

palette – Create palettes for colors and symbols

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Abstract

The `palette` package provides `colorpalette.sty` and `symbolsuite.sty`, which can be used to create and manage palettes of colors and symbols, respectively.

1 Overview

We will go over the basic structure of the user interface in broad terms first (i.e. no macros or environments yet). We will use `colorpalette` as our example here, but `symbolsuite` behaves virtually identically.

First, the user can create palette *themes*, which are independent from each other. Then, you can add colors to themes. Finally, you can make a palette associated with a theme and set its colors.

2 colorpalette.sty

2.1 Usage

<code>\newpalettetheme</code>	To create a new palette theme called <code>theme</code> , write <code>\newpalettetheme{theme}</code> .
<code>\addcolortotheme</code>	To add a color <code>color</code> to theme <code>theme</code> , write <code>\addcolortotheme{theme}{color}</code> .
<code>\newpalette</code>	To create a new palette <code>palette</code> based on theme <code>theme</code> , write <code>\newpalette{theme}{palette}</code> . Palette names only need to be unique across the same theme. This means that you can have two palettes with the same name if they are associated with different themes.
<code>\setpalettecolor</code>	To set the color <code>color</code> (which was defined with respect to the theme of the palette) as the color value <code>value</code> in the format <code>encoding</code> (which by default is HTML) of palette <code>palette</code> in theme <code>theme</code> , write <code>\setpalettecolor{theme}{palette}{color}[encoding]{value}</code>
<code>\activepalette</code>	This sets the active palette of a theme. (This is how palettes are “swapped in” with respect to a theme.) To set the active palette of theme <code>theme</code> as <code>palette</code> , write <code>\activepalette{theme}{palette}</code> .
<code>\getcolor</code>	To use, write <code>\getcolor{theme}{color}</code> . This gets the <i>internal</i> color name

from the *active* palette of `theme`. No errors will be thrown even if you pass in an undefined theme or color (with respect to the theme). This limitation is because we must be able to parse `\getcolor`.

`\applycolor` To use, write `\applycolor{theme}{color}`. This applies color `color` from the *active* palette of theme `theme`. (This means that the newly defined color is passed into `\color`.) If `theme` has no active palette, an error will be thrown.

To make it clearer what `\applycolor` does, we will just show the macro definition directly (since it is quite simple). (The macros `\colorpalette@themecheck` and `\colorpalette@colorcheck` are just for error handling.)

```

1 <*color>
2 \newcommand\applycolor[2]{%
3   \colorpalette@themecheck{#1}%
4   \colorpalette@colorcheck{#1}{#2}%
5   \color{\getcolor{#1}{#2}}%
6 }
7 </color>

```

2.2 Error Messages

If a nonexistent theme is passed in, the following error will be thrown:

The palette passed in is not a defined palette of theme ‘#1’

where `#1` is the name of the theme.

If a palette that does not belong to a theme is passed in, the following error will be thrown:

The palette ‘#2’ passed in is not a defined palette of theme ‘#1’

where `#1` is the name of the theme and `#2` is the name of the palette.

If a color that does not belong to a theme is passed in, the following error will be thrown:

The color ‘#2’ passed in is not a defined color of theme ‘#1’

where `#1` is the name of the theme and `#2` is the name of the color.

3 symbolsuite.sty

Change History

v1.0.0
 General: Initial version 1