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using System;
using System.IO;
using SplashKitSDK;

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

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

        // Loads the shape properties from a file
        public Shape LoadShape()
        {
            Shape shape = null;
            using (StreamReader reader = new StreamReader(FileName))
            {
                string shapeType = reader.ReadLine(); //Read shape type
                Color color = reader.ReadLine().ToColor(); //Read shape
                color
                switch (shapeType)
                {
                    case "Square":
                        shape = new Square
                        {
                            Color = color,
                            SideLength = double.Parse(reader.ReadLine())
                        };
                        break;
                    case "Triangle":
                        shape = new Triangle
                        {
                            Color = color,
                            Base = double.Parse(reader.ReadLine()),
                            Height = double.Parse(reader.ReadLine())
                        };
                        break;
                    case "Circle":
                        shape = new Circle
                        {
                            Color = color,
                            Radius = double.Parse(reader.ReadLine())
                        };
                        break;
                    case "Trapezium":
                        shape = new Trapezium
                        {
                            Color = color,
                            Base1 = double.Parse(reader.ReadLine()),
                            Base2 = double.Parse(reader.ReadLine()),
                            Height = double.Parse(reader.ReadLine())
                        };
                        break;
                }
            }
        }
    }
}

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        };
        break;
    case "Rectangle":
        shape = new Rectangle
        {
            Color = color,
            Width = double.Parse(reader.ReadLine()),
            Height = double.Parse(reader.ReadLine())
        };
        break;
    }
}
return shape;
}
}
```