

```
1 using Microsoft.SPOT;
2
3 //Nowendig für Visual Studio 2015
4 namespace System.Diagnostics
5 {
6     public enum DebuggerBrowsableState
7     {
8         Never,
9         Collapsed,
10        RootHidden
11    }
12 }
13
14 class Program
15 {
16     private BrainPad.Image imageW = new BrainPad.Image(8, 8);
17     private BrainPad.Image imageF = new BrainPad.Image(8, 8);
18     private BrainPad.Image imageS = new BrainPad.Image(26, 26);
19     private BrainPad.Image imageZ000 = new BrainPad.Image(26, 26);
20     private BrainPad.Image imageZ030 = new BrainPad.Image(26, 26);
21     private BrainPad.Image imageZ060 = new BrainPad.Image(26, 26);
22     private BrainPad.Image imageZ090 = new BrainPad.Image(26, 26);
23     private BrainPad.Image imageZ120 = new BrainPad.Image(26, 26);
24     private BrainPad.Image imageZ150 = new BrainPad.Image(26, 26);
25     private BrainPad.Image imageZ180 = new BrainPad.Image(26, 26);
26
27     private int position;
28
29     public void BrainPadSetup()
30     {
31         getImage(imageW, BrainPad\_Projekt\_08A.Properties.Resources.BinaryResources.Kreis\_W);
32         getImage(imageF, BrainPad\_Projekt\_08A.Properties.Resources.BinaryResources.Kreis\_F);
33         getImage(imageS, BrainPad\_Projekt\_08A.Properties.Resources.BinaryResources.Schwarz);
34         getImage(imageZ000, BrainPad\_Projekt\_08A.Properties.Resources.BinaryResources.Zeiger\_000)
35         ;
36         getImage(imageZ030, BrainPad\_Projekt\_08A.Properties.Resources.BinaryResources.Zeiger\_030)
37         ;
38         getImage(imageZ060, BrainPad\_Projekt\_08A.Properties.Resources.BinaryResources.Zeiger\_060)
39         ;
40         getImage(imageZ090, BrainPad\_Projekt\_08A.Properties.Resources.BinaryResources.Zeiger\_090)
41         ;
42         getImage(imageZ120, BrainPad\_Projekt\_08A.Properties.Resources.BinaryResources.Zeiger\_120)
43         ;
44         getImage(imageZ150, BrainPad\_Projekt\_08A.Properties.Resources.BinaryResources.Zeiger\_150)
45         ;
46         getImage(imageZ180, BrainPad\_Projekt\_08A.Properties.Resources.BinaryResources.Zeiger\_180)
47         ;
48     }
49 }
```

```
    ;
41
42     BrainPad.Button.ButtonPressed += Button_ButtonPressed;
43     position = 0;
44     rotation();
45 }
46
47 public void BrainPadLoop()
48 {
49 }
50
51 private void Button_ButtonPressed(BrainPad.Button.DPad button,           ↗
    BrainPad.Button.State state)
52 {
53     if (button == BrainPad.Button.DPad.Right)
54     {
55         if (state == BrainPad.Button.State.Pressed)
56         {
57             if (position > 0)
58             {
59                 position -= 30;
60                 rotation();
61             }
62             else
63                 position = 0;
64         }
65     }
66     if (button == BrainPad.Button.DPad.Left)
67     {
68         if (position < 180)
69         {
70             position += 30;
71             rotation();
72         }
73         else
74             position = 180;
75     }
76     if (button == BrainPad.Button.DPad.Down)
77     {
78         if (position != 0)
79         {
80             position = 0;
81             rotation();
82         }
83     }
84 }
85
86 private void getImage(BrainPad.Image image,                               ↗
    BrainPad_Projekt_08A.Properties.Resources.BinaryResources resource)
87 {
88     int info;
89     byte[] data;
90     BrainPad.Color color = new BrainPad.Color();
91
92     data = (byte[])ResourceUtility.GetObject                             ↗
        (BrainPad_Projekt_08A.Properties.Resources.ResourceManager,     ↗
```

```
resource);
93     info = data[0xA];
94     for (int Y = image.Height - 1; Y >= 0; Y--)
95     {
96         for (int X = 0; X < image.Width; X++)
97         {
98             byte h = data[info++];
99             byte n = data[info++];
100            color.B = (byte)(h & 0x1f);
101            color.G = (byte)(((h & 0xe0) >> 5) + ((n & 0x07) << 3));
102            color.R = (byte)((n & 0xf8) >> 3);
103            image.SetPixel(Y, X, color);
104        }
105    }
106 }
107
108 private void drawPoints()
109 {
110     BrainPad.Display.DrawImage(62, 46, imageS);
111     BrainPad.Display.DrawImage(72, 46, imageS);
112     BrainPad.Display.DrawImage(51, 60, imageF);
113     BrainPad.Display.DrawImage(54, 47, imageF);
114     BrainPad.Display.DrawImage(63, 38, imageF);
115     BrainPad.Display.DrawImage(76, 35, imageF);
116     BrainPad.Display.DrawImage(88, 38, imageF);
117     BrainPad.Display.DrawImage(98, 47, imageF);
118     BrainPad.Display.DrawImage(101, 60, imageF);
119 }
120
121 private void drawPointer()
122 {
123     drawPoints();
124     switch (position)
125     {
126     case 0:
127         BrainPad.Display.DrawImage(101, 60, imageW);
128         BrainPad.Display.DrawImage(72, 46, imageZ000);
129         break;
130     case 30:
131         BrainPad.Display.DrawImage(98, 47, imageW);
132         BrainPad.Display.DrawImage(72, 46, imageZ030);
133         break;
134     case 60:
135         BrainPad.Display.DrawImage(88, 38, imageW);
136         BrainPad.Display.DrawImage(72, 46, imageZ060);
137         break;
138     case 90:
139         BrainPad.Display.DrawImage(76, 35, imageW);
140         BrainPad.Display.DrawImage(72, 46, imageZ090);
141         break;
142     case 120:
143         BrainPad.Display.DrawImage(63, 38, imageW);
144         BrainPad.Display.DrawImage(62, 46, imageZ120);
145         break;
146     case 150:
147         BrainPad.Display.DrawImage(54, 47, imageW);
```

```
148     BrainPad.Display.DrawImage(62, 46, imageZ150);
149     break;
150     case 180:
151         BrainPad.Display.DrawImage(51, 60, imageW);
152         BrainPad.Display.DrawImage(62, 46, imageZ180);
153         break;
154     }
155     BrainPad.Display.DrawText(27, 80, "Rotation: " + position.ToString
156     ("D3") + " Grad", BrainPad.Color.White);
157 }
158 private void rotation()
159 {
160     drawPointer();
161     BrainPad.ServoMotor.SetPosition(position);
162     BrainPad.Wait.Seconds(0.5);
163 }
164 }
165
```