# The shortIst Package\*

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#### Abstract

The shortlst package provides environments similar to itemize and enumerate designed especially for lists of short items.

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### 1 The Basics

When you have a list of short items, the regular itemize environment leaves

- a lot
- of
- white
- space.

shortitemize The obvious alternative is to use a tabular, but tables are difficult to type and harder to edit if you decide to interchange two items. This package allows you to type input very similar to itemize input.

\begin{shortitemize}
\item the \textsf{itemize} environment

<sup>\*</sup>This file describes version 1.1, 1998/11/27, which is a bug-fix release containing no new functionality since version 1.0.

```
\item leaves
\item a lot
\item of
\item white space
\end{shortitemize}
```

The code above yields output like<sup>1</sup> this:

- the itemize environment • leaves • a lot
  - white space • of

Above, LATEX decided that the first item needs twice as much space as the other items. You may give an optional argument to the shortitemize environment specifying the width of the default allotment of space.

```
\begin{shortitemize}[the \textsf{itemize} environment]
```

Now each item gets as much space as the first.

- the itemize environment • leaves
- a lot

- of
- white space

You may not put any list environment inside a shortitemize environment—but a shortitemize environment can be (part of) an item of a regular list environment. If you put a shortitemize environment inside a regular itemize environment, shortitemize will use the next level of labels. You may use the optional argument to \item to override the label—just as for the regular itemize environment.

\item

shortenumerate

The shortIst package also provides a shortenumerate environment. You may use shortenumerate in the same way as shortitemize, mutatis mutandis.

```
\begin{enumerate}
\item An item.
\item This item contains a sub-list:
      \begin{shortenumerate}
      \item One
      \times [\] One and a half
      \item Two
      \item \label{here}Three
      \end{shortenumerate}
\item Back in the outer list.
\end{enumerate}
```

The code above yields this output:

- 1. An item.
- 2. This item contains a sub-list:

(a) One % One and a half (b) Two (c) Three

 $<sup>^{1}</sup>$ All "output" in this document is simulated since you probably did not install the shortIst package before LATEXing the documentation. The real output is nicer...

3. Back in the outer list.

Now you may use  $\ref{here}$  to refer to item 2(c) in the usual manner.

runenumerate Some lists do not deserve a displayed paragraph. For such you may use the runenumerate environment.

You have three choices: \begin{runenumerate} \item wash you hands, \item postpone it until tomorrow, or \item \label{choice}stay dirty. \end{runenumerate} I choose \ref{choice}!

Here is then the output:

You have three choices: 1. wash you hands, 2. postpone it until tomorrow, or 3. stay dirty. I choose 3!

The main advantage of the runenumerate environment is the automatic (and nested) numbering and cross references. For completeness, the shortlst package also provides a runitemize environment.

### 2 The Parameters

\runitemsep The length \runitemsep stores the space between items of a runenumerate or runitemize environment. Here is the default value:

\setlength{\runitemsep}{1em plus .5em minus .5em}

\labelsep All four environments, shortitemize, shortenumerate, runitemize, and runenumerate use \labelsep (from the LATEX kernel, see [6, p. 113], [4, p. 62], or [1]) for the space between the label and the item itself. The two short-list environments use the same space as the minimal space between one item and the next label.

The labels of the shortitemize and shortenumerate environments may overlap the previous item if the length \labelwidth (from the LATEX kernel, see [6, p. 113], [4, p. 62], or [1]) is too small.

\shortitemwidth

\labelwidth

Instead of giving optional arguments to each shortitemize and shortitemize environment, you may change the length \shortitemwidth, which stores the default width of each item (without the label and a bit of space on each side).

\setlength{\shortitemwidth}{65pt}

Inside a shortitemize or shortenumerate environment  $\$  bortitemwidth is the width of the optional argument to the environment. Thus you may use  $\parbox[t]{\shortitemwidth}{\paragraph}$  to typeset a long item.

```
\begin{shortenumerate}[A little paragraph]
\item A short item
\item \parbox[t]{\shortitemwidth}{A little paragraph
        that\footnote{To parbox} will be too long to fit on one line
```

```
no matter what\strut.}
\item Another short
\item \newlength{\mylength}%
    \setlength{\mylength}{2\shortitemwidth}%
    \addtolength{\mylength}{2\labelsep}%
    \addtolength{\mylength}{\labelwidth}%
    \begin{minipage}[t]{\mylength}
        A little paragraph that\footnote{To minipage}
        will be too long to fit on one line no matter what.
        \end{minipage}
\item Bla
    \item Bla
    \end{shortenumerate}
```

The \strut on the last line of the \parbox improves the spacing between the \parbox and the following line.

1. A short item	2. A little paragraph	3. Another short		
	$that^2$ will be too			
	long to fit on one			
	line no matter			
	what.			
4. A little paragrap	h that <sup><math>a</math></sup> will be too long	5. Bla		
to fit on one line no matter what.				
<sup>a</sup> To minipage				
6. Bla				

## 3 The Limitations

- The shortitemize and shortenumerate environments cannot contain any list environment. These include shortitemize, shortenumerate, itemize, enumerate, description, quote, quotation, verse, center, flushleft, flushright, verbatim<sup>3</sup>, tabbing, trivlist, list, and all environments made with \newtheorem.
- All four environments handle footnotes<sup>4</sup>; however, the shortitemize and shortenumerate environments do not handle other types of floats.
- The shortitemize and shortenumerate environments cannot handle items that are longer than one line; use \parbox or the minipage environment—with the implications that has on footnotes.
- The shortlst package does not define a version of the description environment because I do not know what it should do.
- You cannot use the **\label** command if your shortenumerate or runenumerate environment is nested inside a tabularx environment.

<sup>&</sup>lt;sup>2</sup>To parbox

<sup>&</sup>lt;sup>3</sup>But \verb is ok.

 $<sup>^{4}</sup>$ In the case of shortitemize and shortenumerate due to a technique found in the tabularx package by David Carlisle [2, code lines 121–127].

• All four environments defined by the shortlst package make (parts of) paragraphs not boxes. If you want your list centred, you must therefore include it in a **\parbox** (or **minipage**) and centre the box.

### 4 The Alternatives

- multiple columns You may use the regular itemize and enumerate environments in a multi-column format. The multicol package [7] creates multiple columns very nicely. The items end up ordered vertically where this package orders them horizontally.
- **tabular** You can put your items in a table—but such are difficult to edit and you do not get automatic numbering and cross references.
- **multienum** The multienum package [5] provides an environment similar to shortenumerate. However, the input syntax is more similar to tabular than to enumerate.
- **paralist** The paralist package [8] provides environments similar to runitemize and runenumerate except that nesting inside itemize or enumerate is not considered.

### 5 The Copyright

- You may use this software.
- You may copy this software and the documentation for your own use.
- You may distribute the file shortlst.dtx to others provided you do not make a profit doing so.
- You may modify my code and the documentation—including incorporating it into your own work—provided you do not make a profit on my work or allow others to.

### 6 The Installation

• Run the file shortlst.dtx through LATEX (thrice to resolve cross references<sup>5</sup>).

latex shortlst.dtx

• Run the file short1st.ins which now exists through  ${\rm IAT}_{\rm E}{\rm X}.$ 

latex shortlst.ins

• You now have to decide what to do with several files.

 $<sup>^5</sup> If$  you want an index you must run MakeIndex (makeindex -s gind.ist shortlst) between the second and third  $I\!AT_{\!E\!}\!X$  run.

- You may now have to move the file shortlst.sty to some directory where IATEX can find it; texmf/tex/latex/misc would be the natural choice [9].
- Move the documentation, shortlst.dvi, to texmf/doc/latex/misc.
- You may discard the source file, shortlst.dtx, or store it in the directory texmf/source/latex/misc.
- Discard all remaining shortlst.\* files.

### References

- Johannes Braams, David Carlisle, Alan Jeffrey, Leslie Lamport, Frank Mittelbach, Tobias Oetiker, Chris Rowley, and Rainer Schöpf. *ltlists.dtx.* CTAN, 1997/02/21 edition, 1997.
- [2] David Carlisle. The tabularx Package. CTAN, 1997/09/18 v2.05 edition, 1997.
- [3] David Carlisle, Leslie Lamport, Frank Mittelbach, and Chris Rowley. *lt-boxes.dtx.* CTAN, 1998/06/05 edition, 1998.
- [4] Michel Goossens, Frank Mittelbach, and Alexander Samarin. The LATEX Companion. Addison-Wesley, 1994. ISBN 0-201-54199-8.
- [5] Dennis Kletzing. A Multienumerate Package. CTAN. The author does not provide a version number.
- [6] Leslie Lamport. LATEX, A Document Preparation System, User's Guide and Reference Manual. Addison-Wesley, second edition, 1994. ISBN 0-201-52983-1.
- [7] Frank Mittelbach. An environment for multicolumn output. CTAN, 1997/12/16 v1.5p edition, 1997.
- [8] Bernd Schandl. paralist, Enumerate and Itemize as and within Paragraphs. CTAN, 1998/10/11 v1.0 edition.
- [9] TUG Working Group on a T<sub>E</sub>X Directory Structure (TWG-TDS). A Directory Structure for T<sub>E</sub>X Files. CTAN, version 0.9995, january 26, 1998 edition, 1998.