

```

using System;
using System.Collections.Generic;
using SplashKitSDK;

namespace ShapeCalculator
{
    public static class InputValidator
    {
        // Validates color input, providing a list of valid colors if
        // requested by the user
        public static string GetValidatedColor(string prompt)
        {
            var validColors = SplashKitColorRetriever.GetAllColors();

            while (true)
            {
                Console.Write(prompt);
                string input = Console.ReadLine().Trim().ToLower();
                if (validColors.ContainsKey(input))
                {
                    return input;
                }
                else if (input == "more")
                {
                    DisplayValidColors(validColors.Keys);
                }
                else
                {
                    Console.WriteLine("Invalid color. If you want to view
                    the list of colors, type 'More'.");
                }
            }
        }

        // Validates user input, ensuring that user picks either of the
        // units
        public static string GetValidatedUnit(string prompt)
        {
            while (true)
            {
                Console.Write(prompt);
                string input = Console.ReadLine().Trim().ToLower();
                if (input == "inches" || input == "centimeters")
                {
                    return input;
                }
                else
                {
                    Console.WriteLine("Invalid unit. Please enter 'inches'
                    or 'centimeters'.");
                }
            }
        }

        // Validates and returns a double value from user input

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```

public static double GetValidatedDouble(string prompt)
{
    double result;
    while (true)
    {
        Console.Write(prompt);
        if (double.TryParse(Console.ReadLine(), out result))
        {
            return result;
        }
        else
        {
            Console.WriteLine("Invalid number. Please enter a valid
                                number.");
        }
    }
}

//Displays valid colors in a formatted, capitalized manner
private static void DisplayValidColors(IEnumerable<string> colors)
{
    Console.WriteLine("Valid colors are:");
    int count = 0;
    foreach (var color in colors)
    {
        string capitalizedColor = char.ToUpper(color[0]) +
            color.Substring(1);
        Console.Write(capitalizedColor.PadRight(20));
        count++;
        if (count % 4 == 0)
        {
            Console.WriteLine();
        }
    }
    Console.WriteLine();
}
}
}

```