xmlns:mc="http://schemas.openxmlformats.org/markup-compatibility/2006"
        mc:Ignorable="d"
 8
        d:DesignHeight="50" d:DesignWidth="150">
 9
10
        <Button x:Name="btnButtonLocation" Height="50" Width="120"</pre>
11
          Margin="10,0,20,0" Background="{StaticResource DefaultBackgroundColor}"
          Click="btnButtonLocation Click">
            <TextBlock x:Name="tblLocationName" Text="{Binding Path=LocationName}" >
12
              Foreground="White" FontSize="28"/>
        </Button>
13
14 </UserControl>
15
```

```
1 /*-----*\
 2
   * Author : Salvi Cyril
   * Date : 8th juny 2017
 3
 4
   * Diploma : RaspiHome
   * Classroom : T.IS-E2B
 5
 6
    * Description:
 7
8
          RaspiHomeTabletWindows is a program
9
       compatible with the Windows tablet. It's a
10
        program that can be use as tactil graphic
       interface to order the component linked with
11
12
        the other Raspberry Pi.
13 \*-----*/
14
15 using System;
16 using Windows.UI;
17 using Windows.UI.Xaml;
18 using Windows.UI.Xaml.Controls;
19 using Windows.UI.Xaml.Media;
20
21 // The User Control item template is documented at http://go.microsoft.com/
     fwlink/?LinkId=234236
22
23 namespace RaspiHomeTabletWindows.Menu.LocationButton
24 {
       public sealed partial class LocationButtonView : UserControl
25
26
       {
27
          #region Fields
28
          #region Constants
          #endregion
29
30
31
          #region Variables
          private LocationButtonModel _model = null;
32
33
          public event EventHandler _click;
34
35
          private bool _isSelected = false;
36
37
          private bool _isPressed = false;
38
39
          private string _whoseButtonClicked = "";
40
          #endregion
          #endregion
41
42
43
          #region Properties
44
          public LocationButtonModel Model
45
46
           {
47
              get
48
              {
49
                  return _model;
50
              }
51
52
              set
53
              {
54
                  _model = value;
55
              }
```

```
\verb|...tW| indows \verb|\Menu| Location Button \verb|\Location Button View.xaml.cs| \\
 56
 57
 58
             public bool IsSelected
 59
 60
                  get
 61
                  {
62
                      return _isSelected;
 63
                  }
 64
 65
                  set
 66
                  {
                      isSelected = value;
 67
 68
 69
                      btnButtonLocation.IsTabStop = _isSelected;
 70
                      if (value)
 71
 72
                      {
                          btnButtonLocation.BorderThickness = new Thickness(3);
 73
 74
                          btnButtonLocation.BorderBrush = new SolidColorBrush
                                                                                          P
                          (Color.FromArgb(255, 73, 130, 5));
 75
                          tblLocationName.Foreground = new SolidColorBrush
                          (Color.FromArgb(255, 73, 130, 5));
                      }
 76
 77
                      else
 78
                      {
 79
                          btnButtonLocation.BorderThickness = new Thickness(1);
 80
                          btnButtonLocation.BorderBrush = new SolidColorBrush
                          (Color.FromArgb(255, 76, 74, 75));
 81
                          tblLocationName.Foreground = new SolidColorBrush
                          (Color.FromArgb(255, 255, 255, 255));
 82
                      }
 83
                  }
             }
 84
 85
             public bool IsPressed
 86
87
 88
                  get
 89
                  {
 90
                      return _isPressed;
 91
                  }
 92
 93
                  set
 94
 95
                      isPressed = value;
 96
 97
             }
 98
 99
             public string WhoseButtonClicked
100
             {
101
                  get
102
                  {
103
                      return _whoseButtonClicked;
104
                  }
105
106
                  set
```

107

{

```
...tWindows\Menu\LocationButton\LocationButtonView.xaml.cs
```

```
108
                     whoseButtonClicked = value;
109
                 }
110
             }
111
             #endregion
112
             #region Constructor
113
             /// <summary>
114
115
             /// Constructor: Initializer
116
             /// </summary>
117
             public LocationButtonView(string frameChoose, string description)
118
                 this.InitializeComponent();
119
120
121
                 this.Model = new LocationButtonModel(this);
122
123
                 this.WhoseButtonClicked = frameChoose;
124
                 SetInformation(description);
125
126
127
                 this.tblLocationName.Text = description;
128
             }
             #endregion
129
130
131
             #region Events
132
             /// <summary>
133
             /// Event on the button
134
             /// </summary>
             /// <param name="sender"></param>
135
136
             /// <param name="e"></param>
             private void btnButtonLocation_Click(object sender, RoutedEventArgs e)
137
138
             {
139
                 if (this._click != null)
140
                     this._click(this, null);
141
                 this.IsPressed = true;
             }
142
143
             #endregion
144
145
             #region Methods
146
             /// <summary>
             /// Set the Text of the button
147
148
             /// </summary>
149
             /// <param name="description"></param>
             private void SetInformation(string description)
150
151
                 this.Model.SetInformation(description);
152
153
             }
154
             #endregion
155
156
         }
157 }
158
```

```
/*-----*\
1
    * Author
 2
                : Salvi Cyril
 3
    * Date
                : 8th juny 2017
 4
    * Diploma : RaspiHome
 5
    * Classroom : T.IS-E2B
 6
    * Description:
 7
 8
           RaspiHomeTabletWindows is a program
 9
        compatible with the Windows tablet. It's a
10
        program that can be use as tactil graphic
        interface to order the component linked with
11
12
        the other Raspberry Pi.
13
14
15 namespace RaspiHomeTabletWindows.Modules.Home.Location.House
16 {
       public class RoomModel
17
18
       {
19
           #region Fields
20
           #region Constants
21
           #endregion
22
23
           #region Varaibles
24
           private RoomView _view = null;
25
           Windows.Storage.ApplicationDataContainer localSettings =
26
                                                                                  P
             Windows.Storage.ApplicationData.Current.LocalSettings;
27
           #endregion
28
           #endregion
29
30
           #region Properties
31
           public RoomView View
32
           {
33
               get
34
               {
35
                   return _view;
36
               }
37
38
               set
39
               {
40
                   view = value;
41
               }
42
43
           #endregion
44
45
           #region Constructor
46
           /// <summary>
47
           /// Constructor: Initializer
48
           /// </summary>
49
           public RoomModel(RoomView paramView)
50
           {
51
               this.View = paramView;
52
           }
53
           #endregion
54
55
           #region Methods
```

```
\underline{\dots} e Tablet \verb|Windows| Modules| Home| Location| House| Room Model.cs
```

```
56
            /// <summary>
57
           /// Save message to be send
58
           /// </summary>
59
           /// <param name="action"></param>
60
           /// <param name="component"></param>
           public void SendMessage(string action, string component)
61
62
           {
               localSettings.Values["SendMessageToServer"] = action + " " +
63
64
           }
65
           #endregion
66
       }
67 }
68
```

```
1
   < Page
2
       x:Class="RaspiHomeTabletWindows.Modules.Home.Location.House.RoomView"
3
       xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"
4
       xmlns:x="http://schemas.microsoft.com/winfx/2006/xam1"
5
       xmlns:local="using:RaspiHomeTabletWindows.Modules.Home.Location.House"
6
       xmlns:d="http://schemas.microsoft.com/expression/blend/2008"
7
       xmlns:mc="http://schemas.openxmlformats.org/markup-compatibility/2006"
       mc:Ignorable="d">
8
9
10
       <RelativePanel x:Name="rpnlDisplay" Margin="10">
            <!--LIGHT BUTTON-->
11
            <Rectangle x:Name="rect1" Width="17"/>
12
            <TextBlock x:Name="tblLight" Text="Lumière"
13
              RelativePanel.RightOf="rect1" RelativePanel.AlignTopWithPanel="True" →
               FontSize="26"/>
            <Button x:Name="btnLightOnOff" RelativePanel.Below="tblLight"</pre>
14
                                                                                      P
              Height="120" Width="120" Background="{StaticResource
                                                                                      P
              DefaultBackgroundColor}" HorizontalContentAlignment="Center"
              VerticalContentAlignment="Center" Click="btnLightOnOff_Click">
15
                <Image x:Name="imgLightButton" Source="ms-appx:///Icon/bulb.png"/>
16
            </Button>
17
            <!--STORE BUTTON-->
18
19
            <!--UP-->
            <Rectangle x:Name="rect2" Width="20"</pre>
20
                                                                                      P
              RelativePanel.AlignRightWithPanel="True"/>
            <TextBlock x:Name="tblUp" Text="Monter" RelativePanel.LeftOf="rect2"
21
              RelativePanel.AlignTopWithPanel="True" FontSize="26"/>
22
            <Button x:Name="btnStoreUp" RelativePanel.AlignRightWithPanel="True"</pre>
              RelativePanel.Below="tblUp" Height="120" Width="120"
                                                                                      P
              Background="{StaticResource DefaultBackgroundColor}"
              HorizontalContentAlignment="Center" VerticalContentAlignment="Center" →
               Click="btnStoreUp Click">
23
                <Image Source="ms-appx:///Icon/arrowUp.png"/>
24
            </Button>
25
            <Rectangle x:Name="rect3" Height="20" Width="120"</pre>
26
                                                                                      P
              RelativePanel.AlignRightWithPanel="True"
              RelativePanel.Below="btnStoreUp"/>
27
            <!--DOWN-->
28
            <Button x:Name="btnStoreDown" RelativePanel.AlignRightWithPanel="True"</pre>
29
              RelativePanel.Below="rect3" Height="120" Width="120"
                                                                                      P
              Background="{StaticResource DefaultBackgroundColor}"
              HorizontalContentAlignment="Center" VerticalContentAlignment="Center" →
               Click="btnStoreDown Click">
30
                <Image Source="ms-appx:///Icon/arrowDown.png"/>
31
            </Button>
32
            <TextBlock x:Name="tblDown" Text="Descendre"
              RelativePanel.AlignHorizontalCenterWith="tblUp"
                                                                                      P
              RelativePanel.Below="btnStoreDown" FontSize="26"/>
33
            <!--OPEN-->
34
35
            <TextBlock x:Name="tbl0pen" Text="Ouvrir"
                                                                                      P
              RelativePanel.AlignHorizontalCenterWith="tblUp"
                                                                                      P
              RelativePanel.Above="btnStoreOpen" FontSize="26"/>
```

```
...TabletWindows\Modules\Home\Location\House\RoomView.xaml
36
            <Button x:Name="btnStoreOpen" RelativePanel.AlignRightWithPanel="True"</pre>
              RelativePanel.Above="rect4" Height="120" Width="120"
                                                                                      P
              Background="{StaticResource DefaultBackgroundColor}"
                                                                                      P
              HorizontalContentAlignment="Center" VerticalContentAlignment="Center" →
               Click="btnStoreOpen Click">
37
                <Image Source="ms-appx:///Icon/arrowUp.png"/>
38
            </Button>
39
            <Rectangle x:Name="rect4" Height="20" Width="150"</pre>
40
                                                                                      P
              RelativePanel.AlignRightWithPanel="True"
                                                                                      P
              RelativePanel.Above="btnStoreClose"/>
41
42
            <!--CLOSE-->
            <Button x:Name="btnStoreClose" RelativePanel.AlignRightWithPanel="True" →</pre>
43
               RelativePanel.Above="tblClose" Height="120" Width="120"
              Background="{StaticResource DefaultBackgroundColor}"
              HorizontalContentAlignment="Center" VerticalContentAlignment="Center" →
               Click="btnStoreClose_Click">
44
                <Image Source="ms-appx:///Icon/arrowDown.png"/>
45
            </Button>
            <TextBlock x:Name="tblClose" Text="Fermer"
46
                                                                                      P
              RelativePanel.AlignHorizontalCenterWith="tblUp"
                                                                                      P
              RelativePanel.AlignBottomWithPanel="True" FontSize="26"/>
47
       </RelativePanel>
48 </Page>
```

```
1 /*-----*\
 2
   * Author : Salvi Cyril
   * Date : 8th juny 2017
 3
 4
   * Diploma : RaspiHome
   * Classroom : T.IS-E2B
 5
 6
 7
    * Description:
8
          RaspiHomeTabletWindows is a program
9
        compatible with the Windows tablet. It's a
10
        program that can be use as tactil graphic
        interface to order the component linked with
11
12
        the other Raspberry Pi.
13 \*-----*/
14
15 using System;
16 using Windows.UI.Xaml;
17 using Windows.UI.Xaml.Controls;
18 using Windows.UI.Xaml.Media.Imaging;
19
20 // The User Control item template is documented at http://go.microsoft.com/
     fwlink/?LinkId=234236
21
22 namespace RaspiHomeTabletWindows.Modules.Home.Location.House
23 {
24
       public sealed partial class RoomView : Page
25
26
          #region Fields
          #region Constants
27
28
          #endregion
29
30
          #region Varaibles
31
          private RoomModel _model = null;
32
33
          private bool isOn = false;
          private bool isUp = false;
34
          private bool _isDown = false;
35
          private bool _isOpen = false;
36
37
          private bool _isClose = false;
38
          #endregion
39
          #endregion
40
          #region Properties
41
42
          public RoomModel Model
43
           {
              get
44
45
              {
46
                  return _model;
47
              }
48
49
              set
50
              {
51
                  model = value;
52
              }
53
          }
54
          public bool IsOn
55
```

```
\underline{\dots} {\tt letWindows \backslash Modules \backslash Home \backslash Location \backslash House \backslash RoomView.xaml.cs}
56
                   get
 57
 58
                   {
 59
                        return _is0n;
 60
                   }
 61
                   set
 62
 63
                   {
 64
                        _isOn = value;
 65
                       if (value)
 66
 67
                        {
 68
                            // Send message to save
                            this.Model.SendMessage("allumer", "lumiere");
 69
 70
                            //Change the picture
                            this.imgLightButton.Source = new BitmapImage(new Uri("ms- →
 71
                            appx:///Icon/bulbLighting.png"));
 72
                        }
 73
                       else
 74
                        {
 75
                            // Send message to save
76
                            this.Model.SendMessage("eteindre", "lumiere");
 77
                            // Change the picture
 78
                            this.imgLightButton.Source = new BitmapImage(new Uri("ms- →
                            appx:///Icon/bulb.png"));
 79
                        }
 80
                   }
              }
 81
 82
              public bool IsUp
 83
 84
 85
                   get
 86
                   {
 87
                        return _isUp;
 88
                   }
 89
 90
                   set
 91
                   {
 92
                       _isUp = value;
 93
                   }
 94
              }
 95
 96
              public bool IsDown
 97
 98
                   get
 99
                   {
100
                        return _isDown;
101
                   }
102
103
                   set
104
                   {
105
                        isDown = value;
106
                   }
107
              }
108
```

public bool IsOpen

```
...letWindows\Modules\Home\Location\House\RoomView.xaml.cs
110
                 get
111
112
                 {
113
                     return _isOpen;
114
                 }
115
116
                 set
117
                 {
                     _isOpen = value;
118
119
                 }
120
             }
121
122
             public bool IsClose
123
124
                 get
125
                 {
126
                     return _isClose;
127
                 }
128
129
                 set
130
                 {
131
                     _isClose = value;
                 }
132
133
             }
134
             #endregion
135
136
             #region Constructor
137
             /// <summary>
138
             /// Constructor: Initializer
             /// </summary>
139
140
             public RoomView()
141
             {
142
                 this.InitializeComponent();
143
144
                 this.Model = new RoomModel(this);
145
             }
146
             #endregion
147
148
             #region Events
149
             /// <summary>
             /// Light control
150
151
             /// </summary>
             private void btnLightOnOff_Click(object sender, RoutedEventArgs e)
152
153
             {
                 this.IsOn = !this.IsOn;
154
155
             }
156
             ///
157
158
             /// <summary>
159
             /// Store control
160
             /// </summary>
             private void btnStoreUp_Click(object sender, RoutedEventArgs e)
161
162
             {
163
                 this.IsUp = true;
```

this.Model.SendMessage("monter", "store");

164 165

}

```
166
167
            private void btnStoreDown_Click(object sender, RoutedEventArgs e)
168
            {
169
                 this.IsDown = true;
                 this.Model.SendMessage("descendre", "store");
170
171
            }
172
            private void btnStoreOpen_Click(object sender, RoutedEventArgs e)
173
174
175
                 this.IsOpen = true;
176
                 this.Model.SendMessage("ouvrir", "store");
            }
177
178
            private void btnStoreClose_Click(object sender, RoutedEventArgs e)
179
180
                 this.IsClose = true;
181
182
                 this.Model.SendMessage("fermer", "store");
183
             }
184
            #endregion
185
186
            #region Methods
187
            #endregion
188
         }
189 }
190
```

```
1 /*-----*\
2
   * Author : Salvi Cyril
 3
   * Date : 8th juny 2017
   * Diploma : RaspiHome
 4
   * Classroom : T.IS-E2B
 5
 6
 7
    * Description:
8
          RaspiHomeTabletWindows is a program
9
        compatible with the Windows tablet. It's a
10
        program that can be use as tactil graphic
        interface to order the component linked with
11
12
        the other Raspberry Pi.
13 \*-----*/
14
15 using System;
16 using System.Linq;
17 using System.Threading.Tasks;
18 using Windows.UI.Xaml;
19
20 namespace RaspiHomeTabletWindows.Modules.Home.Location.OtherRoom
21 {
22
       public class RoomModel
23
24
          #region Fields
          #region Constants
25
          #endregion
26
27
          #region Varaibles
28
29
          private RoomView _view = null;
30
          private string messageReaded = "";
31
32
33
          DispatcherTimer _dTimer = null;
34
          Windows.Storage.ApplicationDataContainer localSettings =
35
            Windows.Storage.ApplicationData.Current.LocalSettings;
36
           #endregion
37
          #endregion
38
39
          #region Properties
          public RoomView View
40
41
           {
42
              get
43
              {
44
                  return _view;
45
              }
46
47
              set
48
              {
49
                  _view = value;
50
              }
          }
51
52
53
          public string MessageReceive
54
55
              get
```

```
... let \verb|Windows\Modules\Home\Location\OtherRoom\RoomModel.cs|
```

```
2
```

```
56
                 {
 57
                     return messageReaded;
 58
                 }
 59
 60
                 set
 61
                 {
 62
                     _messageReaded = value;
 63
                 }
 64
             }
 65
             #endregion
 66
             #region Constructor
 67
             /// <summary>
 68
 69
             /// Constructor: Initializer
 70
             /// </summary>
 71
             public RoomModel(RoomView paramView)
 72
 73
                 this.View = paramView;
 74
 75
                 this. dTimer = new DispatcherTimer();
 76
                 this. dTimer.Interval = new TimeSpan(200);
 77
                 this._dTimer.Tick += _dTimer_Tick; ;
 78
 79
                 this. dTimer.Start();
 80
                 this.InitializeState();
 81
 82
             }
 83
 84
             private void _dTimer_Tick(object sender, object e)
 85
 86
                 if (localSettings.Values["ReceiveMessageFromServer"] != null)
 87
                 {
 88
                     var messageToSend = localSettings.Values
                                                                                       P
                       ["ReceiveMessageFromServer"];
 89
                     this.MessageReceive = messageToSend.ToString();
 90
                     UpDateView();
                     localSettings.Values.Remove("ReceiveMessageFromServer");
 91
 92
 93
                     this._dTimer.Stop();
                 }
 94
 95
             }
 96
             #endregion
 97
98
             #region Events
 99
             /// <summary>
             /// Initialize at the start (check if the sense hat exist)
100
101
             /// </summary>
102
             private void InitializeState()
103
             {
104
                 // Update state room
                 var locationName = localSettings.Values["NameButtonClicked"];
105
106
                 if (locationName != null)
107
                     localSettings.Values["SendMessageToServer"] = "etat " +
108
                       locationName;
109
                 else
```

```
...letWindows\Modules\Home\Location\OtherRoom\RoomModel.cs
```

```
3
```

```
110
                     localSettings.Values["SendMessageToServer"] = "etat salon";
111
             }
             #endregion
112
113
114
             #region Methods
115
             /// <summary>
             /// Save value to be send
116
117
             /// </summary>
118
             /// <param name="action"></param>
119
             /// <param name="component"></param>
120
             public void SendMessage(string action, string component)
121
122
                 var locationName = localSettings.Values["NameButtonClicked"];
123
                 if (locationName != null)
124
                     localSettings.Values["SendMessageToServer"] = action + " " +
125
                       component + " " + locationName;
             }
126
127
128
             /// <summary>
129
             /// Update state values on the view
             /// </summary>
130
131
             private async void UpDateView()
132
133
                 await Task.Delay(TimeSpan.FromMilliseconds(200));
134
135
                 this.View.EnableDisplayState();
136
137
                 var informations = this.MessageReceive.Split(';');
                 foreach (var info in informations)
138
139
                 {
140
                     switch (info.Split('=').First())
141
                     {
                         case "TEMP":
142
                             this.View.StrTemp = info.Split('=').Last();
143
144
                             break;
                         case "HUMI":
145
146
                             this.View.StrHumi = info.Split('=').Last();
147
                             break;
148
                         case "PRES":
                             this.View.StrPres = info.Split('=').Last();
149
150
                             break:
151
                     }
152
                 }
153
154
             #endregion
155
         }
156 }
157
```

```
1
   < Page
2
        x:Class="RaspiHomeTabletWindows.Modules.Home.Location.OtherRoom.RoomView"
3
       xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"
4
       xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml"
5
       xmlns:local="using:RaspiHomeTabletWindows.Modules.Home.Location.OtherRoom"
       xmlns:d="http://schemas.microsoft.com/expression/blend/2008"
6
7
       xmlns:mc="http://schemas.openxmlformats.org/markup-compatibility/2006"
       mc:Ignorable="d">
8
9
10
        <RelativePanel x:Name="rpnlDisplay" Margin="10">
            <!--LIGHT BUTTON-->
11
            <Rectangle x:Name="rectTextLight" Width="17"/>
12
            <TextBlock x:Name="tblLight" Text="Lumière"
13
              RelativePanel.RightOf="rectTextLight"
                                                                                       D
              RelativePanel.AlignTopWithPanel="True" FontSize="26"/>
            <Button x:Name="btnLightOnOff" RelativePanel.Below="tblLight"</pre>
14
              Height="120" Width="120" Background="{StaticResource
                                                                                       P
              DefaultBackgroundColor}" HorizontalContentAlignment="Center"
              VerticalContentAlignment="Center" Click="btnLightOnOff_Click">
15
                <Image x:Name="imgLightButton" Source="ms-appx:///Icon/bulb.png"/>
16
            </Button>
17
            <!--STATE OF THE ROOM-->
18
19
            <!--HUMIDITY-->
20
            <Rectangle x:Name="rectHumid" RelativePanel.AlignBottomWithPanel="True" →</pre>
               Height="34"/>
21
            <Rectangle x:Name="rectInformation" RelativePanel.Above="rectHumid"</pre>
              Width="75"/>
22
            <Image x:Name="imgHumidity" Visibility="Collapsed" Source="ms-appx:///</pre>
              Icon/Humidity.png " RelativePanel.AlignLeftWithPanel="True"
              RelativePanel.Above="rectHumid" Height="75"/>
23
24
            <!--TEMPERATURE-->
25
            <Rectangle x:Name="rectThermo" RelativePanel.Above="imgHumidity"</pre>
              Height="34"/>
            <Image x:Name="imgThermometer" Visibility="Collapsed" Source="ms-</pre>
26
                                                                                       P
              appx:///Icon/Thermometer.png "
                                                                                       P
              RelativePanel.AlignHorizontalCenterWith="imgHumidity"
              RelativePanel.Above="rectThermo" Height="75"/>
27
            <Rectangle x:Name="rectPressure" RelativePanel.Above="rectHumid"</pre>
28
                                                                                       P
              Width="250"/>
            <Rectangle x:Name="rectInformation2" RelativePanel.Above="rectHumid"</pre>
29
              Width="350"/>
30
            <!--PRESSURE-->
31
            <Image x:Name="imgBarometer" Visibility="Collapsed" Source="ms-appx:/// >
32
              Icon/Pressure.png " RelativePanel.RightOf="rectPressure"
              RelativePanel.AlignVerticalCenterWith="imgThermometer" Height="65"/>
33
            <TextBlock x:Name="tblTemperature"
34
                                                                                       P
              RelativePanel.RightOf="rectInformation"
              RelativePanel.AlignVerticalCenterWith="imgThermometer" FontSize="26"/ →
            <TextBlock x:Name="tblHumidity" RelativePanel.RightOf="rectInformation" →
35
               RelativePanel.AlignVerticalCenterWith="imgHumidity" FontSize="26"/>
```

```
...etWindows\Modules\Home\Location\OtherRoom\RoomView.xaml
36
            <TextBlock x:Name="tblPressure"
                                                                                       P
              RelativePanel.RightOf="rectInformation2"
              RelativePanel.AlignVerticalCenterWith="imgBarometer" FontSize="26"/>
37
38
39
            <!--STORE BUTTON-->
40
            <!--UP-->
41
42
            <Rectangle x:Name="rect2" Width="20"</pre>
              RelativePanel.AlignRightWithPanel="True"/>
            <TextBlock x:Name="tblUp" Text="Monter" RelativePanel.LeftOf="rect2"
43
              RelativePanel.AlignTopWithPanel="True" FontSize="26"/>
            <Button x:Name="btnStoreUp" RelativePanel.AlignRightWithPanel="True"</pre>
44
              RelativePanel.Below="tblUp" Height="120" Width="120"
                                                                                       P
              Background="{StaticResource DefaultBackgroundColor}"
              HorizontalContentAlignment="Center" VerticalContentAlignment="Center" →
               Click="btnStoreUp_Click">
45
                <Image Source="ms-appx:///Icon/arrowUp.png"/>
46
            </Button>
47
            <Rectangle x:Name="rect3" Height="20" Width="120"</pre>
48
                                                                                       P
              RelativePanel.AlignRightWithPanel="True"
                                                                                       P
              RelativePanel.Below="btnStoreUp"/>
49
            <!--DOWN-->
50
            <Button x:Name="btnStoreDown" RelativePanel.AlignRightWithPanel="True"</pre>
51
              RelativePanel.Below="rect3" Height="120" Width="120"
                                                                                       P
              Background="{StaticResource DefaultBackgroundColor}"
              HorizontalContentAlignment="Center" VerticalContentAlignment="Center" →
               Click="btnStoreDown_Click">
52
                <Image Source="ms-appx:///Icon/arrowDown.png"/>
53
            </Button>
            <TextBlock x:Name="tblDown" Text="Descendre"
54
                                                                                       P
              RelativePanel.AlignHorizontalCenterWith="tblUp"
              RelativePanel.Below="btnStoreDown" FontSize="26"/>
55
            <!--OPEN-->
56
57
            <TextBlock x:Name="tbl0pen" Text="Ouvrir"
              RelativePanel.AlignHorizontalCenterWith="tblUp"
                                                                                       P
              RelativePanel.Above="btnStoreOpen" FontSize="26"/>
            <Button x:Name="btnStoreOpen" RelativePanel.AlignRightWithPanel="True"</pre>
58
                                                                                       P
              RelativePanel.Above="rect4" Height="120" Width="120"
                                                                                       P
              Background="{StaticResource DefaultBackgroundColor}"
              HorizontalContentAlignment="Center" VerticalContentAlignment="Center" →
               Click="btnStoreOpen Click">
59
                <Image Source="ms-appx:///Icon/arrowUp.png"/>
60
            </Button>
61
62
            <Rectangle x:Name="rect4" Height="20" Width="150"</pre>
              RelativePanel.AlignRightWithPanel="True"
              RelativePanel.Above="btnStoreClose"/>
63
            <!--CLOSE-->
64
65
            <Button x:Name="btnStoreClose" RelativePanel.AlignRightWithPanel="True" →</pre>
               RelativePanel.Above="tblClose" Height="120" Width="120"
                                                                                       P
              Background="{StaticResource DefaultBackgroundColor}"
                                                                                       P
```

```
\underline{\dots} \verb|etWindows\| \verb|Modules\| \verb|Hom|| e \verb|Location\| \verb|OtherRoom\| \verb|RoomView.xaml|| e \verb|Modules\| e \verb|Modules\
```

```
HorizontalContentAlignment="Center" VerticalContentAlignment="Center" →
              Click="btnStoreClose_Click">
66
                <Image Source="ms-appx:///Icon/arrowDown.png"/>
67
           </Button>
           <TextBlock x:Name="tblClose" Text="Fermer"
68
                                                                                    P
             RelativePanel.AlignHorizontalCenterWith="tblUp"
                                                                                    P
             RelativePanel.AlignBottomWithPanel="True" FontSize="26"/>
69
       </RelativePanel>
70 </Page>
71
```

```
1 /*----*\
 2
   * Author : Salvi Cyril
   * Date : 8th juny 2017
 3
 4
   * Diploma : RaspiHome
   * Classroom : T.IS-E2B
 5
 6
 7
    * Description:
8
          RaspiHomeTabletWindows is a program
9
        compatible with the Windows tablet. It's a
10
        program that can be use as tactil graphic
        interface to order the component linked with
11
12
        the other Raspberry Pi.
13 \*-----*/
14
15 using System;
16 using Windows.UI.Xaml;
17 using Windows.UI.Xaml.Controls;
18 using Windows.UI.Xaml.Media.Imaging;
19
20 // The User Control item template is documented at http://go.microsoft.com/
     fwlink/?LinkId=234236
21
22 namespace RaspiHomeTabletWindows.Modules.Home.Location.OtherRoom
23 {
24
       public sealed partial class RoomView : Page
25
26
           #region Fields
27
           #region Constants
28
           #endregion
29
30
           #region Varaibles
31
           private RoomModel _model = null;
32
           private string _strTemp = "";
33
           private string _strHumi = "";
34
           private string _strPres = "";
35
36
37
           private bool _isOn = false;
38
           private bool _isUp = false;
39
           private bool _isDown = false;
40
           private bool isOpen = false;
           private bool isClose = false;
41
42
           #endregion
43
           #endregion
44
           #region Properties
45
           public RoomModel Model
46
47
48
              get
49
              {
50
                  return _model;
51
              }
52
53
              set
54
              {
55
                  model = value;
```

```
\underline{\dots} \\ \texttt{Indows} \\ \texttt{Modules} \\ \texttt{Location} \\ \texttt{OtherRoom} \\ \texttt{RoomView.xaml.cs} \\
```

```
2
```

```
56
 57
             }
 58
 59
             public string StrTemp
 60
 61
                  get
 62
                  {
 63
                      return _strTemp;
 64
                  }
 65
 66
                  set
 67
                  {
                      _strTemp = value;
 68
 69
                      this.tblTemperature.Text = value + " °C";
 70
 71
                  }
 72
             }
 73
             public string StrHumi
 74
 75
 76
                  get
 77
                  {
 78
                      return _strHumi;
 79
                  }
 80
 81
                  set
 82
                  {
 83
                      _strHumi = value;
 84
 85
                      this.tblHumidity.Text = value + " %";
 86
                  }
 87
             }
 88
 89
             public string StrPres
 90
 91
                  get
 92
                  {
 93
                      return _strPres;
 94
                  }
 95
 96
                  set
 97
                  {
 98
                      _strPres = value;
 99
100
                      this.tblPressure.Text = value + " [hPa]";
101
                  }
             }
102
103
104
             public bool IsOn
105
106
                  get
107
                  {
108
                      return _isOn;
109
                  }
110
111
                  set
```

```
...indows\Modules\Home\Location\OtherRoom\RoomView.xaml.cs
112
113
                     _isOn = value;
114
115
                     if (value)
116
                     {
117
                         // Send message to save
118
                         this.Model.SendMessage("allumer", "lumiere");
119
                         // Change the picture
120
                         this.imgLightButton.Source = new BitmapImage(new Uri("ms- →
                         appx:///Icon/bulbLighting.png"));
121
                     }
                     else
122
123
                     {
124
                         // Save message to save
125
                         this.Model.SendMessage("eteindre", "lumiere");
126
                         // Change the picture
127
                         this.imgLightButton.Source = new BitmapImage(new Uri("ms- →
                         appx:///Icon/bulb.png"));
128
                     }
129
                 }
130
             }
131
             public bool IsUp
132
133
134
                 get
135
                 {
136
                     return _isUp;
137
                 }
138
139
                 set
140
                 {
141
                     _isUp = value;
                 }
142
             }
143
144
145
             public bool IsDown
146
                 get
147
148
                 {
149
                     return _isDown;
150
                 }
151
152
                 set
153
                 {
154
                     isDown = value;
155
                 }
156
             }
157
158
             public bool IsOpen
159
160
                 get
161
                 {
```

return \_isOpen;

}

set

162

163

```
...indows\Modules\Home\Location\OtherRoom\RoomView.xaml.cs
```

```
Δ
```

```
166
                     _isOpen = value;
167
168
                 }
169
             }
170
             public bool IsClose
171
172
173
                 get
174
                 {
175
                     return _isClose;
176
                 }
177
178
                 set
179
180
                     _isClose = value;
181
182
             }
183
             #endregion
184
185
             #region Constructor
186
             /// <summary>
             /// Constructor: Initializer
187
188
             /// </summary>
189
             public RoomView()
190
             {
191
                 this.InitializeComponent();
192
193
                 this.Model = new RoomModel(this);
194
             }
             #endregion
195
196
197
             #region Events
198
             /// <summary>
199
             /// Light control
200
             /// </summary>
             private void btnLightOnOff_Click(object sender, RoutedEventArgs e)
201
202
203
                 this.IsOn = !this.IsOn;
204
             }
205
             /// <summary>
206
207
             /// Store control
208
             /// </summary>
209
             private void btnStoreUp_Click(object sender, RoutedEventArgs e)
210
211
                 this.IsUp = true;
                 this.Model.SendMessage("monter", "store");
212
213
             }
214
215
             private void btnStoreDown_Click(object sender, RoutedEventArgs e)
216
217
                 this.IsDown = true;
218
                 this.Model.SendMessage("descendre", "store");
219
             }
220
221
             private void btnStoreOpen_Click(object sender, RoutedEventArgs e)
```

```
...indows\Modules\Home\Location\OtherRoom\RoomView.xaml.cs
```

246 } 247

```
222
223
                 this.IsOpen = true;
224
                 this.Model.SendMessage("ouvrir", "store");
225
             }
226
227
             private void btnStoreClose_Click(object sender, RoutedEventArgs e)
228
229
                 this.IsClose = true;
                 this.Model.SendMessage("fermer", "store");
230
231
             }
232
             #endregion
233
234
             #region Methods
235
             /// <summary>
236
             /// Set to visible the state values if exist
             /// </summary>
237
238
             public void EnableDisplayState()
239
             {
240
                 this.imgThermometer.Visibility = Visibility.Visible;
241
                 this.imgHumidity.Visibility = Visibility.Visible;
242
                 this.imgBarometer.Visibility = Visibility.Visible;
243
             }
244
             #endregion
245
         }
```

```
1 /*-----*\
    * Author : Salvi Cyril
 2
 3
    * Date
                : 8th juny 2017
 4
    * Diploma : RaspiHome
 5
    * Classroom : T.IS-E2B
 6
 7
    * Description:
 8
           RaspiHomeTabletWindows is a program
 9
        compatible with the Windows tablet. It's a
10
        program that can be use as tactil graphic
        interface to order the component linked with
11
        the other Raspberry Pi.
12
13
14
15 namespace RaspiHomeTabletWindows.Modules.GlobalSetup
16 {
17
       public class GlobalSetupModel : PropertyChangedBase
18
       {
19
           #region Fields
20
           #region Constants
           #endregion
21
22
23
           #region Varaibles
24
           private GlobalSetupView _view = null;
25
           #endregion
           #endregion
26
27
           #region Properties
28
29
           public GlobalSetupView View
30
           {
               get
31
32
               {
33
                   return _view;
34
               }
35
36
               set
37
               {
                   _view = value;
38
39
               }
40
41
           #endregion
42
43
           #region Constructor
           public GlobalSetupModel(GlobalSetupView paramView)
44
45
           {
46
               this.View = paramView;
47
           }
           #endregion
48
49
           #region Methods
50
51
           #endregion
52
       }
53
   }
54
```

```
1
   < Page
 2
       x:Class="RaspiHomeTabletWindows.Modules.GlobalSetup.GlobalSetupView"
 3
       xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"
       xmlns:x="http://schemas.microsoft.com/winfx/2006/xam1"
 4
       xmlns:local="using:RaspiHomeTabletWindows.Modules.GlobalSetup"
 5
       xmlns:d="http://schemas.microsoft.com/expression/blend/2008"
 6
 7
       xmlns:mc="http://schemas.openxmlformats.org/markup-compatibility/2006"
       mc:Ignorable="d">
 8
 9
10
       <Grid>
11
            <Image Source="ms-appx:///Icon/GlobalSetup.png"/>
       </Grid>
12
13 </Page>
14
```

```
1 /*-----*\
    * Author
 2
               : Salvi Cyril
 3
    * Date
              : 8th juny 2017
 4
    * Diploma : RaspiHome
 5
    * Classroom : T.IS-E2B
 6
    * Description:
 7
 8
          RaspiHomeTabletWindows is a program
 9
       compatible with the Windows tablet. It's a
10
        program that can be use as tactil graphic
       interface to order the component linked with
11
12
       the other Raspberry Pi.
13
   \*____*/
14
using Windows.UI.Xaml.Controls;
16
   // The User Control item template is documented at http://go.microsoft.com/
17
     fwlink/?LinkId=234236
18
   namespace RaspiHomeTabletWindows.Modules.GlobalSetup
20
21
       public sealed partial class GlobalSetupView : Page
22
23
           #region Fields
24
           #region Constants
           #endregion
25
26
          #region Varaibles
27
28
           private GlobalSetupModel _model = null;
29
           #endregion
30
          #endregion
31
32
          #region Properties
33
          public GlobalSetupModel Model
34
           {
35
              get
36
              {
37
                  return _model;
38
              }
39
40
              set
41
              {
42
                  model = value;
43
              }
44
45
           #endregion
46
47
           #region Constructor
48
          /// <summary>
49
          /// Constructor: Initializer
50
          /// </summary>
51
          public GlobalSetupView()
52
          {
53
              this.InitializeComponent();
54
55
              this.Model = new GlobalSetupModel(this);
```

```
...bletWindows\Modules\GlobalSetup\GlobalSetupView.xaml.cs
56 }
           }
#endregion
57
58
59
           #region Events
           #endregion
60
61
           #region Methods
62
           #endregion
63
64
       }
65 }
66
```

```
1 /*-----*\
    * Author
 2
                : Salvi Cyril
 3
    * Date
                : 8th juny 2017
 4
    * Diploma : RaspiHome
 5
    * Classroom : T.IS-E2B
 6
    * Description:
 7
 8
           RaspiHomeTabletWindows is a program
 9
        compatible with the Windows tablet. It's a
10
        program that can be use as tactil graphic
        interface to order the component linked with
11
12
        the other Raspberry Pi.
13
14
15 namespace RaspiHomeTabletWindows.Modules.Information
16
17
       public class InformationModel : PropertyChangedBase
18
       {
19
           #region Fields
20
           #region Constants
21
           #endregion
22
23
           #region Varaibles
24
           private InformationView _view = null;
25
           #endregion
26
           #endregion
27
           #region Properties
28
29
           public InformationView View
30
           {
31
               get
32
               {
33
                   return _view;
34
               }
35
36
               set
37
               {
                   _view = value;
38
39
               }
40
41
           #endregion
42
           #region Constructor
43
44
           /// <summary>
           /// Constructor: Initializer
45
46
           /// </summary>
47
           public InformationModel(InformationView paramView)
48
           {
49
               this.View = paramView;
50
           }
51
           #endregion
52
53
           #region Methods
54
           #endregion
55
       }
56 }
```

```
1
   < Page
 2
       x:Class="RaspiHomeTabletWindows.Modules.Information.InformationView"
 3
       xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"
 4
       xmlns:x="http://schemas.microsoft.com/winfx/2006/xam1"
 5
       xmlns:local="using:RaspiHomeTabletWindows.Modules.Information"
 6
       xmlns:d="http://schemas.microsoft.com/expression/blend/2008"
 7
       xmlns:mc="http://schemas.openxmlformats.org/markup-compatibility/2006"
       mc:Ignorable="d">
 8
 9
10
       <Grid>
            <Image Source="ms-appx:///Icon/Information.png" />
11
       </Grid>
12
13 </Page>
14
```

```
1 /*-----*\
    * Author
 2
               : Salvi Cyril
 3
    * Date : 8th juny 2017
 4
    * Diploma : RaspiHome
 5
    * Classroom : T.IS-E2B
 6
    * Description:
 7
 8
          RaspiHomeTabletWindows is a program
 9
       compatible with the Windows tablet. It's a
10
        program that can be use as tactil graphic
       interface to order the component linked with
11
12
       the other Raspberry Pi.
13
   \*____*/
14
using Windows.UI.Xaml.Controls;
16
   // The User Control item template is documented at http://go.microsoft.com/
17
     fwlink/?LinkId=234236
18
   namespace RaspiHomeTabletWindows.Modules.Information
20
21
       public sealed partial class InformationView : Page
22
23
           #region Fields
24
           #region Constants
           #endregion
25
26
          #region Varaibles
27
28
           private InformationModel _model = null;
29
           #endregion
30
          #endregion
31
32
          #region Properties
33
          public InformationModel Model
34
           {
35
              get
36
              {
37
                  return _model;
38
              }
39
40
              set
41
              {
42
                  model = value;
43
              }
44
45
           #endregion
46
47
           #region Constructor
48
           /// <summary>
49
          /// Constructor: Initializer
50
          /// </summary>
51
          public InformationView()
52
          {
53
              this.InitializeComponent();
54
55
              this.Model = new InformationModel(this);
```

```
...bletWindows\Modules\Information\InformationView.xaml.cs
56 }
```

```
57
           #endregion
58
59
           #region Events
           #endregion
60
61
           #region Methods
62
           #endregion
63
64
       }
65 }
66
```

```
/*-----*\
1
    * Author
 2
                : Salvi Cyril
 3
    * Date
                : 8th juny 2017
 4
    * Diploma : RaspiHome
 5
    * Classroom : T.IS-E2B
 6
 7
    * Description:
 8
           RaspiHomeTabletWindows is a program
 9
        compatible with the Windows tablet. It's a
10
        program that can be use as tactil graphic
        interface to order the component linked with
11
12
        the other Raspberry Pi.
13
14
15 namespace RaspiHomeTabletWindows.Modules.Setting
16 {
17
       public class SettingModel : PropertyChangedBase
18
       {
19
           #region Fields
20
           #region Constants
21
           #endregion
22
23
           #region Varaibles
24
           private SettingView _view = null;
25
           #endregion
26
           #endregion
27
           #region Properties
28
29
           public SettingView View
30
           {
31
               get
32
               {
33
                   return _view;
34
               }
35
36
               set
37
               {
                   _view = value;
38
39
               }
40
41
           #endregion
42
           #region Constructor
43
44
           /// <summary>
           /// Constructor: Initializer
45
46
           /// </summary>
47
           public SettingModel(SettingView paramView)
48
           {
49
               this.View = paramView;
50
           }
51
           #endregion
52
53
           #region Methods
54
           #endregion
55
       }
56 }
```

```
1
   < Page
       x:Class="RaspiHomeTabletWindows.Modules.Setting.SettingView"
 2
 3
       xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"
       xmlns:x="http://schemas.microsoft.com/winfx/2006/xam1"
 4
       xmlns:local="using:RaspiHomeTabletWindows.Modules.Setting"
 5
       xmlns:d="http://schemas.microsoft.com/expression/blend/2008"
 6
 7
       xmlns:mc="http://schemas.openxmlformats.org/markup-compatibility/2006"
       mc:Ignorable="d">
 8
 9
10
       <Grid>
11
           <Image Source="ms-appx:///Icon/Setting.png" />
       </Grid>
12
13 </Page>
14
```

```
1 /*-----*\
    * Author : Salvi Cyril
 2
 3
    * Date : 8th juny 2017
 4
    * Diploma : RaspiHome
 5
    * Classroom : T.IS-E2B
 6
    * Description:
 7
 8
          RaspiHomeTabletWindows is a program
 9
       compatible with the Windows tablet. It's a
10
        program that can be use as tactil graphic
       interface to order the component linked with
11
12
       the other Raspberry Pi.
13
   \*____*/
14
using Windows.UI.Xaml.Controls;
16
   // The User Control item template is documented at http://go.microsoft.com/
17
     fwlink/?LinkId=234236
18
   namespace RaspiHomeTabletWindows.Modules.Setting
20
21
       public sealed partial class SettingView : Page
22
23
           #region Fields
24
           #region Constants
          #endregion
25
26
          #region Varaibles
27
28
          private SettingModel _model = null;
29
          #endregion
30
          #endregion
31
32
          #region Properties
33
          public SettingModel Model
34
           {
35
              get
36
              {
37
                  return _model;
38
              }
39
40
              set
41
              {
42
                  _model = value;
43
              }
44
45
          #endregion
46
47
           #region Constructor
48
          /// <summary>
49
          /// Constructor: Initializer
50
          /// </summary>
51
          public SettingView()
52
          {
53
              this.InitializeComponent();
54
              this.Model = new SettingModel(this);
55
```

```
...piHomeTabletWindows\Modules\Setting\SettingView.xaml.cs
56 }
           }
#endregion
57
58
59
           #region Events
           #endregion
60
61
           #region Methods
62
           #endregion
63
64
       }
65 }
66
```

```
1 /*----*\
   * Author : Salvi Cyril
* Date : 8th juny 2017
2
3
4
    * Diploma : RaspiHome
5
    * Classroom : T.IS-E2B
6
7
   * Description:
8
         RaspiHomeTabletWindows is a program
9
       compatible with the Windows tablet. It's a
10
       program that can be use as tactil graphic
       interface to order the component linked with
11
   * the other Raspberry Pi.
12
   \*-----*/
13
14
15 using System.ComponentModel;
16
17
   namespace RaspiHomeTabletWindows
18 {
19
       public class PropertyChangedBase
20
          public event PropertyChangedEventHandler PropertyChanged;
21
22
23
          protected virtual void OnPropertyChanged(string propertyName)
24
25
              //Raise the PropertyChanged event on the UI Thread, with the
                relevant propertyName parameter:
              if (PropertyChanged != null)
26
27
28
                  PropertyChanged(this, new PropertyChangedEventArgs
                    (propertyName));
29
              }
30
          }
31
       }
32 }
33
```

```
<Application</pre>
 2
        x:Class="RaspiHomeTabletWindows.App"
 3
        xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"
 4
        xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml"
 5
        xmlns:local="using:RaspiHomeTabletWindows"
        RequestedTheme="Light">
 6
 7
        <Application.Resources>
 8
            <!--| COLOR |-->
 9
            <Color x:Key="White">#FFFDFDFD</Color>
10
            <Color x:Key="LightGray">#FFEEEEEE</Color>
            <Color x:Key="Gray">#FFBCBCBC</Color>
11
            <Color x:Key="DarkGray">#FF2C2C2C</Color>
12
            <Color x:Key="ShadowGray">#FF4C4A4B</Color>
13
14
            <Color x:Key="GreenForest">#FF498205</Color>
15
16
            <!--Event color-->
            <Color x:Key="WhiteOnEvent">#80F5F5F5</Color>
17
            <Color x:Key="DarkGrayOnEvent">#802C2C2C</Color>
18
19
            <Color x:Key="BlueAzureOnEvent">#80498205</Color>
20
21
            <!--
                    BRUSH
                            |-->
            <SolidColorBrush x:Key="DefaultBackColor"</pre>
22
23
                         Color="{StaticResource White}"/>
24
25
            <SolidColorBrush x:Key="DefaultBackgroundColor"</pre>
                         Color="{StaticResource ShadowGray}"/>
26
27
            <SolidColorBrush x:Key="DefaultBorderColor"</pre>
28
29
                         Color="{StaticResource DarkGray}"/>
30
31
            <SolidColorBrush x:Key="OverColor"
32
                         Color="{StaticResource WhiteOnEvent}"/>
33
34
            <SolidColorBrush x:Key="PressedColor"</pre>
                         Color="{StaticResource DarkGrayOnEvent}"/>
35
                            |-->
36
            <!--
                    STYLE
            <Style x:Name="styleRoundButton" TargetType="Button">
37
                <Setter Property="Background" Value="{StaticResource</pre>
38
                  DefaultBackColor}"/>
39
                <Setter Property="BorderBrush" Value="{StaticResource</pre>
                  DefaultBackgroundColor}"/>
                <Setter Property="BorderThickness" Value="5"/>
40
                <Setter Property="Template">
41
42
                    <Setter.Value>
                         <ControlTemplate TargetType="Button">
43
                             <Border x:Name="Border"
44
45
                                 Background="{TemplateBinding Background}"
                                 BorderBrush="{TemplateBinding BorderBrush}"
46
47
                                 BorderThickness="{TemplateBinding BorderThickness}"
48
                                 CornerRadius="70">
                                 <ContentPresenter</pre>
49
                                                                                       P
                        HorizontalAlignment="{TemplateBinding
                                                                                       P
                        HorizontalContentAlignment}"
50
                                                VerticalAlignment="{TemplateBinding
                        VerticalContentAlignment}"/>
51
                             </Border>
```

```
...\RaspiHomeTabletWindows\RaspiHomeTabletWindows\App.xaml
```