Package ‘tth’

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License GPL-2
NeedsCompilation yes
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Description

TtH/ttm are command line utilities written by Hutchinson (2012) for converting (La)TeX to HTML or HTML+MathML, respectively.
Details

The R package **tth** ships the C sources for convenient compilation and installation on all platforms. It also provides wrappers in R to process R character vectors with the command line tools directly from the R prompt. A detailed manual for tth/ttm is available online at [http://hutchinson.belmont.ma.us/tth/](http://hutchinson.belmont.ma.us/tth/).

References


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**tth**

*R Interface to the tth/ttm TeX to HTML Converter*

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**Description**

Convert TeX or LaTeX markup to HTML or HTML+MathML. Works for snippets as well as complete documents.

**Usage**

```r
tth(x, ..., fixup = TRUE, Sweave = TRUE, mode = NULL)
ttm(x, ..., fixup = TRUE, Sweave = TRUE, mode = NULL)
```

**Arguments**

- **x** character vector of (La)TeX code.
- **fixup** logical. Should the resulting code be fixed up by deleting blank or empty lines and by replacing certain math symbols (such as not lower/greater etc.)?
- **Sweave** logical. Should the Sweave code environments Sinput/Soutput be replaced by verbatim (and Schunk deleted) prior to conversion with tth/ttm?
- **mode** character. If this is set to "hex", "dec", or "named", the corresponding mode is enforced for all character entity references. See also the details.
- **...** arguments passed to `tth.control`.
- **c** logical. Prefix header "Content-type: text/HTML" (for direct web serving)?
- **d** logical. Disable definitions with delimited arguments? Default enable.
- **e** numeric specifying epsfbox handling: 0 no conversion, just ref. 1 convert to png/gif using user-supplied ps2png/gif. 2 (default) convert and include inline.
tth numeric specifying limit for built-up fraction nesting in display equations to 0 to 9. Default is 5. For tth only.

g logical. Remove (instead of guessing intent of) font commands. Default guess font/size.

i logical. Use italic font for equations (like TeX)? Default roman. For tth only.

j numeric specifying index page length. Default is 20 lines.

L logical or character. If logical: Should LaTeX commands (e.g., frac) be enabled without a documentclass line? If character: The base file (no extension) for LaTeX auxiliary input.

n numeric HTML title format control: 0 raw, 1 expand macros, 2 expand equations.

p character specifying additional directories (paths) to search for input files.

r logical. Raw HTML output (omit header and tail) for inclusion in other files?

t logical. Display built-up items in textstyle equations? Default is inline. For tth only.

u logical. Use unicode character encoding? Default is ISO-8859-1 (latin1).

w numeric specifying HTML writing style. Default is no head/body tags, 0 no title, 1 single title only, head/body tags. 2 XHTML. For tth only.

y numeric specifying equation style: 1 compress vertically, 2 inline overaccents.

xmakeindxcmd character specifying command for making index. Default is makeindex.

v logical or numeric. Give verbose commentary? Verbosity level can also be 0 (none, same as FALSE), 1 (same as TRUE), 2 (even higher verbosity for debugging).

Details

tth and ttm are simple R wrapper functions, calling command line tools of the same name which either need to be provided by the R package tth or be installed on the system (and available in the search path). The command line tools have been written by Hutchinson (2012) and a detailed manual is available online at http://hutchinson.belmont.ma.us/tth/.

By default, the results of tth and ttm are processed further to accommodate the Sweave environments and fixup certain math symbols. Furthermore, optionally a particular mode for character entity references (mathematical symbols, greek letters, and other special characters) can be enforced. For example, the greek small letter mu can be represented in "named" mode (&mgr; or μ), in "hex" mode (&#x03BC;) or "dec" model (&#956;). Plain tth employs "dec" mode while plain ttm employs "named" mode. But setting mode = "hex" would convert all character entity references to hex mode etc. See http://www.w3.org/TR/xml-entity-names/bycodes.html for the list of character entity references employed and https://dev.w3.org/html5/html-author/charref for a somewhat nicer display.

Value

tth/ttm return a character vector with HTML code. tth.control returns a character vector with collapsed (non-default) control arguments.
References


Examples

tex <- c("This is \textbf{bold} and this \textit{italic}.",
    "Points on the unit circle: \$x^2 + y^2 = 1\$."
)
tth(tex)
ttm(tex)

h0 <- "$H_0: \mu_0 = 0$"
tth(h0)
tth(h0, mode = "hex")
tth(h0, mode = "named")
ttm(h0)
ttm(h0, mode = "hex")
ttm(h0, mode = "dec")
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