## The alltt environment\*

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#### Abstract

This package defines the alltt environment, which is like the verbatim environment except that  $\setminus$ ,  $\{$ , and  $\}$  have their usual meanings.

Thus, other commands and environments can appear within an alltt environment.

### 1 Introduction

alltt (env.) Here are some things you may want to do in an alltt environment:

- Change fonts-e.g., by typing \emph{emphasized text}
- Insert text from a file foo.tex by typing \input{foo}. Beware that each <return> starts a new line, so if foo.tex ends with a <return> you can wind up with an extra blank line if you're not careful.
- Insert a math formula. Note that \$ just produces a dollar sign, so you'll have to type \(...\) or \[...\]. Also, ^ and \_ just produce their characters; use \sp or \sb for super- and subscripts, as in \(x\sp{2}\).

**NB** When you are using OT1 encoded fonts you might be surprised when you switch to italics, because those fonts have a different set of glyphs:

```
% The glyph at the position of the $ in a slanted font: $. % The glyph at the position of the $ in an italic font: £. %
```

# 2 The Implementation

 $1 \langle *package \rangle$ 

alltt (env.) The alltt environment is similar to the verbatim environment, except that \, { and } have their usual behaviour.

<sup>\*</sup>This file has version number v2.0g, last revised 2024/07/07.

```
2 \begingroup
3 \lccode '\~='\'
4 \lowercase{\endgroup
5 \newenvironment{alltt}{%
    \trivlist
    \item\relax
      \if@minipage
9
      \else
        \vskip\parskip
10
11
      \fi
      \leftskip\@totalleftmargin
12
      \rightskip\z@skip
13
       \parindent\z@
14
       \parfillskip\@flushglue
15
       \parskip\z@skip
16
17
       \@@par
       \@tempswafalse
18
19
      \def\par{%
20
         \if@tempswa
           \leavevmode\null\@@par\penalty\interlinepenalty
21
22
         \@tempswatrue
23
        \ifhmode\@@par\penalty\interlinepenalty\fi
24
      \fi}
25
26
       \obeylines
       \verbatim@font
27
      \let\org@prime~%
28
      \@noligs
29
30
      \everymath\expandafter{\the\everymath
         \catcode'\'=12 \let~\org@prime}
31
      \everydisplay\expandafter{\the\everydisplay
32
         \catcode'\'=12 \let~\org@prime}
33
       \let\org@dospecials\dospecials
34
       \g@remfrom@specials{\\}
35
       \g@remfrom@specials{\{}
36
       \g@remfrom@specials{\}}
37
38
       \let\do\@makeother
39
       \dospecials
      \let\dospecials\org@dospecials
40
      \frenchspacing\@vobeyspaces
41
      \everypar \expandafter{\the\everypar \unpenalty}}
42
43 {\endtrivlist}}
```

\g@remfrom@specials In the old implementation of the alltt package a fixed \dospecials was used. However nowadays the \dospecials command might contain more special characters at run-time then as was defined in the format. Therefore we remove the necessary special character from \dospecials at the start of the alltt environment. For this we need a macro. Remember that the list of special characters in \dospecials contains the control sequence \do between the characters. We use that to check whether a character has to be removed.

The macro  $\gomessize{\gomessize{1.5ex}}$  takes one argument, the character to be removed from the list.

```
44 \def\g@remfrom@specials#1{%
```

We build up a new list in \OnewOspeicals.

 $45 \qquad \texttt{\def\@new@specials\{\}}$ 

The command  $\ensuremath{\mbox{\tt Qremove}}$  compares its argument with the argument of  $\ensuremath{\mbox{\tt Qremfrom@specials}}$ .

- 46 \def\@remove##1{%
- 47 \ifx##1#1\else

When they are not the same the argument of  $\ensuremath{\texttt{Qremove}}$  is added (together with  $\ensuremath{\texttt{do}}$ ) to the new list.

48 \g@addto@macro\@new@specials{\do ##1}\fi}

Now we \let \do be equal to \@remove and execute \dospecials.

49 \let\do\@remove\dospecials

All that's left is to make \dospecials point to the new list.

- 50 \let\dospecials\@new@specials
- 51 }
- $_{52}\;\langle/\mathsf{package}\rangle$