KingSchlock / **COS20007**   (Public)

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main

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1 contributor

84 lines (69 sloc) | 2.09 KB

```csharp
1   using SplashKitSDK;
2   using System.IO;
3
4   namespace _5._2C_Not_Complete
5   {
6       public abstract class Shape
7       {
8           //! Field Declerations
9           private Color _color;
10          private float _x, _y;
11          private bool _selected;
12
13          //! Constructors
14          public Shape()
15              : this(Color.Red, false)
16          {
17
18          }
19
20          public Shape(Color color, bool selected)
21          {
22              this._color = color;
23              this._selected = selected;
24          }
25
26          public Shape(Color color, float x, float y, bool selected)
27              : this(color, selected)
28          {
29              this._x = x;
30              this._y = x;
31          }
32
```

```csharp
33
34          //! Properties
35          public Color Color
36          {
37              get { return this._color; }
38              set {this._color = value; }
39          }
40
41          public float X
42          {
43              get { return this._x; }
44              set { this._x = value; }
45          }
46
47          public float Y
48          {
49              get { return this._y; }
50              set { this._y = value; }
51          }
52
53          public bool Selected
54          {
55              get { return this._selected; }
56              set { this._selected = value; }
57          }
58
59          //! Methods
60          //? Takes a point and determines if said point lies within our shape
61          public abstract bool IsAt(Point2D mouseLocation);
62
63          //? Draws the outline of a rectangle
64          public abstract void DrawOutline();
65
66          //? Draws a Rectangle based on parameters and outlines the rectangle if the shape is se
67          public abstract void Draw();
68
69          //! 5.2C Save and Load functionality
70          public virtual void SaveTo(StreamWriter writer)
71          {
72              writer.WriteColor(Color);
73              writer.WriteLine(X);
74              writer.WriteLine(Y); //? possible to add selected if you wanted to load that aswell
75          }
76
77          public virtual void LoadFrom(StreamReader reader)
78          {
79              Color = reader.ReadColor();
80              X = reader.ReadInteger();
81              Y = reader.ReadInteger();
82          }
83      }
84  }
```