

```
1  /*-----*\
2  * Author    : Salvi Cyril
3  * Date      : 7th june 2017
4  * Diploma  : RaspiHome
5  * Classroom : T.IS-E2B
6  *
7  * Description:
8  *   RaspiHomeServer is a server TCP. It's the m
9  *   ain program, where all command pass before
10 *   to be reply to the good client.
11 \*-----*/
12
13 namespace RaspiHomeServer
14 {
15     public abstract class Component { }
16
17     // Speecher and synthetizer
18     public class Microphone : Component { }
19
20     // Application Windows tablet
21     public class Tablet : Component { }
22
23     // SenseHAT
24     public class Sensor : Component { }
25
26     #region PiFace Digital 2
27     public class Light : Component
28     {
29         #region Variable
30         private bool _isOn = false;
31         private double _luxPercent = 0.0;
32         private int[] _colorARGB = { 255, 0, 0, 0 };
33         #endregion
34
35         #region Properties
36         public bool IsOn
37         {
38             get
39             {
40                 return _isOn;
41             }
42
43             set
44             {
45                 _isOn = value;
46
47                 if (value)
48                     this.LuxPercent = 100.0;
49                 else
50                     this.LuxPercent = 0.0;
51             }
52         }
53
54         public double LuxPercent
55         {
56             get
```

```
57         {
58             return _luxPercent;
59         }
60
61         set
62         {
63             _luxPercent = value;
64
65             if (value >= 100.0)
66                 _luxPercent = 100.0;
67             if (value <= 0.0)
68                 _luxPercent = 0.0;
69         }
70     }
71
72     public int[] ColorARGB
73     {
74         get
75         {
76             return _colorARGB;
77         }
78
79         set
80         {
81             _colorARGB = value;
82         }
83     }
84     #endregion
85 }
86
87 public class Store : Component
88 {
89     #region Variable
90     private bool _isUp = false;
91     private bool _isDown = false;
92     private bool _isOpen = false;
93     private bool _isClose = false;
94     private bool _isStop = false;
95     private double _percentUp = 0.0;
96     private double _percentOpen = 0.0;
97     #endregion
98
99     #region Properties
100     public bool IsUp
101     {
102         get
103         {
104             return _isUp;
105         }
106
107         set
108         {
109             _isUp = value;
110
111             if (value)
112             {
```

```
113         this.IsDown = false;
114         this.PercentUp = 100.0;
115     }
116 }
117 }
118
119 public bool IsDown
120 {
121     get
122     {
123         return _isDown;
124     }
125     set
126     {
127         _isDown = value;
128
129         if (value)
130         {
131             this.IsUp = false;
132             this.PercentUp = 100.0;
133         }
134     }
135 }
136
137 public bool IsOpen
138 {
139     get
140     {
141         return _isOpen;
142     }
143     set
144     {
145         _isOpen = value;
146
147         if (value)
148         {
149             this.IsClose = false;
150             this.PercentOpen = 100.0;
151         }
152     }
153 }
154
155 public bool IsClose
156 {
157     get
158     {
159         return _isClose;
160     }
161     set
162     {
163         _isClose = value;
164
165         if (value)
```

```
169         {
170             this.IsOpen = false;
171             this.PercentOpen = 100.0;
172         }
173     }
174 }
175
176 public double PercentUp
177 {
178     get
179     {
180         return _percentUp;
181     }
182     set
183     {
184         _percentUp = value;
185
186         if (value >= 100.0)
187             _percentUp = 100.0;
188         if (value <= 0.0)
189             _percentUp = 0.0;
190     }
191 }
192
193 public double PercentOpen
194 {
195     get
196     {
197         return _percentOpen;
198     }
199     set
200     {
201         _percentOpen = value;
202
203         if (value >= 100.0)
204             _percentOpen = 100.0;
205         if (value <= 0.0)
206             _percentOpen = 0.0;
207     }
208 }
209
210
211 public bool IsStop
212 {
213     get
214     {
215         return _isStop;
216     }
217     set
218     {
219         _isStop = value;
220     }
221 }
222
223 #endregion
224
```

```
225     }  
226     #endregion  
227 }  
228
```