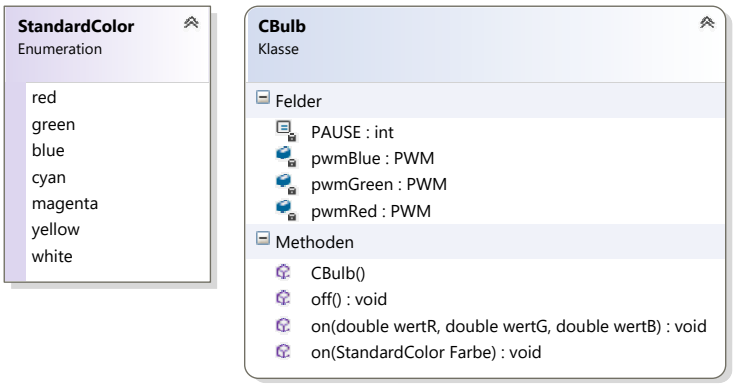
```
1  using System;
2  using Microsoft.SPOT;
3
4  namespace BrainPad_Einstieg_MF
5  {
6      public class Program
7      {
8          public static void Main()
9          {
10             Random random = new Random();
11             CBulb bulb = new CBulb();
12             int helpR, helpG, helpB;
13
14             while (true)
15             {
16                 bulb.on(StandardColor.red);
17                 bulb.off();
18                 bulb.on(StandardColor.green);
19                 bulb.off();
20                 bulb.on(StandardColor.blue);
21                 bulb.off();
22                 bulb.on(StandardColor.cyan);
23                 bulb.off();
24                 bulb.on(StandardColor.magenta);
25                 bulb.off();
26                 bulb.on(StandardColor.yellow);
27                 bulb.off();
28                 bulb.on(StandardColor.white);
29                 bulb.off();
30
31                 for (int i = 0; i < 5; i++)
32                 {
33                     helpR = random.Next(256);
34                     helpG = random.Next(256);
35                     helpB = random.Next(256);
36                     Debug.Print(helpR.ToString() + " " + helpG.ToString() + " "
                        + helpB.ToString());
37                     bulb.on((double)helpR / 255, (double)helpG / 255, (double)
                        helpB / 255);
38                     bulb.off();
39                 }
40             }
41         }
42     }
43 }
44
```

```
 1  using System;
 2  using System.Threading;
 3  using Microsoft.SPOT;
 4  using Microsoft.SPOT.Hardware;
 5
 6  namespace BrainPad_Einstieg_MF
 7  {
 8      public enum StandardColor
 9      {
10          red,
11          green,
12          blue,
13          cyan,
14          magenta,
15          yellow,
16          white
17      }
18
19      class CBulb
20      {
21          private const int PAUSE = 1000;
22
23          private PWM pwmRed;
24          private PWM pwmGreen;
25          private PWM pwmBlue;
26
27          public CBulb()
28          {
29              pwmRed = new PWM((Cpu.PWMChannel)10, 1000, 0, false);
30              pwmGreen = new PWM((Cpu.PWMChannel)9, 1000, 0, false);
31              pwmBlue = new PWM((Cpu.PWMChannel)8, 1000, 0, false);
32          }
33
34          public void on(StandardColor Farbe)
35          {
36              double wertR = 0;
37              double wertG = 0;
38              double wertB = 0;
39
40              switch (Farbe)
41              {
42                  case StandardColor.red:
43                      wertR = 1.0;
44                      wertG = 0;
45                      wertB = 0;
46                      break;
47                  case StandardColor.green:
48                      wertR = 0;
49                      wertG = 1.0;
50                      wertB = 0;
51                      break;
52                  case StandardColor.blue:
53                      wertR = 0;
54                      wertG = 0;
55                      wertB = 1.0;
56                      break;
```

```
57                  case StandardColor.cyan:
58                      wertR = 0;
59                      wertG = 1.0;
60                      wertB = 1.0;
61                      break;
62                  case StandardColor.magenta:
63                      wertR = 1.0;
64                      wertG = 0;
65                      wertB = 1.0;
66                      break;
67                  case StandardColor.yellow:
68                      wertR = 1.0;
69                      wertG = 1.0;
70                      wertB = 0;
71                      break;
72                  case StandardColor.white:
73                      wertR = 1.0;
74                      wertG = 1.0;
75                      wertB = 1.0;
76                      break;
77              }
78              pwmRed.DutyCycle = wertR;
79              pwmGreen.DutyCycle = wertG;
80              pwmBlue.DutyCycle = wertB;
81              pwmRed.Start();
82              pwmGreen.Start();
83              pwmBlue.Start();
84              Thread.Sleep(PAUSE);
85          }
86
87          public void on(double wertR, double wertG, double wertB)
88          {
89              pwmRed.DutyCycle = wertR;
90              pwmGreen.DutyCycle = wertG;
91              pwmBlue.DutyCycle = wertB;
92              pwmRed.Start();
93              pwmGreen.Start();
94              pwmBlue.Start();
95              Thread.Sleep(PAUSE);
96          }
97
98          public void off()
99          {
100             pwmRed.Stop();
101             pwmGreen.Stop();
102             pwmBlue.Stop();
103         }
104     }
105 }
106
```


StandardColor
Enumeration
red
green
blue
cyan
magenta
yellow
white
CBulb
Klasse
Felder
PAUSE : int
pwmBlue : PWM
pwmGreen : PWM
pwmRed : PWM
Methoden
CBulb()
off() : void
on(double wertR, double wertG, double wertB) : void
on(StandardColor Farbe) : void