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# neoshorthands

#### Abstract

This is the documentation of the package neoshorthands. It is a tool to use the powerfull Neo-layout with Xalate. It does not do very much, but mapping many of the usefull symbols to TeX commands. will be converted to \tau. This package does *not* define fancy commands and is therefore very robust. Just say \usepackage{neoshorthands}. If you find any incompatibilities with any package, pleas drop me a mail and maybe I can take care of it.

The single command of this package is \neoshorthand{ }\tau wich maps the command onto the given symbol. You can add your own definitions, but please consider to send me the code so I could add it to the package. Only with the help of many people, this package can be usefull for many people!

\sh{ }\tau is a shorthand for \neoshorthand. It could have been \ns for \neoshorthand, but I found \ns not to be an appropriate macro name.

Special thanks to the guys on german TEX mailinglist tex-d-1 who gave me the code (I copied it from the alttex package).

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### **Implementation**

First, the helper macros. Thanks to the german mailinglist participants!

\add@special

- 1 \def\add@special#1{%
- \rem@special{#1}%
- 3 \expandafter\gdef\expandafter\dospecials\expandafter
- 4 {\dospecials\_\\do\_\#1}%
- > \expandafter\gdef\expandafter\@sanitize\expandafter
- 6 {\@sanitize \@makeother \#1}}

\rem@special

- 7 \def\rem@special#1{%
- 8 \def\do##1{%
- 9 \ifnum\#1=\##1\_\else\_\noexpand\do\noexpand##1\fi}%
- 10 \xdef\dospecials{\dospecials}%
- 11 \begingroup
- 12 \def\@makeother##1{%

```
\ifnum`#1=`##1_\else_\noexpand\@makeother\noexpand##1\fi}%
             13
                    \xdef\@sanitize{\@sanitize}%
             14
                 \endgroup}
             16 \def\neoshorthand#1#2{%
\neoshorthand
                 \expandafter\ifx\csname\cc\string#1\endcsname\relax
             17
                    \add@special{#1}%
             18
                    \expandafter
             19
                    \xdef\csname_cc\string#1\endcsname{\the\catcode`#1}%
                    \begingroup
             21
                      \code^{\code}\code^{\code}\code^{\code}
             22
                      \lowercase{%
             23
                      \global\expandafter\let
             24
                         \csname_ac\string#1\endcsname~%
             25
                      \expandafter\gdef\expandafter~\expandafter{#2}}%
                    \endgroup
             27
                    \global\catcode`#1\active
             28
                 \else
             29
                 \fi
             30
             31 }
             32 \let\sh\neoshorthand
```

And from here on, the great list of symbols is defined.

## greek

```
33 \sh{ }\alpha
35 \sh{}\gamma
36 \sh{ }\delta
38 \sh{ }\eta
39 \sh{ }\mu
40 \sh{ }\nu
41 \sh{ }\pi
42 \sh{ }\psi
44 \sh{ }\tau
45 \sh{}\omega
46 \ \sinh{\Gamma} \setminus Gamma
48 \sh{Π}\Pi
49 \ \sinh{\Xi}\Xi
  careful! \Sigma will give a sum-sign, not a Sigma!!
50 \ \sh{\Sigma} \sum
51 \ \h{\Omega}\
```

#### arrows

```
52 \sh{ }\Leftarrow
53 \sh{ }\Rightarrow
54 \sh{ }\Leftrightarrow
55 \sh{→}\rightarrow
```

# mathematical symbols

```
56 \sh{√}\sqrt
57 \sh{ }\int
58 \sh{ }\partial
59 \sh{ }\exists
60 \sh{∞}\infty
61 \sh{ }\aleph
62 \sh{ }\emptyset
```

# sets and logic

```
63 \sh{}\subset
64 \sh{}\|cup
65 \sh{}\||cap
66 \sh{}\in
67 \sh{}\notin_\% better than \not\in!
68 \sh{}\forall|
69 \section{blackboard_\bold}
70 \sh{}\mathbb{C}
71 \sh{}\mathbb{N}
72 \sh{}\mathbb{R}
73 \sh{}\mathbb{Q}
74 \sh{}\mathbb{Z}
```

If you want to change a certain symbol in your document, you have to use the command \neoshorthand, as \sh will no longer be defined after this package is loaded. I think, the name is too good to be blocked by such a function.

```
<sup>76</sup> ⟨/package⟩
```