```
using System;
using System.IO;
using SplashKitSDK;

namespace ShapeCalculator
{
    public class ShapeSaver
    {
        public string FileName { get; set; }

        public ShapeSaver(string fileName)
        {
            FileName = fileName;
        }

        // Saves the shape properties to a file
        public void SaveShape(Shape shape)
        {
            using (StreamWriter writer = new StreamWriter(FileName))
            {
                writer.WriteLine(shape.GetType().Name); // Write Shape Type
                writer.WriteLine(shape.Color.FromColor()); //Write SHape
                 Color
                switch (shape)
                {
                    case Square square:
                        writer.WriteLine(square.SideLength);
                        break;
                    case Triangle triangle:
                        writer.WriteLine(triangle.Base);
                        writer.WriteLine(triangle.Height);
                        break;
                    case Circle circle:
                        writer.WriteLine(circle.Radius);
                        break;
                    case Trapezium trapezium:
                        writer.WriteLine(trapezium.Base1);
                        writer.WriteLine(trapezium.Base2);
                        writer.WriteLine(trapezium.Height);
                        break;
                    case Rectangle rectangle:
                        writer.WriteLine(rectangle.Width);
                        writer.WriteLine(rectangle.Height);
                        break;
                }
            }
        }
    }
}
```