CSS Colors Module

History

X11 colors

The X11 color names, developed in the 1980s, included a file named rgb.txt that was shipped with every X11 installation. It mapped over 400 color names to specific RGB values. This list was used in Unix-based systems to standardize color representation, but it suffered from inconsistencies in invocation and usage.

Sixteen named colors

The HTML 3.2 specification of 1996 introduced sixteen color names, derived from the standard 16 colors supported by the Windows VGA palette. These colors, hitherto called the *sixteen named colors*, are:

- aqua
- black
- blue
- fuchsia
- gray
- green
- lime
- maroon
- navy
- olive
- purple
- red
- silver
- teal
- white
- yellow

Thanks to this standard, these sixteen color names could be used reliably and consistently in documents across the Web, without recourse to their hexadecimal values.

The CSS Level 1 colors introduced in 1996 specified these same sixteen colors, while the CSS Level 2 colors, introduced in 1998, augmented this list to seventeen named colors, with the addition of orange.

CSS/SVG colors

Finally, the SVG 1.0 Specification of 2001 and the CSS Color Module Level 3 of 2011 have standardized a list of 147 color names, known as the "extended color keywords" or the "recognized color keyword names" which included the original 16 colors, orange, and additional colors from the X11 set. This standardization aims to provide a consistent color naming scheme across the Web, and has remained relatively stable. It

is this set of color names that forms the basis for this module. These named colors are standard both for CSS and SVG, although we shall refer to them here as CSS Colors.

CSS colors vis-a-vis Typst

Typst comes with seven standard color functions for accessing colors.

It also ships with *eighteen pre-defined colors* which include the sixteen named colors, plus orange, plus one more color named eastern. The color eastern is undefined in the CSS colors. The remaining seventeen colors have identical names, but different RGB/Hex values, as tabulated below.

Color Name	Typst Hex Code	SWATCH	CSS HEX CODE	SWATCH
aqua	#7fdbff		#00ffff	
black	#00000		#00000	
blue	#0074d9		#0000ff	
eastern	#239dad		Not Defined	Not Defined
fuchsia	#f012be		#ff00ff	
gray	#aaaaaa		#808080	
green	#2ecc40		#008000	
lime	#01ff70		#00ff00	
maroon	#85144b		#800000	
navy	#001f3f		#000080	

COLOR NAME	Typst Hex Code	SWATCH	CSS HEX CODE	SWATCH
olive	#3d9970		#808000	
orange	#ff851b		#ffa500	
purple	#b10dc9		#800080	
red	#ff4136		#ff0000	
silver	#dddddd		#c0c0c0	
teal	#39cccc		#008080	
white	#ffffff		#ffffff	
yellow	#ffdc00		#ffff00	

Purpose

The CSS Colors Module is a robust convenience which allows CSS colors to be used by their names within a Typst file, rather than by their RGB/Hex codes, which have to be looked up.

Reference documentation

For easy reference, tabulations of the CSS color name, its RGB/Hex value, a color swatch, and a color stripe are available as

a. PDF and

b. HTML

files.

Usage

The CSS Color Module provides two functions:

- 1. css("color-name") where "color-name" is a valid CSS color. It may be used wherever a color is valid input in Typst.
- 2. get-hex-value("color-name") which returns the hexadecimal code for a valid CSS color.

The CSS Color module accepts lowercase and CamelCase names as valid CSS colors.

```
#import "@preview/css-colors:0.1.0": *
```

Notes

References

https://www.youtube.com/watch?v=HmStJQzclHc Alex Sexton: Peachpuffs and Lemonchiffons [CSSConfUS2014]