palette – Create palettes for colors and symbols

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Abstract
The palette package provides colorpalette.sty and symbolpalette.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 symbolpalette 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

\newpalettetheme To create a new palette theme called theme, write \newpalettetheme{theme}.
\addcolortotheme To add a color color to theme theme, write \addcolortotheme{theme}{color}.
\newpalette To create a new palette palette based on theme theme, write \newpalette{theme}{palette}.

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.

\setpalettecolor To set the color color (which was defined with respect to the theme of the palette) as the color value value in the format encoding (which by default is HTML) of palette palette in theme theme, write
\setpalettecolor{theme}{palette}{color}{encoding}{value}

\activepalette 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 theme as palette, write \activepalette{theme}{palette}.

\getcolor To use, write \getcolor{theme}{color}. This gets the internal 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. 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.)

\begin{verbatim}
\newcommand\applycolor[2]{%  
  \colorpalette@themecheck{#1}%  
  \colorpalette@colorcheck{#1}{#2}%  
  \color{\getcolor{#1}{#2}}%  
}  
\end{verbatim}

### 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 symbolpalette.sty

Despite the name `symbolpalette` (which is used to identify it as one of the files of the package `palette`), the main keyword is a *suite*. This is because the keyword `palette` is already used for `colorpalette`.

This package is nearly analogous to `colorpalette`. A *suite* is analogous to a `palette`, and a *symbol* is analogous to a `color`. *Themes* are used in both packages.
3.1 Usage

\newsuitetheme
To create a new suite theme called theme, write \newsuitetheme{theme}.
\addsymboltotheme
To add a symbol symbol to theme theme, write \addsymboltotheme{theme}{symbol}.
\newsuite
To create a new suite suite based on theme theme, write \newsuite{theme}{suite}.

Suites are only required to be unique across the same theme. This means that you can have two suites with the same name if they are associated with different themes.
\setsuitesymbol
To set the symbol symbol (which was defined with respect to the theme of the suite) as the icon icon of suite suite in theme theme, write
\setsuitesymbol{theme}{suite}{symbol}{icon}
\activesuite
This sets the active suite of a theme. (This is how suites are “swapped in” with respect to a theme.) To set the active suite of theme theme as suite, write \activesuite{theme}{suite}.
\printsymbol
To use, write \printsymbol{theme}{symbol}. This is similar to color-palette.sty’s \applycolor.

3.2 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 suite that does not belong to a theme is passed in, the following error will be thrown:
The suite ‘#2’ passed in is not a defined suite of theme ‘#1’
where #1 is the name of the theme and #2 is the name of the suite.

If a symbol that does not belong to a theme is passed in, the following error will be thrown:
The symbol ‘#2’ passed in is not a defined symbol of theme ‘#1’
where #1 is the name of the theme and #2 is the name of the symbol.

Change History

v1.0.0          to symbol, not color
                General: Initial version
v1.0.1          v1.1.0
                General: Make error message refer
                General: Update macrolist (to get compatibility with etoolbox)

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