

Arno Trautmann
arno.trautmann@gmx.de

neoshorthands

Abstract

This is the documentation of the package neoshorthands. It is a tool to use the powerfull Neo-layout with \LaTeX . It does not do very much, but mapping many of the usefull symbols to \TeX commands. τ will be converted to $\backslash\tau$. This package does *not* define fancy commands and is therefore very robust. Just say $\backslash\text{usepackage}\{\text{neoshorthands}\}$. 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 $\backslash\text{neoshorthand}\{\tau\}$ 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!

$\backslash\text{sh}\{\tau\}$ is a shorthand for $\backslash\text{neoshorthand}$. It could have been $\backslash\text{ns}$ for $\backslash\text{neoshorthand}$, but I found $\backslash\text{ns}$ 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 `alrtex` package).

Contents

Implementation	1
greek	2
arrows	3
mathematical symbols	3
sets and logic	3
blackboard bold	3
contribution	3

Implementation

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

```
\add@special 1 \def\add@special#1{%
2   \rem@special{#1}%
3   \expandafter\gdef\expandafter\dospecials\expandafter
4   {\dospecials_\do_#1}%
5   \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{%
13     \ifnum`#1=`##1_\else_\noexpand\@makeother\noexpand##1\fi}%
14   \xdef\@sanitize{\@sanitize}%
15   \endgroup}

\neoshorthand 16 \def\neoshorthand#1#2{%
17   \expandafter\ifx\csname_cc\string#1\endcsname\relax
18     \add@special{#1}%
19     \expandafter
20     \xdef\csname_cc\string#1\endcsname{\the\catcode`#1}%
21     \begingroup
22       \catcode`\~\active_\lccode`\~`#1%
23       \lowercase{%
24         \global\expandafter\let
25         \csname_ac\string#1\endcsname~%
26         \expandafter\gdef\expandafter~\expandafter{#2}}%
27     \endgroup
28     \global\catcode`#1\active
29   \else
30     \fi
31 }
32 \let\sh\neoshorthand

```

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

greek

```

33 \sh{ }\alpha
34 \sh{ }\beta
35 \sh{ }\gamma
36 \sh{ }\delta
37 \sh{ }\epsilon
38 \sh{ }\eta
39 \sh{ }\mu
40 \sh{ }\nu
41 \sh{ }\pi
42 \sh{ }\psi
43 \sh{ }\zeta
44 \sh{ }\tau
45 \sh{ }\omega

46 \sh{\Gamma}\Gamma
47 \sh{\Delta}\Delta
48 \sh{\Pi}\Pi
49 \sh{\Xi}\Xi

```

careful! Σ will give a sum-sign, not a Sigma!!

```

50 \sh{\Sigma}\sum
51 \sh{\Omega}\Omega

```

arrows

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

mathematical symbols

```
56 \sh{\sqrt}\sqrt
57 \sh{ }\int
58 \sh{ }\partial
59 \sh{ }\exists
60 \sh{\omega}\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
```

blackboard bold

```
69 \sh{ }\mathbb{C}
70 \sh{ }\mathbb{N}
71 \sh{ }\mathbb{R}
72 \sh{ }\mathbb{Q}
73 \sh{ }\mathbb{Z}
74 \let\sh\undefined
75 \end{package}
```

contribution

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. Thanks to all people that have submitted additions:
Dennis-f

□