

Program.cs

```
using System;
using SplashKitSDK;

namespace ShapeDrawer
{
    public class Program
    {
        public static void Main()
        {
            Window window = new Window("Shape Drawer", 800, 600);
            Shape myShape = new Shape();
            do
            {
                SplashKit.ProcessEvents();
                SplashKit.ClearScreen();

                if (SplashKit.MouseClicked(MouseButton.LeftButton))
                {
                    myShape.X = SplashKit.MousePosition().X;
                    myShape.Y = SplashKit.MousePosition().Y;
                }

                if (SplashKit.KeyDown(KeyCode.SpaceKey))
                {
                    myShape.Color = SplashKit.RandomColor();
                }

                myShape.Draw();
                SplashKit.RefreshScreen();
            } while (!window.CloseRequested);
        }
    }
}
```

Shape.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Reflection;
using SplashKitSDK;

namespace ShapeDrawer
{
    public class Shape
    {
        private Color _color;
        private float _x;
        private float _y;
        private int _width;
        private int _height;

        public Shape()
        {
            _color = Color.Green;
            _x = 0.0f;
            _y = 0.0f;
            _width = 100;
            _height = 100;
        }

        public void Draw()
        {
            SplashKit.FillRectangle(_color, _x, _y,
                _width, _height);
        }

        public bool IsAt(Point2D pt)
        {
            float minX = _x;
            float maxX = _x + _width;
            float minY = _y;
            float maxY = _y + _height;

            if (pt.X >= minX && pt.X < maxX && pt.Y >= minY && pt.Y <= maxY)
            {
                return true;
            }
            else
            {
                return false;
            }
        }

        public Color Color
        {
            get
            {
                return _color;
            }
        }
    }
}
```

```

        }
        set
        {
            _color = value;
        }
    }

    public float X
    {
        get
        {
            return _x;
        }
        set
        {
            _x = value;
        }
    }

    public float Y
    {
        get
        {
            return _y;
        }
        set
        {
            _y = value;
        }
    }

    public int Width
    {
        get
        {
            return _width;
        }
        set
        {
            _width = value;
        }
    }

    public int Height
    {
        get
        {
            return _height;
        }
        set
        {
            _height = value;
        }
    }
}

```

