The \texttt{clrstrip} package

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1 Introduction

This package provides the \texttt{colorstrip} environment, that places its contents into a full page width colour strip. It requires the macro \texttt{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 \texttt{color} or \texttt{xcolor} in your preamble, too.

It is meant to be lightweight and fast. So while packages like \texttt{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 \texttt{latex clrstrip.dtx} generates the \texttt{clrstrip.sty} file and typesets this documentation; execute \texttt{tex clrstrip.dtx} to only generate \texttt{clrstrip.sty}.

2 Examples

The following is an example showing the results of

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

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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!”

3 Documentation

3.1 Macros and Environments

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

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 0pt (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).

afterheading
Ignores every value given to it. If used the indentation of the first line in a
colorstrip will be prevented using the \LaTeX 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.

4 Implementation

4.1 Initializing Variables

\clrstrip@box Stores the contents of colorstrip.
\texttt{\clrstrip@innerT} Stores the upper inner padding. Gets reused to store the overall height of the colour strip locally.

\begin{verbatim}
\newlength{\clrstrip@innerT}
\clrstrip@innerT\medskipamount
\end{verbatim}

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

\begin{verbatim}
\newlength{\clrstrip@innerB}
\clrstrip@innerB\clrstrip@innerT
\end{verbatim}

\texttt{\clrstrip@outerT} Stores the upper outer padding.

\begin{verbatim}
\newlength{\clrstrip@outerT}
\clrstrip@outerT\clrstrip@innerT
\end{verbatim}

\texttt{\clrstrip@outerB} Stores the lower outer padding.

\begin{verbatim}
\newlength{\clrstrip@outerB}
\clrstrip@outerB\clrstrip@innerT
\end{verbatim}

\texttt{\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.

\begin{verbatim}
\newlength{\clrstrip@width}
\end{verbatim}

\texttt{\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.

\begin{verbatim}
\newlength{\clrstrip@left}
\clrstrip@left1sp
\end{verbatim}

\texttt{\clrstrip@oarg} Stores the first optional argument to \texttt{colorstrip} for later use.

\begin{verbatim}
\newcommand*{\clrstrip@oarg}{\clrstrip@oarg}
\end{verbatim}

\texttt{\clrstrip@marg} Stores the mandatory argument to \texttt{colorstrip} for later use.

\begin{verbatim}
\newcommand*{\clrstrip@marg}{\clrstrip@marg}
\end{verbatim}
4.2 Internal Macros

\clrstrip@key Shortcut to define new keys with keyval.
\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 once depending on the chosen colour model.
\newcommand*\clrstrip@strip[1]{%
\begingroup
\ifx\clrstrip@oarg\@empty
\color{#1}%
\else
\expandafter\color\expandafter\[\clrstrip@oarg]{#1}%
\fi
\advance\clrstrip@innerT\ht\clrstrip@box
\advance\clrstrip@innerB\dp\clrstrip@box
\rlap{%
\hskip-\paperwidth
\vrule
width 2\paperwidth
height \clrstrip@innerT
depth \clrstrip@innerB
}%
\endgroup}%

(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.
\newcommand\clrstrip@start[1][]{%
\colorstripSet{#1}[]
\ifdim\clrstrip@width=\z@
\clrstrip@width\linewidth\linewidth
\fi
\setbox\clrstrip@box\vbox\bgroup
\hsize\clrstrip@width
\clrstrip@preventIndent
\ingroup
}

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

\clrstrip@afterheading These two macros are the two options to suppress the indentation in a colorstrip.
\newcommand*\clrstrip@afterheading{\@afterindentfalse\@afterheading}
\newcommand*\clrstrip@noindent{\noindent\ignorespaces}
\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.
\newcommand*{\clrstrip@preventIndent}{\let\clrstrip@preventIndent\clrstrip@afterheading}

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

4.3 Initializing Keys
\clrstrip@key{inner}{\clrstrip@innerT#1\relax\clrstrip@innerB#1\relax}
\clrstrip@key{outer}{\clrstrip@outerT#1\relax\clrstrip@outerB#1\relax}
\clrstrip@key{inner top}{\clrstrip@innerT#1\relax}
\clrstrip@key{inner bot}{\clrstrip@innerB#1\relax}
\clrstrip@key{outer top}{\clrstrip@outerB#1\relax}
\clrstrip@key{outer bot}{\clrstrip@outerB#1\relax}
\clrstrip@key{width}{\clrstrip@width#1\relax}
\clrstrip@key{left}{\clrstrip@left#1\relax}
\clrstrip@key{afterheading}{\let\clrstrip@preventIndent\clrstrip@afterheading}
\clrstrip@key{noindent}{\let\clrstrip@preventIndent\clrstrip@noindent}

4.4 User Level Macros
\colorstripSet

Shortcut for keyval’s \setkeys.
\newcommand*{\colorstripSet}{\setkeys{clrstrip}}

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

colorstrip
\newenvironment{colorstrip}[2][]
{\% Save the arguments for the usage in \end{colorstrip}.}
\def\clrstrip@oarg{#1}\
\def\clrstrip@marg{#2}\
\% Start grabbing the contents
\clrstrip@start
\% \egroup \par \vskip\clrstrip@outerT \noindent \expandafter\clrstrip@strip\expandafter{\clrstrip@marg}\% \ifdim\clrstrip@left=1sp \advance\clrstrip@width-\linewidth \clrstrip@left-.5\clrstrip@width \fi \rlap{\hskip\clrstrip@left\copy\clrstrip@box}\% \par \vskip\clrstrip@outerB}
(End definition for colorstrip. This function is documented on page 9.)
\endinput
\pkg