

# Color representation in r,g,b with values [0.0 – 1.0].

```
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using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Windows.Media;
using System.ComponentModel;

namespace Dotway.WPF.Controls.Utilities
{
    ///

    /// Color representation in r,g,b with values [0.0 – 1.0].
    ///

    public struct RGB
    {
        public RGB(Color color)
        {
            r = 0.0;
            g = 0.0;
            b = 0.0;

            R = color.R / 255.0;
            G = color.G / 255.0;
            B = color.B / 255.0;
        }

        ///

        /// Each value must be in the span 0 – 255.
        ///

        /// /// /// public RGB(byte red, byte green, byte blue)
```

```
{  
r = 0.0;  
g = 0.0;  
b = 0.0;  
  
R = red / 255.0;  
G = green / 255.0;  
B = blue / 255.0;  
}  
  
///  
  
/// Each value must be in the span 0.0 – 1.0.  
///  
///    ///    /// public RGB(double red, double green, double  
blue)  
{  
r = 0.0;  
g = 0.0;  
b = 0.0;  
  
R = red;  
G = green;  
B = blue;  
}  
  
private double r;  
public double R  
{  
get { return r; }  
set  
{  
if (value >= 0.0 && value <= 1.0) { r = value; } else { throw  
new ArgumentOutOfRangeException("R is not in the span [0,  
1]"); } } private double g; public double G { get { return  
g; } set { if (value >= 0.0 && value <= 1.0) { g = value; }  
else { throw new ArgumentOutOfRangeException("G is not in the  
span [0, 1]"); } } } private double b; public double B { get {
```

```
return b; } set { if (value >= 0.0 && value <= 1.0) { b =  
value; } else { throw new ArgumentOutOfRangeException("B is  
not in the span [0, 1]"); } } } } [/csharp]
```