

# 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. How the CSS colors were given their rather idiosyncratic names is explained in [this You Tube video](#) [1].

## CSS colors vis-a-vis Typst

Typst comes with [seven standard color functions](#) for accessing colors.

It also ships with [eighteen predefined 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	#000000		#000000	
blue	#0074d9		#0000ff	
eastern	#239dad		Not Defined	Not Defined
fuchsia	#f012be		#ff00ff	
gray	#aaaaaa		#808080	
green	#2ecc40		#008000	
lime	#01ff70		#00ff00	
maroon	#85144b		#800000	

COLOR NAME	Typst HEX CODE	SWATCH	CSS HEX CODE	SWATCH
navy	#001f3f		#000080	
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 [here](#).

## Usage

The CSS Colors Module provides a `css` function defined as:

```
css(  
  str color-name  
) -> color
```

The `css` function accepts a single parameter, `color-name`, which is the name of a CSS color. It returns the corresponding `rgb` code as a Typst color type.

The `color-name` can be provided in either lowercase or CamelCase formats, both of which are valid.

## Examples

The following examples demonstrate the usage of the `css` function in various cases:

### 1. Coloring text.

```
#import "@preview/css-colors:0.1.0": *  
  
Normal text may be #text(fill: css("crimson"))[colored so.]
```

Normal text may be **colored so.**

### 2. A rectangle may be colored with `fill`.

```
#import "@preview/css-colors:0.1.0": *  
  
#rect(width: 100%, height: auto, fill: css("darkorchid"))
```



### 3. CSS Colors may be invoked either with lowercase or CamelCase.


```
#import "@preview/css-colors:0.1.0": *  
  
(a) saddlebrown: #box(width: 30mm, height: 1em, fill:  
  css("saddlebrown"))  
  
(b) SaddleBrown: #box(width: 30mm, height: 1em, fill:  
  css("SaddleBrown"))
```


(a) saddlebrown: 

(b) SaddleBrown: 

4. The maroon shipped with Typst is different from the maroon specified in CSS Colors. Their hex codes are different as shown below. The CSS color is deliberately written as “Maroon” with an initial capital letter to distinguish it here.

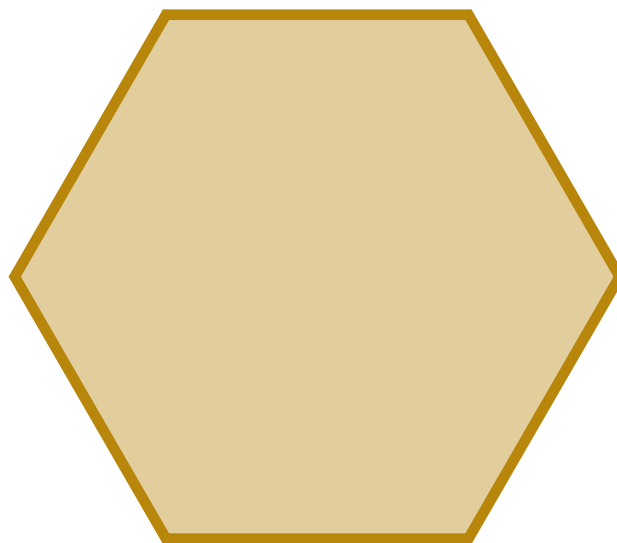
```
#import "@preview/css-colors:0.1.0": *  
  
Typst maroon: #color.maroon.to-hex(): #box(width: 30mm, height:  
1em, fill: maroon)  
  
CSS maroon: #css("Maroon").to-hex(): #box(width: 30mm, height:  
1em, fill: css("Maroon"))
```

Typst maroon    #85144b    

CSS maroon      #800000    

5. CSS Colors may also be used in the context of drawing and data visualization.

```
#import "@preview/css-colors:0.1.0": *  
  
#align(center)[  
#polygon.regular(  
  fill: css("DarkGoldenRod").lighten(60%),  
  stroke: (paint: css("darkgoldenrod"), thickness: 4pt, cap:  
"round"),  
  size: 90mm,  
  vertices: 6,  
)]
```



6. CSS Colors may be used to underline text with a line of default thickness. The thickness of the underline may be changed manually if desired.

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

```
This is #underline(stroke: css("teal"))[important.]
```




















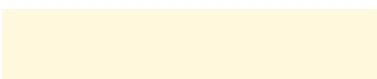






```
This is #underline(stroke: (paint: css("teal"), thickness:  
2pt))[important.]
```



























This is important. This is important.

## Notes








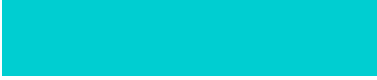





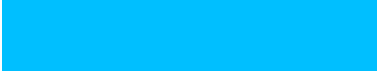












### Available CSS Colors

NAME	HEX VALUE	SWATCH	STRIPE
aliceblue	#f0f8ff		
antiquewhite	#faebd7		
aqua	#00ffff		
aquamarine	#7fffd4		
azure	#f0ffff		
beige	#f5f5dc		
bisque	#ffe4c4		
black	#000000		
blanchedalmond	#ffebcd		


NAME	HEX VALUE	SWATCH	STRIPE
blue	#0000ff		
blueviolet	#8a2be2		
brown	#a52a2a		
burlywood	#deb887		
cadetblue	#5f9ea0		
chartreuse	#7fff00		
chocolate	#d2691e		
coral	#ff7f50		
cornflowerblue	#6495ed		
cornsilk	#fff8dc		
crimson	#dc143c		
cyan	#00ffff		
darkblue	#00008b		






















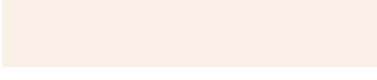




NAME	HEX VALUE	SWATCH	STRIPE
darkcyan	#008b8b		
darkgoldenrod	#b8860b		
darkgray	#a9a9a9		
darkgreen	#006400		
darkgrey	#a9a9a9		
darkkhaki	#bdb76b		
darkmagenta	#8b008b		
darkolivegreen	#556b2f		
darkorange	#ff8c00		
darkorchid	#9932cc		
darkred	#8b0000		
darksalmon	#e9967a		
darkseagreen	#8fbc8f		








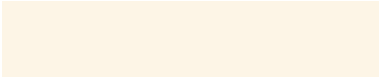




















NAME	HEX VALUE	SWATCH	STRIPE
darkslateblue	#483d8b		
darkslategray	#2f4f4f		
darkslategrey	#2f4f4f		
darkturquoise	#00ced1		
darkviolet	#9400d3		
deeppink	#ff1493		
deepskyblue	#00bfff		
dimgray	#696969		
dimgrey	#696969		
dodgerblue	#1e90ff		
firebrick	#b22222		
floralwhite	#fffaf0		
forestgreen	#228b22		



























NAME	HEX VALUE	SWATCH	STRIPE
fuchsia	#ff00ff		
gainsboro	#dcdcdc		
ghostwhite	#f8f8ff		
gold	#ffd700		
goldenrod	#daa520		
gray	#808080		
green	#008000		
greenyellow	#adff2f		
grey	#808080		
honeydew	#f0fff0		
hotpink	#ff69b4		
indianred	#cd5c5c		
indigo	#4b0082		


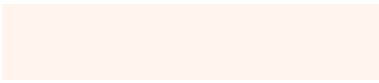
























NAME	HEX VALUE	SWATCH	STRIPE
ivory	#fffff0		
khaki	#f0e68c		
lavender	#e6e6fa		
lavenderblush	#fff0f5		
lawngreen	#7cfc00		
lemonchiffon	#ffffac		
lightblue	#add8e6		
lightcoral	#f08080		
lightcyan	#e0ffff		
lightgoldenrodyellow	#fafad2		
lightgray	#d3d3d3		
lightgreen	#90ee90		
lightgrey	#d3d3d3		

NAME	HEX VALUE	SWATCH	STRIPE
lightpink	#ffb6c1		
lightsalmon	#ffa07a		
lightseagreen	#20b2aa		
lightskyblue	#87cefa		
lightslategray	#778899		
lightslategrey	#778899		
lightsteelblue	#b0c4de		
lightyellow	#ffffe0		
lime	#00ff00		
limegreen	#32cd32		
linen	#faf0e6		
magenta	#ff00ff		
maroon	#800000		

NAME	HEX VALUE	SWATCH	STRIPE
mediumaquamarine	#66cdaa		
mediumblue	#0000cd		
mediumorchid	#ba55d3		
mediumpurple	#9370db		
mediumseagreen	#3cb371		
mediumslateblue	#7b68ee		
mediumspringgreen	#00ffa9		
mediumturquoise	#48d1cc		
mediumvioletred	#c71585		
midnightblue	#191970		
mintcream	#f5fffa		
mistyrose	#ffe4e1		
moccasin	#ffe4b5		

NAME	HEX VALUE	SWATCH	STRIPE
navajowhite	#ffdead		
navy	#000080		
oldlace	#fdf5e6		
olive	#808000		
olivedrab	#6b8e23		
orange	#ffa500		
orangered	#ff4500		
orchid	#da70d6		
palegoldenrod	#eee8aa		
palegreen	#98fb98		
paleturquoise	#afeeee		
palevioletred	#db7093		
papayawhip	#ffefd5		

NAME	HEX VALUE	SWATCH	STRIPE
peachpuff	#ffdab9		
peru	#cd853f		
pink	#ffc0cb		
plum	#dda0dd		
powderblue	#b0e0e6		
purple	#800080		
red	#ff0000		
rosybrown	#bc8f8f		
royalblue	#4169e1		
saddlebrown	#8b4513		
salmon	#fa8072		
sandybrown	#f4a460		
seagreen	#2e8b57		

NAME	HEX VALUE	SWATCH	STRIPE
seashell	#fff5ee		
sienna	#a0522d		
silver	#c0c0c0		
skyblue	#87ceeb		
slateblue	#6a5acd		
slategray	#708090		
slategrey	#708090		
snow	#fffafa		
springgreen	#00ff7f		
steelblue	#4682b4		
tan	#d2b48c		
teal	#008080		
thistle	#d8bfd8		



NAME	HEX VALUE	SWATCH	STRIPE
tomato	#ff6347		
turquoise	#40e0d0		
violet	#ee82ee		
wheat	#f5deb3		
white	#ffffff		
whitesmoke	#f5f5f5		
yellow	#ffff00		
yellowgreen	#9acd32		

## References

- [1] Alex Sexton, *Peachpuffs and Lemonchiffons [CSSConfUS2014]*. Accessed: Jul. 17, 2014. [Online Video]. Available: <https://www.youtube.com/watch?v=HmStJQzclHc>