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81 lines (67 sloc) │ 1.92 KB   ···

```csharp
1   using SplashKitSDK;
2   using System;
3   using System.IO;
4
5   namespace _5._2C_Not_Complete
6   {
7       public class MyLine : Shape
8       {
9           //! Fields
10          private float _length;
11
12          //! Constructors
13          public MyLine()
14              : this(Color.BlueViolet, 0, 0, false, 150)
15          {
16
17          }
18
19          public MyLine(Color color, float x, float y, bool selected, float length) : base(color
20          {
21              this._length = length;
22          }
23
24          //! Properties
25          public float Length
26          {
27              get { return _length; }
28              set { _length = value; }
29          }
30
31
32          //! Methods
```

```csharp
33          public override bool IsAt(Point2D mouseLocation)
34          {
35              Point2D initialPoint = new()
36              {
37                  X = X,
38                  Y = Y
39              };
40
41              Point2D finalPoint = new()
42              {
43                  X = X + Length,
44                  Y = Y
45              };
46
47              Line line = SplashKit.LineFrom(initialPoint, finalPoint);
48              return SplashKit.PointOnLine(mouseLocation, line);
49          }
50
51          public override void DrawOutline()
52          {
53              SplashKit.DrawCircle(Color.GhostWhite, X, Y, 2);
54              SplashKit.DrawCircle(Color.GhostWhite, X + Length, Y, 2);
55          }
56
57          public override void Draw()
58          {
59              SplashKit.DrawLine(Color, X, Y, (X + Length), Y);
60
61              if (Selected)
62              {
63                  DrawOutline();
64              }
65          }
66
67          //! 5.2C Saving and Loading functionality
68          public override void SaveTo(StreamWriter writer)
69          {
70              writer.WriteLine("Line");
71              base.SaveTo(writer);
72              writer.WriteLine(Length);
73          }
74
75          public override void LoadFrom(StreamReader reader)
76          {
77              base.LoadFrom(reader);
78              Length = reader.ReadInteger();
79          }
80      }
81  }
```