SNOTEZ

V0.5a 2020/12/14
	sidenote support for \LaTeX\n
Clemens NIEDERBERGER

https://bitbucket.org/cgnieder/snotez

contact@mychemistry.eu

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1 License and Requirements

Permission is granted to copy, distribute and/or modify this software under the terms of the \LaTeX\ Project Public License (LPPL), version 1.3c or later (http://www.latex-project.org/lppl.txt). The software has the status “maintained.” SNOTEZ needs and loads the packages etoolbox,\footnote{etoolbox} pgf\footnote{pgf}, marginnote\footnote{marginnote} and perpage.\footnote{perpage}

2 Motivation

This has just been an exercise on a lazy afternoon.\footnote{https://www.youtube.com/watch?v=0U6EyXcFBxA} Well, in the beginning at least. Since there already is Andy Thomas’ sidenotes package\footnote{Andy Thomas’ sidenotes package} there is probably no real need for SNOTEZ. Moreover, the tuft\footnote{tufte} classes as well as memoir\footnote{memoir} also provide corresponding mechanisms. Besides the fun I had my motivation was also based on the fact that I didn’t like some things done by the sidenotes package such as inserting kerns and superscripted commas for multiple marks. I prefer to let my fnpct\footnote{fnpct} package handle these things. Anyways,
here it is and it seems to be working as intended so I don’t see a reason why it shouldn’t be available for use.

By the way: the fnpct package version later knows about \textbf{snotez} and automatically adapts the note commands!

\section{Introduction}

The \texttt{snotez} package introduces a \texttt{\sidenote} command\footnote{This is an example demonstrating the default appearance.} that typesets sidenotes the same way \texttt{\footnote} typesets footnotes. It provides some options that allow formatting the appearance of the sidenotes.\footnote{In all sidenotes in this document the mark is typeset on the baseline and the text is set ragged right.} As a default sidenotes are typeset in a \texttt{\marginpar} but there are possibilities using Markus Kohm’s \texttt{marginnote} \cite{Koh18} package as well.

As with footnotes it is possible to set mark and text separately using the equivalent commands \texttt{\sidenotemark} and \texttt{\sidenotetext}, respectively. Instead of lots of code examples this documentation will use the \texttt{\sidenote} macro itself extensively. It is assumed you know how to use \texttt{\footnote} and are able to transfer your knowledge.

\section{Usage}

The basic usage is the very same as with \LaTeX’s \texttt{\footnote}, \texttt{\footnotemark} and \texttt{\footnotetext}. Unsurprisingly the presented commands are these:

\begin{verbatim}
\sidenote\{\langle mark\rangle\}\{\langle text\rangle\}

The basic command. The syntax is the very same as for \texttt{\footnote}.

\sidenote\{\langle offset\rangle\}\{\langle mark\rangle\}\{\langle text\rangle\}

Actually I lied: \texttt{\sidenote} has a second option that smuggles itself before the \texttt{\langle mark\rangle} option if you use it: an argument for a vertical offset that takes a length. An empty second option assumes you want the automatic mark. If you use this argument the note is set with the \texttt{\marginnote} command.\footnote{Please see its documentation \cite{Koh18} for the \texttt{\langle offset\rangle} argument. \texttt{snotez} only passes the value on.}

Actually, this is only part of the truth: while typing this documentation I repeatedly found myself shifting notes by multiples of \texttt{\baselineskip} so the argument accepts a shortcut for this. A star * followed by a (positive or negative) number denotes a multiple of \texttt{\baselineskip}. By the way: a positive value shifts the note down.

When you’re using the \texttt{\dblarg = \{true\}} option the \texttt{\langle offset\rangle} argument has square brackets instead of parentheses!

\sidenotemark\{\langle marg\rangle\}

This command has the same purpose as \texttt{\footnotemark} but for sidenotes.
\sidenotetext{(mark)}{(text)}

The same as \footnotetext but for sidenotes. Beware where you place it: it calls \marginpar or \marginnote and thus determines where the actual note is placed.

\sidenotetext((offset)){(mark)}{(text)}

I lied again: \sidenotetext also has the second optional argument \langle offset \rangle that again smuggles itself before the \langle mark \rangle option if you use it. For details see the second description of the \sidenote command.

Here is one short example of the usage.

```latex
1 \% produces a sidenote with automatic number in a
2 \sidenote{A note}
3
4 \% produces a sidenote with mark `a' in a
5 \sidenote[a]{A note}
6
7 \% produces a sidenote with automatic number in a
8 \sidenote{}{A note}
9 \% \marginnote shifted down by \baselineskip:
10 \sidenote{*}{A note}
11 \% alternative syntax (dblarg=true):
12 \sidenote[*]{A note}
13
14 \% produces a sidenote with automatic number in a
15 \% \marginnote shifted up by 2ex:
16 \sidenote[-2ex]{A note}
17 \% alternative syntax (dblarg=true):
18 \sidenote[-2ex]{A note}
19
20 \% produces a sidenote with automatic number in a
21 \% \marginnote shifted down by 2\baselineskip:
22 \sidenote[2]{A note}
23 \% alternative syntax (dblarg=true):
24 \sidenote[2]{A note}
25
26 \% produces a sidenote with mark `a' in a
27 \% \marginnote shifted down by 2\baselineskip:
28 \sidenote[2][a]{A note}
29 \% alternative syntax (dblarg=true):
30 \sidenote[2][a]{A note}
31```

4 Usage
5 Figures in the Margin

In the case of small figures or tables one might want to place them in the margin, too. Especially in a document with a larger margin than it is in the standard classes.

For these cases \texttt{snotez} provides\footnote{1. Introduced in version 0.5} these environments:

\begin{sidefigure}
Places a figure in the margin within a \texttt{marginpar}. \texttt{\caption} can be used in the usual way.
\end{sidefigure}

\begin{sidetable}
Places a table in the margin within a \texttt{marginpar}. \texttt{\caption} can be used in the usual way.
\end{sidetable}

In order to be able to place other floats in the margin, too, \texttt{snotez} provides the following command:

\begin{verbatim}
\texttt{snewnotezfloat}\{\langle code\rangle}\{\langle name\rangle}\}
\end{verbatim}

This defines a new environment \texttt{side\langle name\rangle}. \langle code\rangle would be placed after the formatting from \texttt{sidefloat-format} but before the environment’s contents.

Both existing environments have been defined with this command.

\begin{verbatim}
1. \newnotezfloat{figure}
2. \newnotezfloat{table}
\end{verbatim}

6 Options

Although all options can be used as package option you can also set all options (locally) with a setup command:

\begin{verbatim}
\texttt{setsidenotes}\{\langle options\rangle\}
\end{verbatim}

Set options as a comma-separated list of key/value pairs.

Available options are these:

\begin{verbatim}
dblarg = true|false \hfill \texttt{Default: false}
\end{verbatim}

Prior to version 0.3 \texttt{snotez’s \texttt{sidenote} and \texttt{sidenotetext} had both their optional arguments with square brackets where the use of one argument referred to the mark but when both were used the first argument referred to the offset and the second to the mark. This syntax is kept with this option. Setting it to \texttt{true} changes the \langle offset\rangle argument syntax into \sbrace{\langle offset\rangle}.\]
Options

\texttt{marginnote = true|false} \hspace{1cm} \text{Default: false}

Use \texttt{marginnote} \cite{koh} for all \texttt{sidenotes}. In the default setting \texttt{sidenote} uses \texttt{marginpars} to set the sidenote unless you use the \texttt{(offset)} argument. If you use this option all sidenotes are set with \texttt{marginnote}. This option can only be used in the preamble.

\texttt{text-format = \{\langle code\}\}} \hspace{1cm} \text{Default: $\text{normalfont}$ $\text{footnotesize}$}

The format of the sidenote text.

\texttt{text-format+ = \{\langle code\}\}} \hspace{1cm} \text{(initially empty)}

Code to be appended to the format set with \texttt{text-format}.¹

\texttt{perpage = true|false} \hspace{1cm} \text{Default: false}

\textit{This option can only be set in the preamble.} Make sidenotes counter per page. It uses package perpage's \cite{kas} \texttt{\textbackslash MakeSortedPerPage} macro for the task. Otherwise the macro \texttt{\textbackslash\textbackslash MakeSorted} is used. In the default setting sidenotes are counted per chapter. If you want sidenotes counted document-wise together with a class that defines a counter \texttt{\textbackslash chapter} then use for example the package chngcntr \cite{wil} and issue \texttt{\textbackslash\textbackslash counterwithout\{sidenote\}\{chapter\}} after loading \texttt{\textbackslash notez}. This documentation is an example for the use of the option.

\texttt{note-mark-sep = \{\langle code\}\}} \hspace{1cm} \text{Default: $\text{\textbackslash space}$}

The separator between sidenote mark and sidenote text in the sidenote.

\texttt{note-mark-format = \{\langle code\}\}} \hspace{1cm} \text{Default: $\text{@textsuperscript{\textbackslash normalfont}\#1}$}

The format of the sidenote mark in the sidenote. Please refer to the actual mark with \#1.

\texttt{text-mark-format = \{\langle code\}\}} \hspace{1cm} \text{Default: $\text{@textsuperscript{\textbackslash normalfont}\#1}$}

The format of the sidenote mark in the text.² Please refer to the actual mark with \#1.

\texttt{footnote = true|false} \hspace{1cm} \text{Default: false}

\textit{This option can only be used in the preamble.} Let³ \texttt{\footnotemark} to be \texttt{sidenote}, \texttt{\footnotemark} to be \texttt{sidenotemark} and \texttt{\footnotetext} to be \texttt{sidenotetext}.

\texttt{sidefloat-format = \{\langle code\}\}} \hspace{1cm} \text{Default: $\text{\textbackslash raggedright}$}

The format of the contents of a sidefloat environment text.⁴

\texttt{sidefloat-format+ = \{\langle code\}\}} \hspace{1cm} \text{Code to be appended to the format set with \texttt{sidefloat-format}.⁵}

¹. This document, for example, appends ragged2e's $\text{\textbackslash\textbackslash RaggedRight}$ \cite{sch} to the sidenote’s format.
². This document uses Bob Tennent's libertine package \cite{ten} and redefines the mark formats to use its $\text{\textbackslash\textbackslash textsu}$ command.
³. In the sense of $\text{\textbackslash\textbackslash let}$
⁴.Introduced in version 0.5
⁵. Introduced in version 0.5
7 Implementation

As a short example this is how the sidenotes for this document are formatted:

\setsidenotes{
  note-mark-format=#1.,
  text-mark-format=\textsuperscript{\hspace*{.04em}#1},
  text-format+=\RaggedRight,
  perpage=true
}

7 Implementation

In the following code the lines 1–30 have been omitted. They only repeat the license statement which has already been mentioned in section 1.
7 Implementation

\text-mark-format/.code = \renewcommand*\snotez@text@mark@format[1]{#1} ,
% make all footnotes sidenotes:
footnote/.is if = snotez@footnote ,
% change optional argument input:
dblarg/.is if = snotez@dblarg ,
% formatting of the sidefloats’ contents:
sidefloat-format/.code = \renewcommand*\snotez@sidefloat@format{#1} ,
sidefloat-format+.code =
\expandafter\renewcommand
\expandafter%\expandafter
\expandafter\snotez@sidefloat@format
\expandafter{\snotez@sidefloat@format#1}
\ProcessPgfOptions*
\newrobustcmd\setsidenotes[1]{\pgfqkeys{/snotez}{#1}}
% the \sidenote command
\ifbool{snotez@dblarg}{
\newrobustcmd\sidenote{\snotez@sidenote@dblarg}
}{
\newrobustcmd\sidenote{\snotez@sidenote@nodblarg}
}% syntax:
% - \sidenote{text}
% - \sidenote[mark]{text}
% - \sidenote[offset]{text}
% - \sidenote[offset][mark]{text}
\newrobustcmd\snotez@sidenote@dblarg{%}
\ifnextchar[{
\snotez@sidenote@dblarg@aux
}{
\snotez@sidenote@aux{\{}\}}% no option
}% syntax:
% - \sidenote{text}
% - \sidenote[mark]{text}
% - \sidenote[offset]{text}
% - \sidenote[offset][mark]{text}
\newrobustcmd\snotez@sidenote@nodblarg{%}
\ifnextchar(\snotez@sidenote@nodblarg@aux
{\snotez@sidenote@aux{\{}\})){\{}% two options
{\snotez@sidenote@aux{\}{{}\{}\})){\{}% one option
}% syntax:
% - \sidenote{text}
% - \sidenote[mark]{text}
% - \sidenote[offset]{text}
% - \sidenote[offset][mark]{text}
\newrobustcmd\snotez@sidenote@nodblarg{%}
\ifnextchar(\snotez@sidenote@nodblarg@aux
{\snotez@sidenote@aux{\{}\})){\{}% offset

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{%
  \@ifnextchar[...
  \snotez@sidenote@aux{}}% no offset but mark
{%
  \snotez@sidenote@aux{}\]}% no offset and no mark
%
%

\protected\def\snotez@sidemarker{\nodblarg@aux{}}{%
  \@ifnextchar[...
  \snotez@sidenote@aux{}\]}% no mark
%
}
%
% #1: offset
% #2: mark
% #3: text
\long\def\snotez@sidenote@aux#1[#2]#3{%
  \snotez@mark{#2}\
  \snotez@text{#1}{#3}\
  \snotez@write@mark{#1}\
%
%
% this one is very much \@footnotemark from latex.ltx:
\newrobustcmd*\snotez@mark[1]{\snotez@mark{#1}}%
\leavemode
\ifn@mode\@x@sf{\the\spacefactor}\nobreak\fi
\ifn@mode\spacefactor\@x@sf\fi
\relax%
%
\newrobustcmd*\snotez@mark[1]{%\refstepcounter{sidenote}\protected@edef\@the@snotez@mark{\thesidenote}\
  \protected@edef\@currentlabel{#1}\
  \protected@edef\@currentlabel{#1}}%
%
\newrobustcmd*\snotez@mark[1]{%\refstepcounter{sidenote}\protected@edef\@the@snotez@mark{#1}\
  \hbox{\snotez@text@mark@format{\@the@snotez@mark}}}%
%
% the \ sidenotemark command
\newrobustcmd*\sidenotemark[1]{\snotez@mark{#1}}%
%
% the \ sidenotetext command

7 Implementation

\ifbool{snotez@dblarg}{
\newrobustcmd\sidenotetext{% 
\snotez@sidenotetext@dblarg }
%}
\newrobustcmd\sidenotetext{% 
\snotez@sidenotetext@nodblarg }
% }

\protected\def\sidenotetext@dblargaux[#1]{% 
\@ifnextchar[{
\sidenotetext@dblargaux[#1]}% no option
% }
\protected\def\sidenotetext@nodblargaux[#1]{% 
\@ifnextchar[{
\sidenotetext@nodblargaux[#1]}% offset
% }
\protected\def\sidenotetext@nodblargaux[#1]{% 
\@ifnextchar[{
\sidenotetext@nodblargaux[#1]}% no offset nut mark
% }
\protected\def\sidenotetext@aux{}% no offset and no mark
% }
% }
\protected\def\sidenotetext@aux{#1}#2#3{% 
\ifblank{#2}{\null}{\protected@xdef\@the@snotez@mark{#2}}% 
\snotez@text{#1}{#3}
% }

% #1: offset
% #2: mark
% #3: text
\long\protected\def\sidenotetext@aux#1[#2]{% 
\ifblank{#2}{\null}{\protected@edef\@the@snotez@mark{#2}}% 
\snotez@text{#1}{#2}
% }
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\newrobustcmd\snotez@text[2]{%
\ifblank{#1}{%
\snotez@marginpar{%
\snotez@format
\snotez@write@mark{\snotez@note@mark@format{\@the@snotez@mark}}%
\snotez@note@mark@sep#2%
}
%
\snotez@marginnote{%
\snotez@format
\snotez@write@mark{\snotez@note@mark@format{\@the@snotez@mark}}%
\snotez@note@mark@sep#2%
}}{%
\snotez@marginnote{%
\snotez@format
\snotez@write@mark{\snotez@note@mark@format{\@the@snotez@mark}}%
\snotez@note@mark@sep#2%
}}%
\newcommand*\snotez@if@nblskip[1]{%
\ifx\@car#1\@nil*%
\expandafter\@firstoftwo
\else
\expandafter\@secondoftwo
\fi
{\@cdr#1\@nil\baselineskip}%
{#1}%
}\let\snotez@marginpar\marginpar
\let\snotez@marginnote\marginnote
\newenvironment{snotez@sidefloat}[2]{%
\def\@captype{#1}%
\begin{lrbox}{\snotez@sidefloat@box}%
\minipage{\marginparwidth}%
\snotez@sidefloat@format#2%
\endminipage
\marginpar{\unhbox\snotez@sidefloat@box}%
}}{%
\newrobustcmd\snotez@new@sidefloat[2]{%
\newenvironment{side#1}{}{}}

% margin floats with captions, based on an idea in tufte-latex
\newsavebox{snotez@sidefloat@box}
\newcommand*\snotez@sidefloat@format{\raggedright}
\newenvironment{snotez@sidefloat}[2]{%
\def\@captype{#1}%
\begin{lrbox}{\snotez@sidefloat@box}%
\minipage{\marginparwidth}%
\snotez@sidefloat@format#2%
\endminipage
\marginpar{\unhbox\snotez@sidefloat@box}%
}}{%
\newrobustcmd\snotez@new@sidefloat[2]{%
\newenvironment{side#1}{}{}}
7 Implementation

% process preamble options:
\AtBeginDocument{% if option `footnote=true' let \footnote to \sidenote:
  \ifbool{snotez@footnote}{
    \let\footnote\sidenote
    \let\footnotemark\sidenotemark
    \let\footnotetext\sidenotetext
  }{%}
% if option `marginnote=true' use \marginnote for all notes:
  \ifbool{snotez@marginnote}{% let \snotez@marginpar\marginnote
    \PackageInfo{snotez}{All sidenotes are now using \string\marginnote^^J instead of \string\marginpar}%
  }{%}
}\AtEndPreamble{% if option `perpage=true' count notes per page:
  \ifbool{snotez@perpage}{% MakeSortedPerPage{sidenote}}
  \MakeSorted{sidenote}%
}\
\endinput

% HISTORY:
2012/11/15 v0.1 - first version
2013/04/03 v0.2 - documentation, removed erroneous `fnpct' adaption, other minor changes
2013/04/21 v0.3 - try to avoid conflict with package loading order of `perpage' and `zref-apeshape'
  - added update of \@currentlabel when a custom mark is used
  - allow `*' syntax for offsets that are multiples of \baselineskip
  - syntax change in optional arguments; option `dblarg'
  - syntax provides previous syntax >> this is the default
References


[Leh19] Philipp Lehman, current maintainer: Joseph Wright. etoolbox. version 2.5h, Sept. 21, 2019 (or newer). URL: https://www.ctan.org/pkg/etoolbox/.

[Nie20] Clemens Niederberger. fnpct. version 0.5a, Jan. 2, 2020 (or newer). URL: https://www.ctan.org/pkg/fnpct/.


[TS16] Andy Thomas and Oliver Schebaum. sidenotes. version 1.00, Apr. 21, 2016 (or newer). URL: https://www.ctan.org/pkg/sidenotes/.


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Package names are indicated sans serif, commands \texttt{\textcolor{brown}{brown}} and options \texttt{\textcolor{yellow}{yellow}}.

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