

cs-techrep

Technical Reports in Computer Science and Software Engineering

Christoph P. Neumann <cyberpetaneuron@gmail.com>

March 22, 2024

Abstract

The **cs-techrep** class provides a convenient environment for writing technical reports in computer science and software engineering. The style is adopted from IEEE. The **cs-techrep** class requires the **latex/pdflatex** in combination with **biblatex** using a **biber** backend.

1 Installation

The **zip** or **tar.gz** file comes with a **cs-techrep.ins** and a **cs-techrep.dtx** file included which contains the **L^AT_EX** stuff.

To extract the class files call:

```
$ latex cs-techrep.ins
```

This call will extract all **L^AT_EX** specific files to the current directory. You can either use the files for a single cv project or you can integrate the files into your **T_EX** installation.

If you just want to use **cs-techrep** for a single curriculum vitae project, the simplest way is just to copy the generated files to the folder of the project.

If you want to integrate **cs-techrep** into your **T_EX** installation, create a directory **tex/latex/cs-techrep** beneath your **T_EX** installation (e.g. beneath **/usr/share/texmf**) and copy all files from the current directory there. Now call:

```
$ mktexlsr
```

to update the file-cache of **L^AT_EX**.

Hint: The **cs-techrep** distribution contains a sample **docstrip** configuration in **docstrip.cfg** via which files can be distributed automatically to their correct positions inside a **L^AT_EX** installation. Feel free to adapt this file to your environment and afterwards call **latex cs-techrep.ins** to install the package to its right place.

2 Templates

For a quick start the `iaria-lite` distribution contains document templates. The templates can be found in the `cs-techrep-example-neumann.zip` file.

3 Documentclass

`documentclass cs-techrep` This package provides the documentclass `cs-techrep`. The documentclass supports the following options:

- `conference` Passed to IEEEtran
- `a4paper` Passed to IEEEtran
- `flushend` Activate flushend package
- `pbalance` Activate pbalance package

4 Requirements

We instrument several other \LaTeX packages for different purposes, which must be available under your installation.

- IEEEtran
- acronym
- afterpage
- babel
- biblatex
- booktabs
- ccicons
- cleveref
- csquotes
- diagbox
- etoolbox
- extdash
- flushend
- fontenc
- graphicx

- hypcap
- hyperref
- hyperref
- inputenc
- lipsum
- listings
- lmodern
- lscape
- microtype
- newtxtt
- orcidlink
- paralist
- pbalance
- pdfcomment
- pdfscape
- siunitx
- stfloats
- subfig
- tcolorbox
- times
- upquote
- url
- xcolor
- xpatch
- xspace

5 The Code

```
1 %# Copyright (c) 2023 Christoph P. Neumann,
2 %# Copyright (c) 2018-2021 Oliver Kopp
3 %# Reference: https://latextemplates.github.io/
4
5 % !TeX spellcheck = en-US
6 % LTeX: language=en-US
7 % !TeX encoding = utf8
8 % !TeX program = pdflatex
9 % !BIB program = biblatex / biber
10
11 % Declare that this document class file requires at least LaTeX version 2e.
12 \NeedsTeXFormat{LaTeX2e}
13
14 % Provide the name of your document class, the date it was last updated, and a comment about
15 \ProvidesClass{cs-techrep}[2024/03/20 Technical Reports in Computer Science and Software Engi
16
17 % Define marker counter for options (counter are global in latex):
18 \newcounter{cstechrep@pbalancetracker}
19 \newcounter{cstechrep@flushendtracker}
20
21 % Declare options:
22 \DeclareOption{onecolumn}{\OptionNotUsed} % IEEE option onecolumn will be ignored
23
24 \DeclareOption{pbalance}{
25   \setcounter{cstechrep@pbalancetracker}{1}
26   \typeout{cs-techrep class: pbalance option is set.}
27 }
28 \DeclareOption{flushend}{
29   \setcounter{cstechrep@flushendtracker}{1}
30   \typeout{cs-techrep class: flushend option is set.}
31 }
32
33 % We'll pass any document class options along to the underlying class
34 \DeclareOption*{%
35   \PassOptionsToClass{\CurrentOption}{IEEEtran}% recommended IEEE options: conference,a4paper
36 }
37
38 % Now we'll execute any options passed in
39 \ProcessOptions\relax
40
41 % Instead of defining each and every little detail required to create a new document class,
42 % you can base your class on an existing document class.
43 \LoadClass{IEEEtran}
44
45 % This template has been tested with IEEEtran of 2015.
46
47 % =====
48 % USER PROVIDED VARIABLES
49
50 \makeatletter
51 \newcommand*\DefcstechrepVar[1]{\@namedef{cstechrep#1}##1{\global\@namedef{cstechrep#1}{##1}}}
52 \makeatother
```

```

53
54 \DefcstechrepVar{AuthorListTex}
55 \DefcstechrepVar{AuthorListBib} % Use *and* as author separator!
56 \DefcstechrepVar{TitleTex}
57 \DefcstechrepVar{TitleBib}
58 \DefcstechrepVar{Department} % e.g., Department of Electrical Engineering, Media and Computer Science
59 \DefcstechrepVar{Institution} % e.g., Ostbayerische Technische Hochschule Amberg-Weiden
60 \DefcstechrepVar{Address} % e.g., Amberg, Germany
61 \DefcstechrepVar{Series} % e.g., Technical Reports
62 \DefcstechrepVar{Year} % e.g., 2023
63 \DefcstechrepVar{Title}
64 \DefcstechrepVar{Month} % e.g., 6 (for June)
65 \DefcstechrepVar{Number} % e.g., CL-2023-42
66 \DefcstechrepVar{Lang} % e.g., english = en-US (or: ngerman = DE)
67 % =====
68
69 % backticks (‘) are rendered as such in verbatim environments.
70 % See following links for details:
71 % - https://tex.stackexchange.com/a/341057/9075
72 % - https://tex.stackexchange.com/a/47451/9075
73 % - https://tex.stackexchange.com/a/166791/9075
74 \RequirePackage{upquote}
75
76 % Set English as language and allow to write hyphenated="words
77 %
78 % Even though ‘american’, ‘english’ and ‘usenglish’ are synonyms for babel package (according to babel manual)
79 % english has to go last to set it as default language
80 \RequirePackage[ngerman,main=english]{babel}
81 %
82 % Hint by http://tex.stackexchange.com/a/321066/9075 -> enable "=" as dashes
83 \addto\extrasenglish{\languageshorthands{ngerman}\usesshorthands{}}
84
85 \RequirePackage{lmodern} % CM variant with scalable font (to prevent "pdfTeX error (font expansion limit reached)"
86 \RequirePackage{times} % Times New Roman, because IEEE is based on Times (and not CM/lmodern)
87
88 % Links behave as they should. Enables "\url{...}" for URL typesettings.
89 % Allow URL breaks also at a hyphen, even though it might be confusing: Is the "-" part of the URL?
90 % See https://tex.stackexchange.com/a/3034/9075.
91 \RequirePackage[hyphens]{url}
92
93 % When activated, use text font as url font, not the monospaced one.
94 % For all options see https://tex.stackexchange.com/a/261435/9075.
95 % \urlstyle{same}
96
97 % Improve wrapping of URLs - hint by http://tex.stackexchange.com/a/10419/9075
98 \makeatletter
99 \g@addto@macro{\UrlBreaks}{\UrlOrds}
100 \makeatother
101
102 % nicer // - solution by http://tex.stackexchange.com/a/98470/9075
103 % DO NOT ACTIVATE -> prevents line breaks
104 \makeatletter
105 \def\Url@twoslashes{\mathchar'\@ifnextchar/{\kern-.2em}{}}
106 \g@addto@macro\UrlSpecials{\do/{\Url@twoslashes}}

```

```

107 %\makeatother
108
109 % use nicer font for code
110 \RequirePackage[zerostyle=b,scaled=.75]{newtxtt}
111
112 % inputenc must be loaded before biblatex
113 \RequirePackage[utf8]{inputenc}
114
115 % Has to be loaded AFTER any font packages. See https://tex.stackexchange.com/a/2869/9075.
116 \RequirePackage[T1]{fontenc}
117
118
119 % Character protrusion and font expansion. See http://www.ctan.org/tex-archive/macros/latex/
120 \RequirePackage[
121   babel=true, % Enable language-specific kerning. Take language-settings from the language of
122   expansion=alltext,
123   protrusion=alltext-nott, % Ensure that at listings, there is no change at the margin of the
124   nopatch=eqnum, % fix unable to apply patch eqnum
125   final % Always enable microtype, even if in draft mode. This helps finding bad boxes quickly
126   % In the standard configuration, this template is always in the final mode, so this c
127 ]{microtype}
128
129 % \texttt{test -- test} keeps the "---" as "--" (and does not convert it to an en dash)
130 \DisableLigatures{encoding = T1, family = tt* }
131
132 %\DeclareMicrotypeSet*[tracking]{my}{ font = */*/*/sc/* }%
133 %\SetTracking{ encoding = *, shape = sc }{ 45 }
134 % Source: http://homepage.ruhr-uni-bochum.de/Georg.Verweyen/pakete.html
135 % Deactivated, because does not look good
136
137 \RequirePackage{graphicx}
138
139 % Creative Commons
140 \RequirePackage{ccicons}
141
142 % Diagonal lines in a table - http://tex.stackexchange.com/questions/17745/diagonal-lines-in-
143 % Slashbox is not available in texlive (due to licensing) and also gives bad results. Thus, w
144 \RequirePackage{diagbox}
145
146 \RequirePackage{cmyk, table}{xcolor}
147
148 \RequirePackage[nolist]{acronym}
149
150 % Code Listings
151 \RequirePackage{listings}
152
153 \definecolor{eclipseStrings}{RGB}{42,0.0,255}
154 \definecolor{eclipseKeywords}{RGB}{127,0,85}
155 \colorlet{numb}{magenta!60!black}
156
157 % JSON definition
158 % Source: https://tex.stackexchange.com/a/433961/9075
159
160 \lstdefinlanguage{json}{

```

```

161     basicstyle=\normalfont\ttfamily,
162     commentstyle=\color{eclipseStrings}, % style of comment
163     stringstyle=\color{eclipseKeywords}, % style of strings
164     numbers=left,
165     numberstyle=\scriptsize,
166     stepnumber=1,
167     numbersep=8pt,
168     showstringspaces=false,
169     breaklines=true,
170     frame=lines,
171     % backgroundcolor=\color{gray}, %only if you like
172     string=[s]{"}{"},
173     comment=[l]{:\ "},
174     morecomment=[l]{:"},
175     literate=
176         *{0}{{{ \color{numb}0}}}{1}
177         {1}{{{ \color{numb}1}}}{1}
178         {2}{{{ \color{numb}2}}}{1}
179         {3}{{{ \color{numb}3}}}{1}
180         {4}{{{ \color{numb}4}}}{1}
181         {5}{{{ \color{numb}5}}}{1}
182         {6}{{{ \color{numb}6}}}{1}
183         {7}{{{ \color{numb}7}}}{1}
184         {8}{{{ \color{numb}8}}}{1}
185         {9}{{{ \color{numb}9}}}{1}
186 }
187
188 \lstset{
189 % everything between (* *) is a latex command
190 escapeinside={(*}{*)},
191 %
192 language=json,
193 %
194 showstringspaces=false,
195 %
196 extendedchars=true,
197 %
198 basicstyle=\footnotesize\ttfamily,
199 %
200 commentstyle=\slshape,
201 %
202 % default: \rmfamily
203 stringstyle=\ttfamily,
204 %
205 breaklines=true,
206 %
207 breakatwhitespace=true,
208 %
209 % alternative: fixed
210 columns=flexible,
211 %
212 numbers=left,
213 %
214 numberstyle=\tiny,

```

```

215 %
216 basewidth=.5em,
217 %
218 xleftmargin=.5cm,
219 %
220 % aboveskip=0mm,
221 %
222 % belowskip=0mm,
223 %
224 captionpos=b
225 }
226
227 % Enable Umlauts when using \lstinputputlisting.
228 % See https://stackoverflow.com/a/29260603/873282 für details.
229 % listingsutf8 did not work in June 2020.
230 \lstset{literate=
231   {á}{\`a}}1 {é}{\`e}}1 {í}{\`i}}1 {ó}{\`o}}1 {ú}{\`u}}1
232   {Á}{\`A}}1 {É}{\`E}}1 {Í}{\`I}}1 {Ó}{\`O}}1 {Ú}{\`U}}1
233   {à}{\`a}}1 {è}{\`e}}1 {ì}{\`i}}1 {ô}{\`o}}1 {û}{\`u}}1
234   {Ä}{\`A}}1 {Ë}{\`E}}1 {Ï}{\`I}}1 {Ö}{\`O}}1 {Ü}{\`U}}1
235   {ä}{\`a}}1 {ë}{\`e}}1 {ï}{\`i}}1 {ö}{\`o}}1 {ü}{\`u}}1
236   {Ä}{\`A}}1 {Ë}{\`E}}1 {Ï}{\`I}}1 {Ö}{\`O}}1 {Ü}{\`U}}1
237   {â}{\`a}}1 {ê}{\`e}}1 {î}{\`i}}1 {ô}{\`o}}1 {û}{\`u}}1
238   {Â}{\`A}}1 {Ê}{\`E}}1 {Î}{\`I}}1 {Ô}{\`O}}1 {Û}{\`U}}1
239   {Ã}{\`A}}1 {ä}{\`a}}1 {ö}{\`o}}1 {ö}{\`o}}1
240   {œ}{\`oe}}1 {Œ}{\`OE}}1 {æ}{\`ae}}1 {Æ}{\`AE}}1 {ß}{\`ss}}1
241   {h}{\`H}}1 {H}{\`H}}1 {h}{\`H}}1 {H}{\`H}}1
242   {ç}{\`c}}1 {Ç}{\`C}}1 {ø}{\`o}}1 {å}{\`r}}1 {Å}{\`r}}1
243 }
244
245 % Nicer tables (\toprule, \midrule, \bottomrule)
246 \RequirePackage{booktabs}
247
248 % Extended enumerate, such as \begin{compactenum}
249 \RequirePackage{paralist}
250
251 % Read: Is there a disadvantage to using natbib=true with biblatex?
252 % https://tex.stackexchange.com/questions/149313/is-there-a-disadvantage-to-using-natbib-true
253 % Substitutions:
254 % Natbib \textcite = biblatex \textcite
255 % Natbib \citep = biblatex \parencite
256
257 \RequirePackage[
258   defernumbers=true, % required due to self-cite
259   %style=ieee, % english only
260   sorting=none, % nty, nyt, nyvt, anyt, anyvt, ynt, ydnt, none, debug
261   sortcites=false,
262   citestyle=numeric-comp,
263   bibstyle=numeric,
264   backend=biber,
265   bibencoding=utf8, % = auto, utf8, ascii
266   hyperref=true, % activate hyperref support
267   backref=false, % activate backrefs
268   isbn=true,

```



```

269 url=true,
270 doi=true,
271 urldate=terse,      % = iso, year, short, long, terse
272 maxnames=5,         % max number of names in text ??
273 minnames=1,         % min number of names in text ??
274 maxbibnames=99,     % max number of names in bibliography
275 minbibnames=1,      % number of names in bibliography (bevor et al)
276 maxcitenames=99,    % max number of names in text ??
277 mincitenames=1,     % max number of names in text ??
278 giveninits=false,   % abbreviate first names
279 uniquename=init,    % otherwise option conflict with firstinits=true
280 autolang=other
281 ]{biblatex}
282
283 % Prevent citations in the references are being numbered as '0' in ArXiv
284 % https://tex.stackexchange.com/questions/463556/all-the-citations-in-the-references-are-bein
285 \makeatletter
286 \let\blx@rerun@biber\relax
287 \makeatother
288
289 \addbibresource{selfref.bib} % selfref.bib needs to be generated, containing a bibentry with
290 \DeclareBibliographyCategory{selfref}
291 \addtocategory{selfref}{selfref}
292 % How to use: \printbibliography[notcategory=selfref]
293
294 % Same fontsize as without natbib
295 \renewcommand{\bibfont}{\normalfont\small}
296
297 % Enable hyperlinked author names in the case of \textcite
298 % Source: https://tex.stackexchange.com/a/76075/9075
299 \RequirePackage{etoolbox}
300 \makeatletter
301 \patchcmd{\NAT@test}{\else \NAT@nm}{\else \NAT@hyper@{\NAT@nm}}{}{}
302 \makeatother
303
304 \makeatletter
305 \DeclareCiteCommand{\citemonth}
306   {\usebibmacro{prenote}}
307   {%
308     \let\oldabx@bibmonth\abx@bibmonth%
309     %\let\abx@bibmonth\blx@imc@biblstring\typeout{CHG: abx@bibmonth \meaning\abx@bibmonth}% f
310     \setkeys{blx@opt@pre}{dateabbrev=false}% nowork
311     \mkbibmonth{\thefield{month}}%
312     \let\abx@bibmonth\oldabx@bibmonth% restore
313   }
314   {\multicitedelim}
315   {\usebibmacro{postnote}}
316 \makeatother
317
318 % Enable nice comments
319 \RequirePackage{pdfcomment}
320
321 \newcommand{\commentontext}[2]{\colorbox{yellow!60}{\textcolor{black}{#1}}\pdfcomment[color={0.234 0.867 0.211},
322 \newcommand{\commentatside}[1]{\pdfcomment[color={0.045 0.278 0.643},icon=Note]{#1}}

```

```

323
324 % Compatibility with packages todo, easy-todo, todonotes
325 \newcommand{\todo}[1]{\commentatside{#1}}
326
327 % Compatibility with package fixmetodonotes
328 \newcommand{\TODO}[1]{\commentatside{#1}}
329
330 % Put footnotes below floats
331 % Source: https://tex.stackexchange.com/a/32993/9075
332 \RequirePackage{stfloats}
333 \fnbelowfloat
334
335 \RequirePackage[group-minimum-digits=4,per-mode=fraction]{siunitx}
336 \addto\extrasgerman{\sisetup{locale = DE}}
337
338 % Enable that parameters of \cref{}, \ref{}, \cite{}, ... are linked so that a reader can click
339 \RequirePackage{hyperref}
340
341 % Enable hyperref without colors and without bookmarks
342 \hypersetup{
343   hidelinks,
344   colorlinks=true,
345   allcolors=black,
346   pdfstartview=Fit,
347   breaklinks=true
348 }
349
350 % Enable correct jumping to figures when referencing
351 \RequirePackage[all]{hypcap}
352
353 \RequirePackage{orcidlink}
354
355 \RequirePackage[caption=false,font=footnotesize]{subfig}
356
357 % For easy quotations: \enquote{text}
358 % This package is very smart when nesting is applied, otherwise textcmds (see below) provides
359 \RequirePackage[autostyle=true]{csquotes}
360
361 % Enable using "'quote'" - see https://tex.stackexchange.com/a/150954/9075
362 \defineshorthand{"'"}{\openautoquote}
363 \defineshorthand{"'"}{\closeautoquote}
364
365 % amsmath must be loaded before cleveref
366 \usepackage{amsmath,amssymb,amsfonts}
367
368 % Extensions for references inside the document (\cref{fig:sample}, ...)
369 % Enable usage \cref{...} and \Cref{...} instead of \ref: Type of reference included in the link
370 % That means, "Figure 5" is a full link instead of just "5".
371 \RequirePackage[capitalise,nameinlink,noabbrev]{cleveref}
372
373 \crefname{listing}{Listing}{Listings}
374 \Crefname{listing}{Listing}{Listings}
375 \crefname{lstlisting}{Listing}{Listings}
376 \Crefname{lstlisting}{Listing}{Listings}

```

```

377
378 \RequirePackage{lipsum}
379
380 \RequirePackage{tcolorbox}
381 \tcbuselibrary{listings}
382
383 %introduce \powerset - hint by http://matheplanet.com/matheplanet/nuke/html/viewtopic.php?top
384 \DeclareFontFamily{U}{MnSymbolC}{ }
385 \DeclareSymbolFont{MnSyC}{U}{MnSymbolC}{m}{n}
386 \DeclareFontShape{U}{MnSymbolC}{m}{n}{
387   <-6> MnSymbolC5
388   <6-7> MnSymbolC6
389   <7-8> MnSymbolC7
390   <8-9> MnSymbolC8
391   <9-10> MnSymbolC9
392   <10-12> MnSymbolC10
393   <12-> MnSymbolC12%
394 }{}
395 \DeclareMathSymbol{\powerset}{\mathord}{MnSyC}{180}
396
397 \RequirePackage{xspace}
398 %\newcommand{\eg}{e.\,g.\,xspace}
399 %\newcommand{\ie}{i.\,e.\,xspace}
400 \newcommand{\eg}{e.\,g.\,\ }
401 \newcommand{\ie}{i.\,e.\,\ }
402
403 % Enable hyphenation at other places as the dash.
404 % Example: applicaiton\hydash specific
405 \makeatletter
406 \newcommand{\hydash}{\penalty\M-\hskip\z@skip}
407 % Definition of "=" taken from http://mirror.ctan.org/macros/latex/contrib/babel-contrib/germa
408 \makeatother
409
410 % Add manual adapted hyphenation of English words
411 % See https://ctan.org/pkg/hyphenex and https://tex.stackexchange.com/a/22892/9075 for detail
412 % Does not work on MiKTeX, therefore disabled - issue reported at https://github.com/MiKTeX/m
413 % \input{ushyphex}
414
415 % correct bad hyphenation here
416 \hyphenation{op-tical net-works semi-conduc-tor}
417
418 % Enable copy and paste of text from the PDF
419 % Only required for pdflatex. It "just works" in the case of lualatex.
420 % Alternative: cmap or mmap package
421 % mmap enables mathematical symbols, but does not work with the newtx font set
422 % See: https://tex.stackexchange.com/a/64457/9075
423 % Other solutions outlined at http://goemonx.blogspot.de/2012/01/pdflatex-ligaturen-und-copyr
424 % Trouble shooting outlined at https://tex.stackexchange.com/a/100618/9075
425 %
426 % According to https://tex.stackexchange.com/q/451235/9075 this is the way to go
427 \input glyphtounicode
428 \pdfgentounicode=1
429
430 \RequirePackage{lscapex}

```

```

431 \RequirePackage{pdflscape}
432 \RequirePackage{afterpage}
433
434 % Allows to hyphenate a word that contains a dash:
435 % https://stackoverflow.com/questions/2193307/how-do-i-get-latex-to-hyphenate-a-word-that-con
436 \RequirePackage[shortcuts]{extdash} % Use \-/ for a breakable dash that does not prevent the
437
438 % Improve wrapping of URLs - hint by http://tex.stackexchange.com/a/10419/9075
439 \makeatletter
440 \def\ps@IEEEtitlepagestyle{
441   \def\@oddfont{\mycopyrightnotice}
442   \def\@evenfont{ }
443 }
444 \def\mycopyrightnotice{
445   {\footnotesize
446     \begin{minipage}{0.8\textwidth}
447       \centering
448       % Creative Commons / Open Access:
449       \href{https://creativecommons.org/licenses/by/4.0/}{\ccby} This work is licensed under a
450       % Citation advice:
451       \Please cite as: \fullcite{selfref}.
452     \end{minipage}
453   }
454 }
455 \makeatother
456
457 \makeatletter
458 % allows for forcing command expansion inside a filecontents* environment
459 % (cf. https://tex.stackexchange.com/questions/534035/macros-commands-inside-a-filecontents-e
460 \def\filecontentsForceExpansion#1#2#3{
461   \global\let\ltxspecials\dospecials
462   \gdef\dospecials{\ltxspecials
463     \catcode'#1=0
464     \catcode'#2=1
465     \catcode'#3=2
466     \global\let\dospecials\ltxspecials
467   }
468 }
469 \makeatother
470
471 \title{\cstechrepTitleTex}
472
473 \author{
474   IEEEauthorblockN{\cstechrepAuthorListTex}
475   IEEEauthorblockA{%
476     \cstechrepDepartment\\
477     \cstechrepInstitution\\
478     \cstechrepAddress
479   }}
480
481 \IEEEspecialpapernotice{\cstechrepSeries: \cstechrepNumber, \citmonth{selfref} \cstechrepYea
482
483 % Balance/level columns at the last page / in bibliography
484 % DISCLAIMER: No solution is a 100%/perfect one!

```

```

485 % Mainstream option: pbalance (see https://ctan.org/pkg/pbalance)
486 % BUT: incompatible with arxiv automated process (!)
487 \ifnum\value{cstechrep@pbalancetracker}=1
488   \typeout{cs-techrep class: load pbalance package.}
489   \RequirePackage{pbalance}
490 \fi
491 % Flushend => works with arxiv, but major incompatibility with lineno (and, thus, also with m
492 \ifnum\value{cstechrep@flushendtracker}=1
493   \typeout{cs-techrep class: load flushend package.}
494   \RequirePackage{flushend}
495 \fi
496
497 % Finally, we'll use \endinput to indicate that LaTeX can stop reading this file. LaTeX will
498 \endinput

```