

todo package for appending a *to-do* list to a document

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Abstract

`todo` package provides commands for the typesetting of a *to-do* list in any document, with a customizable format and fully implemented cross referencing. This is version v1.1, released on 2002/07/25.

1 Usage

1.1 Basic user macros

This section describes what happens by default, when using `todo` without options and with default values for the user variables. Subsection 1.3 describes how this can be changed.

`\todo` At any place in the document, the user can issue a `\todo` command, that inserts a *to-do* mark into the text, and appends a *to-do* text to the *to-do* list. The syntax of `\todo` is

```
\todo[mark]{text}
```

The mark is inserted as a superscript in boldface. If no *mark* is given, the default, ‘To do,’ is inserted. After the mark, in the superscript, the number of the *to-do* is put within parenthesis: this is an example.^{To do (3)} As another example, with the optional argument specified, `\todo[FIX]{Fix this}` renders **FIX**⁽⁴⁾.

`\todos` The `\todos` command effectively typesets the list that includes the *text*’s of any previous `\todo` command. The list is typeset in `\large` size, in a new page, under the heading ‘To do...,’ and with an empty box behind each entry (intended for checkmarks). Each entry, moreover, bears the number of the *to-do* and a reference to the page in which it was issued. It looks like

3. (p. 5) This is yet to be done.

If *mark* was specified in a `\todo` command, this mark appears in the particular entry in the *to-do* list, like in

4. **FIX** (p. 5) This is an example, nothing to be actually fixed.

The `\todos` command also turns off the `\todo` command, so that any `\todo` after `\todos` will be ignored (and a warning issued). This is natural (we can assume the *to-do* list comes at the end of the document) and prevents the need of an auxiliary file.¹

1.2 Cross referencing

The `\todo` command creates internal labels and references, so that each entry in the list has a correct reference to the page in which the *to-do* was executed. Moreover, when using `hyperref` package, each mark in the text will link to the entry in the *to-do* list, and viceversa.

`\label` The user can add his own `\label` to any `\todo`. The matching `\ref` will make reference to the number of the *to-do*. However, `\pageref` will lead to the page in which the `\todo` occurred, unless the `\label` has been put *inside* the `\langle text \rangle` (and then the `\pageref` points to the actual text of the `\todo`, as is probably more desirable). Another reason to put it there is that a `hyperref` link will point to the actual text of the *to-do* (not to the mark).

1.3 Customization

1.3.1 Package Options

`marginpar` The option `marginpar` makes the mark to appear not as a superscript, but as a margin par, like in the next paragraph. The option `superscript`, selected by default, makes it appear as a superscript, as explained in subsection 1.1. A third option is `nothing`, which prevents `\todo` from insert anything in the text, while still appending entries to the list.

To do (2) This is the paragraph that exemplifies `marginpar` option. (The presence of options names in the margin of the previous one made it a bad example.)

`hide` Another pair of options is `hide` and `show`. Using `hide` makes `\todo` and `\todos` to be ignored (they will only produce a warning), which is useful for printing semi-final copies. Of course, `show` is selected by default.

1.4 User variables

`\todomark` The user can change the default text of the marks, `\renewcommanding` `\todomark`,
`\todoname` and the heading of the list with `\todoname`. Remember that marks for particular entries can be specified by the optional argument of `\todo` (subsection 1.1). Changing the value of `\todomark` is useful if *most* entries are different than ‘To do.’ In any case, when as superscript, the mark appears always boldface, and before the *to-do* number. Further customization seems not to be necessary, because of the draft-like nature of any document with *to-do*'s.

The initial values are `{To~do}` for `\todomark` and `{To do\dots}` for `\todoname`.

¹This could be changed, if desirable. Please write me if you think it is.

2 Implementation

2.1 Identification

```
1 ⟨*package⟩
2 \NeedsTeXFormat{LaTeX2e}[1995/12/01]
3 \ProvidesPackage{todo}[2002/07/25 v1.1 To-do list (Federico Garcia)]
```

2.2 Options

`\@todohide` The options modify `\@todohide` and `\@todomark`. The former is called by `\todo`
`\@todomark` and `\todos`, and the latter is called by `\todo` to typeset the mark. These commands
are defined depending on which options are used.

```
4 \newcommand\@todomark{}
5 \newcommand\@todohide{}
6 \DeclareOption{hide}{\renewcommand\@todohide[1]{%
7   \PackageWarning{todo}{‘hide’ option used, %
8     ignoring \noexpand\todo’s}}
9 \DeclareOption{show}{\renewcommand\@todohide[1]{#1}}
10 \DeclareOption{superscript}{\renewcommand\@todomark{%
11   \@todosupermark}}
12 \DeclareOption{marginpar}{\renewcommand\@todomark{%
13   \@todomarginpar}}
14 \DeclareOption{nothing}{\let\@todomark\@gobble}
15 \DeclareOption*{\typeout{Unknown option (‘\CurrentOption’)}}
16 \ExecuteOptions{superscript,show}
17 \ProcessOptions
```

2.3 Variables

`\@todotoks` `\@todotoks` is the token register that will store the entries of the list.

```
18 \newtoks\@todotoks\@todotoks{}
19 \newcounter{todo}\setcounter{todo}{0}
20 \newcommand{\todomark}{To~do}
21 \newcommand{\todoname}{To do\dots}
```

2.4 The macros

`\todo` `\todo` has two main tasks: produce the mark, and append the text to `\@todotoks`.
For the former, it calls `\@todomark`, which is defined according to the options. The
latter is done just here. In addition, `\todo` puts the label to the page in which the
mark appears, to be used in the typesetting of the list. Everything is framed by
L^AT_EX 2_ε macros `\@bsphack` and `\@esphack`, to maintain the current space factors
and the like, and launched or not by `\@todohide`.

```
22 \newcommand{\todo}[2][\todomark]{\@bsphack\@todohide{%
23   \refstepcounter{todo}\label{todopage:\thetodo}%
24   \@todomark{#1}%
25   \@todotoks\expandafter{\the\@todotoks\relax%
26     \todoitem{#1}{#2}}%
}
```

```

27     }\@esphack}
\@todosupermark    \@todomark has been defined (by the options) either as \@todosupermark or
\@todomarginpar    \@todomarginpar (or \@gobble for the nothing option). Both macros, in addition
                    to put the corresponding mark, make \ref to the actual text of the to-do, whose
                    \label is to be put later on by \todoitem. Note that this is necessary only for sup-
                    porting hyperref links; otherwise, \ref{todolbl:\thetodo} could have simply
                    been \thetodo. \@todosupermark shares much code with LATEX 2ε \footnote.
28 \newcommand{\@todosupermark}[1]{%
29   \leavevmode
30   \ifhmode\edef\x@sf{\the\spacefactor}\nobreak\fi
31   \textsuperscript{\textbf{#1}} (\ref{todolbl:\thetodo})}
32   \ifhmode\spacefactor\x@sf\fi
33   \relax}
34 \newcommand{\@todomarginpar}[1]{\marginpar{#1 (\ref{todolbl:\thetodo})}}
\todoitem          The construction of the list proper is made by successive \todoitem's appended
                    to \@todotoks. The list is a list environment (called by \todos); each item has
                    the to-do number, the \ref to the page in which it occurred, and the mark
                    (boldfaced) if it is different than \todomark. After all that, of course, it has
                    the to-do text itself. Since \todoitem will be called within a token register in
                    document time, it has no @ in its name, although I'm not quite sure it could not
                    have. In any case, it is not intended for the user.
35 \newcommand{\todoitem}[2]{%
36   \item \label{todolbl:\thetodo} %
37   \ifx#1\todomark%
38     \else\textbf{#1} %
39   \fi%
40   (p.\pageref{todopage:\thetodo})\ #2}
\todos            Finally, \todos does the following: open a new page, put a heading, \begin a
                    list whose label is an empty box (for checkmarks), call \@todotoks, and \end the
                    list. After all that, it redefines \todo to issue a warning, since its text will not be
                    included in the list. Again, all happens only if allowed by \@todohide.
41 \newcommand{\todos}{\@todohide{%
42   \clearpage\section*{\todoname}\large%
43   \begin{list}{\fbox{\vphantom{A}}\hphantom{A}}%
44     \quad\arabic{todo}.}{}%
45     \usecounter{todo}
46     \the\@todotoks
47   \end{list}}
48   \renewcommand{\todo}[1]{%
49     \PackageWarning{todo}{\noexpand\todos already issued, %
50       ignoring \noexpand\todo}}
51 \}
```