

The `clrstrip` package

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1 Introduction

This package provides the `colorstrip` environment, that places its contents into a full page width colour strip. It requires the macro `\color` to be defined and working, but doesn't load a package doing so on its own. So for everything to work out properly, you'd have to load a package like `color` or `xcolor` in your preamble, too.

It is meant to be lightweight and fast. So while packages like `tcolorbox` provide very pretty output, this package has a simplistic look achieved with under 100 lines of code.

It is written as a docstrip file: executing `latex clrstrip.dtx` generates the `clrstrip.sty` file and typesets this documentation; execute `tex clrstrip.dtx` to only generate `clrstrip.sty`.

2 Examples

The following is an example showing the results of

```
\begin{colorstrip}{red!5}  
  \blindduck  
\end{colorstrip}
```

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with `xcolor` and `duckuments` loaded:

There once was a very smart but sadly blind duck. When it was still a small duckling it was renowned for its good vision. But sadly as the duck grew older it caught a sickness which caused its eyesight to worsen. It became so bad, that the duck couldn't read the notes it once took containing much of inline math. Only displayed equations remained legible. That annoyed the smart duck, as it wasn't able to do its research any longer. It called for its underduckling and said: "Go, find me the best eye ducktor there is. He shall heal me from my disease!"

The title of this documentation was typeset with

```
\vspace*{-6cm}%
\begin{colorstrip}{blue!15}
[%
    inner bot=1cm, outer bot=\bigskipamount, width=\paperwidth,
    inner top=6cm, left=-\dimexpr\marginparwidth+\marginparsep\relax
]
\centering
\LARGE The \pkg{clrstrip} package\[\bigskipamount]
\large
Jonathan P. Spratte\footnotemark\[\medskipamount]
Released 2018/07/30
\end{colorstrip}
\footnotetext{E-mail: jspratte@yahoo.de}
```

And the code boxes in this section (except this one) are surrounded by

```
\begin{colorstrip}{gray!15}[inner=0pt]
\begin{verbatim}
\end{verbatim}
\end{colorstrip}
```

3 Documentation

3.1 Macros and Environments

| | |
|-----------------------------|--|
| <code>\colorstripSet</code> | <code>\colorstripSet{<key=value>}</code> |
|-----------------------------|--|

This macro can be used to set the options listed in [subsection 3.2](#) outside of `colorstrip` (the package makes no global assignments).

| | |
|-------------------------|--|
| <code>colorstrip</code> | <code>\begin{colorstrip}[<color model>]{<color>}[<key=value>]</code> |
|-------------------------|--|

This environment typesets its contents inside a `\vbox` which gets surrounded by a strip of the specified `<color>` which reaches across the full page width. `<color model>` and `<color>` are the arguments passed to `\color`. In the second optional argument `<key=value>` you can specify any of the options listed in [subsection 3.2](#). After this environment starts a new paragraph with the document specific `\parindent`. As always you can suppress this indent with `\noindent`. The result is not page breakable.

3.2 Options

The package doesn't support load time options. The following options can be either set with `\colorstripSet` or inside of `colorstrip`.

`inner=<skip>`
Sets both `inner top` and `inner bot` to `<skip>`. Initially this is set to `\medskipamount`.

`inner top=<skip>`
Specifies additional padding between the upper border of the strip and its contents.

`inner bot=<skip>`
Specifies additional padding between the lower border of the strip and its contents.

`outer=<skip>`
Sets both `outer top` and `outer bot` to `<skip>`. Initially this is set to `\medskipamount`.

`outer top=<skip>`
Specifies the vertical skip above the colour strip.

`outer bot=<skip>`
Specifies the vertical skip below the colour strip.

`width=<width>`
Sets the `\hsize` of the `\vbox` for the contents, resulting in the specified `<width>`. If `<width>` is `Opt` (which is the initial value) the width is the current `\linewidth`.

`left=<skip>`
Specifies a horizontal skip from the left border of the text field for the contents. If `<skip>` is `1sp` (which is the initial value) the `\vbox` is horizontally centred (not its contents).

3.3 Dependencies

`clrstrip` depends on the `keyval` package. In addition it needs a package defining `\color` such as `color` or `xcolor` but doesn't load one on its own.

4 Implementation

¹ `<*pkg>`

4.1 Initializing Variables

`\clrstrip@box` Stores the contents of `colorstrip`.

² `\newsavebox\clrstrip@box`

(End definition for `\clrstrip@box`. This variable is documented on page ??.)

`\clrstrip@innerT` Stores the upper inner padding. Gets reused to store the overall height of the colour strip locally.

³ `\newlength\clrstrip@innerT`

⁴ `\clrstrip@innerT\medskipamount`

(End definition for `\clrstrip@innerT`. This variable is documented on page ??.)

`\clrstrip@innerB` Stores the lower inner padding. Gets reused to store the overall depth of the colour strip locally.

```

5 \newlength\clrstrip@innerB
6 \clrstrip@innerB\clrstrip@innerT

```

(End definition for \clrstrip@innerB. This variable is documented on page ??.)

`\clrstrip@outerT` Stores the upper outer padding.

```

7 \newlength\clrstrip@outerT
8 \clrstrip@outerT\clrstrip@innerT

```

(End definition for \clrstrip@outerT. This variable is documented on page ??.)

`\clrstrip@outerB` Stores the lower outer padding.

```

9 \newlength\clrstrip@outerB
10 \clrstrip@outerB\clrstrip@innerT

```

(End definition for \clrstrip@outerB. This variable is documented on page ??.)

`\clrstrip@width` Stores the lower inner padding. Gets reused to store the overall depth of the colour strip locally.

```

11 \newlength\clrstrip@width

```

(End definition for \clrstrip@width. This variable is documented on page ??.)

`\clrstrip@left` Stores the left skip from the left border of the text field. Might be reused to store the necessary left skip for centred alignment locally.

```

12 \newlength\clrstrip@left
13 \clrstrip@left1sp

```

(End definition for \clrstrip@left. This variable is documented on page ??.)

`\clrstrip@oarg` Stores the first optional argument to `colorstrip` for later use.

```

14 \newcommand*\clrstrip@oarg{}

```

(End definition for \clrstrip@oarg. This variable is documented on page ??.)

`\clrstrip@marg` Stores the mandatory argument to `colorstrip` for later use.

```

15 \newcommand*\clrstrip@marg{}

```

(End definition for \clrstrip@marg. This variable is documented on page ??.)

4.2 Internal Macros

`\clrstrip@key` Shortcut to define new keys with `keyval`.

```
16 \newcommand*\clrstrip@key{\define@key{clrstrip}}
```

(End definition for \clrstrip@key. This function is documented on page ??.)

`\clrstrip@strip@a` Draws the colour strip using `\vrule`. `\clrstrip@strip@a` is used to expand the optional argument for `\clrstrip@strip@b` and should be called with the expanded mandatory argument as its argument. `\clrstrip@strip@b` then sets the colour and draws the `\vrule`.

```
17 \newcommand*\clrstrip@strip@a[1]
18 {%
19   \expandafter\clrstrip@strip@b\expandafter{\clrstrip@oarg}{#1}%
20 }
21 \newcommand*\clrstrip@strip@b[2]
22 {%
23   \begingroup
24   \if\relax\detokenize{#1}\relax
25     \color{#2}%
26   \else
27     \color[#1]{#2}%
28   \fi
29   \advance\clrstrip@innerT\ht\clrstrip@box
30   \advance\clrstrip@innerB\dp\clrstrip@box
31   \rlap
32   {%
33     \hskip-\paperwidth
34     \vrule
35     width 2\paperwidth
36     height \clrstrip@innerT
37     depth \clrstrip@innerB
38   }%
39   \endgroup
40 }
```

(End definition for \clrstrip@strip@a and \clrstrip@strip@b. These functions are documented on page ??.)

`\clrstrip@start` Used to grab the second optional argument to `colorstrip`. Sets the specified keys and starts the grabbing of the contents inside the `\vbox`.

```
41 \newcommand\clrstrip@start[1]{}
42 {%
43   \colorstripSet{#1}%
44   \ifdim\clrstrip@width=\z@
45     \clrstrip@width\linewidth
46   \fi
47   \setbox\clrstrip@box\vbox\bgroup
48   \hsize\clrstrip@width
49   \noindent\ignorespaces
50 }
```

(End definition for \clrstrip@start. This function is documented on page ??.)

4.3 Initializing Keys

```

51 \clrstrip@key{inner}{\clrstrip@innerT#1\relax\clrstrip@innerB#1\relax}
52 \clrstrip@key{outer}{\clrstrip@outerT#1\relax\clrstrip@outerB#1\relax}
53 \clrstrip@key{inner top}{\clrstrip@innerT#1\relax}
54 \clrstrip@key{inner bot}{\clrstrip@innerB#1\relax}
55 \clrstrip@key{outer top}{\clrstrip@outerB#1\relax}
56 \clrstrip@key{outer bot}{\clrstrip@outerB#1\relax}
57 \clrstrip@key{width}{\clrstrip@width#1\relax}
58 \clrstrip@key{left}{\clrstrip@left#1\relax}

```

4.4 User Level Macros

`\colorstripSet` Shortcut for keyval's `\setkeys`.

```

59 \newcommand*\colorstripSet{\setkeys{clrstrip}}

```

(End definition for \colorstripSet. This function is documented on page 2.)

`colorstrip`

```

60 \newenvironment{colorstrip}[2] []
61 {%
Save the arguments for the usage in \end{colorstrip}.
62     \def\clrstrip@oarg{#1}%
63     \def\clrstrip@marg{#2}%
Start grabbing the contents
64     \clrstrip@start
65 }
66 {%
67     \egroup
68     \par
69     \vskip\clrstrip@outerT
70     \noindent
71     \expandafter\clrstrip@strip@a\expandafter{\clrstrip@marg}%
72     \ifdim\clrstrip@left=1sp
73         \advance\clrstrip@width-\linewidth
74         \clrstrip@left-.5\clrstrip@width
75     \fi
76     \rlap{\hskip\clrstrip@left\usebox\clrstrip@box}%
77     \par
78     \vskip\clrstrip@outerB
79 }

```

(End definition for colorstrip. This function is documented on page 2.)

```

80 \endinput

```

```

81 \</pkg>

```