Subject: [Proposal] RGB <-> CMYK conversion functions.
Posted by Oblivion on Mon, 13 Apr 2020 11:10:19 GMT
View Forum Message <> Reply to Message

Hello,

U++ already has RGB <-> HSV conversion functions.

Below functions might be a handy addition to them, for people using color conversion a lot.

```
void CMYKtoRGB(double c, double m, double y, double k, double& r, double& g, double& b)
{
 k = clamp(k, 0.0, 1.0);
 r = (1 - c) * (1 - k);
 g = (1 - m) * (1 - k);
 b = (1 - y) * (1 - k);
}

void RGBtoCMYK(double r, double g, double b, double& c, double& m, double& y, double& k)
{
 k = 1 - max(max(r, g), b);
 c = (1 - r - k) / (1 - k);
 m = (1 - g - k) / (1 - k);
 y = (1 - b - k) / (1 - k);
}

Color CmykColorf(double c, double m, double y, double k)
{
 double r, g, b;
 CMYKtoRGB(c, m, y, k, r, g, b);
 return Color(min(int(r * 255), 255), min(int(g * 255), 255), min(int(b * 255), 255));
}

Color CmyColorf(double c, double m, double y)
{
 double r, g, b;
 CMYKtoRGB(c, m, y, 0.0, r, g, b);
 return Color(min(int(r * 255), 255), min(int(g * 255), 255), min(int(b * 255), 255));
}
```

Best regards,
Oblivion