```
...07-Object-Oriented-Programming\ShapeDrawer\Shape.cs
1 using SplashKitSDK;
 2 using System;
 3 using System.Collections.Generic;
 4 using System.Text;
 6 namespace ShapeDrawer
 7 {
 8
        public class Shape
 9
            private Color _color = Color.Chocolate;
10
11
            private float _x = 0.0f;
12
            private float _y = 0.0f;
13
            private int _width;
14
            private int _height;
15
16
            public Shape(int param)
17
18
                 _width = param;
19
                 _height = param;
            }
20
21
22
            public Color Color
23
24
                 get
25
                 {
26
                     return _color;
                 }
27
28
                 set
29
                 {
30
                     _color = value;
31
                 }
            }
32
33
34
            public float X
35
36
                 get
37
                 {
38
                     return _x;
39
                 }
40
                 set
41
                 {
42
                     _x = value;
43
                 }
44
            }
45
46
            public float Y
47
48
                 get
49
                 {
50
                     return _y;
                 }
51
52
                 set
53
```

```
54
                     _y = value;
55
                 }
56
            }
57
58
            public int Width
59
60
                get
61
                 {
62
                     return _width;
63
                 }
64
                 set
65
                 {
                     _width = value;
66
                 }
67
68
            }
69
70
71
            public int Heigh
72
73
                 get
74
                 {
75
                     return _height;
76
                 }
77
                 set
78
                 {
79
                     _height = value;
                 }
80
81
            }
82
83
            public void Draw()
84
                 SplashKit.FillRectangle (_color, _x, _y,
85
                                            _width, _height);
86
            }
87
88
89
            public bool IsAt(Point2D pt)
90
91
                 if (pt.X >= _x && pt.X <= _x + _width &&</pre>
92
                     pt.Y >= _y \&\& pt.Y <= _y + _height)
93
                     return true;
94
                 else return false;
95
96
            }
        }
97
98 }
99
```

```
1 using SplashKitSDK;
2 using System;
3 using System.Threading;
5 namespace ShapeDrawer
6 {
7
       public class Program
8
            public static void Main()
9
10
                Window windown = new Window("Shape Drawer", 800, 600);
11
                Shape myShape = new Shape(158);
12
13
14
                do
                {
15
                    SplashKit.ProcessEvents();
16
17
                    SplashKit.ClearScreen();
18
19
                    myShape.Draw();
20
                    SplashKit.RefreshScreen();
21
22
23
24
25
                    if(SplashKit.MouseClicked(MouseButton.LeftButton))
26
27
                        myShape.X = SplashKit.MouseX();
28
                        myShape.Y = SplashKit.MouseY();
                        Console.WriteLine("clicked");
29
30
                        Console.WriteLine(myShape.Heigh);
                        Console.WriteLine(myShape.Width);
31
                    }
32
33
34
                    if(SplashKit.KeyTyped(KeyCode.SpaceKey) && myShape.IsAt >>
                      (SplashKit.MousePosition()))
35
                    {
                        myShape.Color = SplashKit.RandomColor();
36
37
                    }
38
                }while (!windown.CloseRequested);
39
40
41
           }
42
       }
43 }
44
```

