1 Introduction

This \LaTeX{} package gives useful meaning to various Unicode space characters so that they fulfill their intended function when used in \LaTeX{} source. It uses \texttt{\newunicodechar} macro to do it. Its source is hosted on GitHub in \texttt{wilx/project-uspace} repository.

Here is a list of the implemented characters and their implementations:

- \textbf{ZERO WIDTH SPACE (U+200B)} \hspace{0pt}
- \textbf{NARROW NO-BREAK SPACE (U+202F)} \leavevmode,\leavevmode
- \textbf{NON-BREAKING SPACE$^1$ (U+00A0)} ~
- \textbf{SOFT HYPHEN$^1$ (U+00AD)} \leavevmode
- \textbf{EM QUAD$^2$ (U+2001)} \quad
- \textbf{EM SPACE$^2$ (U+2003)} \quad
- \textbf{EN QUAD$^3$ (U+2000)} \enskip
- \textbf{EN SPACE$^3$ (U+2002)} \enskip
- \textbf{THREE-PER-EM SPACE (U+2004)} \hspace{0.33333em}
- \textbf{FOUR-PER-EM SPACE (U+2005)} \hspace{0.25em}
- \textbf{SIX-PER-EM SPACE (U+2006)} \hspace{0.16667em}
- \textbf{FIGURE SPACE (U+2007)} \leavevmode\phantom{0}
- \textbf{PUNCTUATION SPACE (U+2008)} \hspace{\fwd\textfont1}{\fwd}``
- \textbf{THIN SPACE (U+2009)} \leavevmode\allowbreak\leavevmode
- \textbf{HAIR SPACE (U+200A)} \hspace{0.08333em}
- \textbf{MEDIUM MATH SPACE (U+205F)} \hspace{0.22222em}
2 History

This package would not be what it is without help and comments from people of \TeX, \LaTeX and Friends StackExchange chat room and the \TeX.SE site itself.

v0.05  Add implementation for MEDIUM MATH SPACE.

v0.04  Add implementation for LINE SEPARATOR, NEXT LINE (NEL) and PARAGRAPH SEPARATOR.

v0.03  Change implementation for PUNCTUATION SPACE and THIN SPACE to fix issues with line wrapping when using these characters.

v0.02  Round lengths to five digits after decimal point. List also Unicode code point values beside character names.

v0.01  First published version of this package.

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1 This already defined for pdf\LaTeX because we use inputenc with utf8 option when compiling with pdf\LaTeX, therefore this is only defined for Lua\LaTeX and Xe\LaTeX.

2 According to Unicode, these two are canonically equivalent. See http://unicode.org/notes/tn5/ for explanation of the term.

3 These two are also canonically equivalent. See previous footnote.