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 less than 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 \csname clrstrip@date\endcsname
\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 bot=0pt, inner top=2ex]
\begin{verbatim}
\end{verbatim}
\end{colorstrip}
```

3 Documentation

3.1 Macros and Environments

\colorstripSet

\colorstripSet{\langle key=value \rangle}

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

colorstrip

 $\verb|\decolorstrip|| [\langle color model \rangle] | \{\langle color \rangle\} | [\langle key=value \rangle]|$

This environment typesets its contents inside a $\volumebox{\sc volor}$ which gets surrounded by a strip of the specified $\langle color \rangle$ which reaches across the full page width. $\langle color \ model \rangle$ and $\langle color \rangle$ are the arguments passed to $\c color$. In the second optional argument $\langle key=value \rangle$ 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 $\langle skip \rangle$. Initially this is set to \medskipamount.

inner top= $\langle skip \rangle$

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 $\langle skip \rangle$. 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=\(\psi idth\)

Sets the \hsize of the \vbox for the contents, resulting in the specified $\langle width \rangle$. If $\langle width \rangle$ 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 $\langle skip \rangle$ is 1sp (which is the initial value) the \vbox is horizontally centred (not its contents).

afterheading

Ignores every value given to it. If used the indentation of the first line in a colorstrip will be prevented using the LATFX macros \@afterindentfalse and \@afterheading. This is the package default since version 2018-09-25.

noindent

Ignores every value given to it. If used the indentation of the first line in a colorstrip will be prevented using the TEX primitives \noindent and \ignorespaces. This was the package default before version 2018-09-25.

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.

Implementation 4

1 (*pkg)

4.1Initializing 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

- 3 \newlength\clrstrip@innerT
- 4 \clrstrip@innerT\medskipamount

 $(\textit{End definition for \backslash clrstrip@innerT. This variable is documented on page \ref{eq:clrstrip}.)$

\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 width the text block inside of the colour strip should be wide. Might be reused to calculate the skip to centre the text block 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

Draws the colour strip using \vrule. \clrstrip@strip should be called with the expanded \clrstrip@marg as its argument. It tests whether the first optional argument is empty, sets the colour accordingly and draws the \vrule. The arguments to \color need to be expanded as color doesn't work with the unexpanded ones depending on the chosen colour model.

```
\newcommand*\clrstrip@strip[1]
    {%
18
       \begingroup
19
         \ifx\clrstrip@oarg\@empty
           \color{#1}%
         \else
           \expandafter\color\expandafter[\clrstrip@oarg]{#1}%
23
         \fi
24
         \advance\clrstrip@innerT\ht\clrstrip@box
25
         \advance\clrstrip@innerB\dp\clrstrip@box
26
         \rlap
27
           {%
28
             \hskip-\paperwidth
             \vrule
               width 2\paperwidth
               height \clrstrip@innerT
               depth \clrstrip@innerB
33
           }%
34
       \endgroup
35
    }
36
```

(End definition for \clrstrip@strip. This function is 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.

 $(\mathit{End \ definition \ for \ \ } \texttt{Clrstrip@start}. \ \mathit{This \ function \ is \ documented \ on \ page \ \ref{eq:clrstrip}})$

\clrstrip@afterheading \clrstrip@noindent

These two macros are the two options to suppress the indentation in a colorstrip.

- 47 \newcommand*\clrstrip@afterheading{\@afterindentfalse\@afterheading}
- 48 \newcommand*\clrstrip@noindent{\noindent\ignorespaces}

(End definition for \clrstrip@afterheading and \clrstrip@noindent. These functions are documented on page ??.)

\clrstrip@preventIndent

Used to prevent the indentation of the first line in a colorstrip. It will be let to one of \clrstrip@afterheading or \clrstrip@noindent.

- 49 \newcommand*\clrstrip@preventIndent{}
- ${\tt 50} \verb|\label{lem:clrstrip@preventIndent\clrstrip@afterheading}$

(End definition for \clrstrip@preventIndent. 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}
59 \clrstrip@key{afterheading}[]{\let\clrstrip@preventIndent\clrstrip@afterheading}
60 \clrstrip@key{noindent}[]{\let\clrstrip@preventIndent\clrstrip@noindent}
```

4.4 User Level Macros

\colorstripSet Shortcut for keyval's \setkeys.

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

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

colorstrip

```
62 \newenvironment{colorstrip}[2][]
    ₹%
Save the arguments for the usage in \end{colorstrip}.
      \def\clrstrip@oarg{#1}%
```

Start grabbing the contents

\def\clrstrip@marg{#2}%

```
\clrstrip@start
    }
67
    {%
68
      \egroup
      \par
70
      \vskip\clrstrip@outerT
      \noindent
      \expandafter\clrstrip@strip\expandafter{\clrstrip@marg}%
      \ifdim\clrstrip@left=1sp
74
        \advance\clrstrip@width-\linewidth
        \clrstrip@left-.5\clrstrip@width
76
      \rlap{\hskip\clrstrip@left\copy\clrstrip@box}%
      \par
      \vskip\clrstrip@outerB
    }
81
```

(End definition for colorstrip. This function is documented on page ${\color{red}2.}$)

- 82 \endinput
- 83 $\langle /pkg \rangle$