ltxtemplate : A Perl script to create LaTeX templates

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Contents

1 Introduction

The Perl script `ltxtemplate` can be used to create template LaTeX documents using the specified class file. It is free software distributed under the GNU General Public License, see the file LICENSE for details. You need to have Perl installed before you can use `ltxtemplate`. The software is available for download as a zip archive from http://theoval.cmp.uea.ac.uk/~nlct/latex/apps/ltxtemplate/. `ltxtemplate` can be invoked from the command line either by:

```
ltxtemplate [options] <filename>
```

or

```
perl ltxtemplate [options] <filename>
```

where <*filename*> is the name of the LaTeX file to be created (with or without the `.tex` extension) and the options may be one or more of the following:

`-h`	Include the hyperref package.
`-d`	Include the datetime package.
`-c`	Insert the current date in the `\date` command.
`-n`	Don't use initialisation file.
`-m`	Also create associated Makefile.
`-b`	When used with `-m`, add bibtex to Makefile.
`-x`	When used with `-m`, add makeindex to Makefile.
`-g`	When used with `-m`, add makeglos[1] to Makefile.
`-i`	Prompt before overwriting files.
`-t` <*cls*>	Use the <*cls*> document class (article if omitted).
`-o` <*opts*>	Pass <*opts*> to the documentclass (`a4paper` if omitted).
`-l` <*language*>	Include babel package with specified language.

The `-h`, `-d`, `-c`, `-i`, `-m`, `-b`, `-x` and `-g` options can be combined, e.g. `ltxtemplate -hdc sample.tex`, but not the `-n` option.

1.1 Notes

If the `-h` option is used, the ifpdf package will also be used, and the command `\pdfinfo` will be inserted. The `\pdfinfo` command will use `\@title` in the `/Title` field, so be careful if your title includes non-PDF information. For example, in this document, the title was specified as

```
\title{ltxtemplate : A Perl script to create
\LaTeX\ templates}
```

So I had to modify the `/Title` field as:

```
/Title (ltxtemplate : A Perl script to create LaTeX templates)
```

If the `-d` option is used in conjunction with the `-h` option the `\pdfinfo` command will also include the `/ModDate` field with the `\pdfdate` command defined in the datetime package.

Note that if you use both `-c` and `-d`, the current date will be formatted using `\formatdate`, whereas if you just use `-c` without `-d`, then the current date will simply be entered as <*day*>/<*month*>/<*year*>.

The Perl script performs a simple parsing of the class file (as given by the `-t` option) to determine whether a letter-type of class file is being used. If it determines that the document is a letter, the commands `\title`, `\author`, `\pdfinfo` and `\maketitle` will be omitted.

If the class options (as specified by the `-o` switch) contains one of the European letter sizes (e.g. `a4paper`), the typearea package will be included.

2 Examples

- The following command

```
ltxtemplate sample
```

will create a file called `sample.tex` that contains the following (note that the author's name will be substituted with your own name, as defined by your system):

```
\documentclass[a4paper]{article}

\usepackage{typearea}% use European page layout

\title{Untitled}
\author{Dr Nicola L C Talbot}


\begin{document}
\maketitle
\end{document}
```

If you also include the `-m` switch:

```
ltxtemplate -m sample
```

then the following Makefile will also be created:

```
pdf : sample.pdf

dvi : sample.dvi

ps : sample.ps

sample.pdf : sample.tex
pdflatex sample
pdflatex sample

sample.dvi : sample.tex
latex sample
latex sample

sample.ps : sample.dvi
dvips -o sample.ps sample

clean :
rm -f sample.{aux,log,out,toc,dvi,pdf,ps}
```

- The following command

```
ltxtemplate -o "letter,landscape" sample-ltr
```

will create a file called `sample-ltr.tex` that contains the following (again note that the author's name will be substituted with your own name, as defined by your system):

```
\documentclass[letter,landscape]{article}


\title{Untitled}
\author{Dr Nicola L C Talbot}


\begin{document}
\maketitle
\end{document}
```

- The following command

```
ltxtemplate -hdc sample-hdc
```

will create a file called `sample-hdc.tex` that contains the following (again note that the author's name will be substituted with your own name, as defined by your system, and the date will be replaced by the current date):

```
\documentclass[a4paper]{article}

\usepackage{datetime}
\usepackage{typearea}% use European page layout
\usepackage{ifpdf}
\usepackage[colorlinks,plainpages=false]{hyperref}

\title{Untitled}
\author{Dr Nicola L C Talbot}
\date{\formatdate{12}{7}{2006}}

\ifpdf
\makeatletter
\pdfinfo{
   /Author (Dr Nicola L C Talbot)
   /Title (\@title)
   /CreationDate (D:20060712112528)
   /ModDate (D:\pdfdate)
   /Subject ()
   /Keywords ()
```

```
}
\makeatother
\fi

\begin{document}
\maketitle
\end{document}
```

- The following command

  ```
  ltxtemplate -l french sample-fr
  ```

  will create a file called `sample-fr.tex` that contains the following (again note that the author's name will be substituted with your own name, as defined by your system, and the date will be replaced by the current date):

  ```
  \documentclass[a4paper]{article}

  \usepackage[french]{babel}
  \usepackage{typearea}% use European page layout

  \title{Untitled}
  \author{Dr Nicola L C Talbot}


  \begin{document}
  \maketitle
  \end{document}
  ```

- The following command

  ```
  ltxtemplate -o "" -l english -dc -t scrlttr2 sample-scrl
  ```

  will create a file called `sample-scrl.tex` that contains the following (again note that the date will be replaced by the current date, note also that the Perl script has detected that the class file used is part of the Koma bundle, and so has not included the typearea package. It has also detected that the class file is a letter, so no `\title` or `\author` is used):

  ```
  \documentclass{scrlttr2}

  \usepackage[english]{babel}
  \usepackage{datetime}

  \date{\formatdate{12}{7}{2006}}
  ```

```
\begin{document}
\begin{letter}{To Name\\To Address}
\opening{Dear Sir/Madam}
\closing{Yours Faithfully}
\end{letter}
\end{document}
```

3 Initialisation File

The ltxtemplate Perl script will check for one of the following files:

- `$HOME/.ltxtemplate-init`
- `$HOME/ltxtemplate-init`
- `$USERPROFILE/ltxtemplate-init`
- `./ltxtemplate-init`

It will only load the file it finds first. Note that command line switches override any values set in the initialisation file.

You can use this file to override ltxtemplate's default values. You can change any of the following Perl variables:

- `$opt_t` : This is the document class, e.g.

  ```
  $opt_t = 'report';
  ```

- `$opt_o` : This is the document class options, e.g.

  ```
  $opt_o = 'letter,12pt';
  ```

- `$opt_l` : This is the language to pass to the babel package (if set to `''`, the babel package is not used) e.g.

  ```
  $opt_l = 'french';
  ```

- `$opt_d` : Set to 1 to include the datetime package, e.g.

  ```
  $opt_d = 1;
  ```

- `$opt_c` : Set to 1 to explicitly set the current date, e.g.

  ```
  $opt_c = 1;
  ```

- `$opt_h` : Set to 1 to include the hyperref package, e.g.

  ```
  $opt_h = 1;
  ```

- `$opt_m` : Set to 1 to additionally create an associated Makefile, e.g.

  ```
  $opt_m = 1;
  ```

- `$opt_b` : Set to 1 to include bibtex in Makefile, e.g.

  ```
  $opt_b = 1;
  ```

- `$opt_x` : Set to 1 to include makeindex in Makefile.
- `$opt_g` : Set to 1 to include makeglos in Makefile
- `$opt_i` : Set to 1 to prompt before overwriting an existing file.
- `$author` : Use this to set the author's name, e.g.

  ```
  $author = "A.N. Other";
  ```

- `$title` : Use this to set the title ("Untitled" used by default), e.g.

  ```
  $title = "No Title";
  ```

- `$hyperref_opt` : Options to pass to the hyperref package (default `colorlinks,plainpages=false`), e.g.

  ```
  $hyperref_opt = ''; # use hyperref's default options
  ```

- `$datetime_opt` : Options to pass to the datetime package (default is `''`), e.g.

  ```
  $datetime_opt='us'; # use U.S. (standard LaTeX) date format
  ```

- `$otherpackages` : Other packages to add (these will go before the other packages), e.g.

  ```
  $otherpackages="\\usepackage{amsmath}\n\\usepackage{graphicx}";
  ```

- `$preamble` : Extra stuff to go in the preamble (these will go after the hyperref package), e.g.

  ```
  $preamble = "\\newcommand{\\someCmd}{Some command I always define}";
  ```

  Note that if you want any packages that should go after the hyperref package (e.g. the glossary package), these should be included in `$preamble` e.g.

```
$preamble = "\\usepackage{glossary}";
```

- `$toName` : The text to enter if the document is a letter (default "To Name")
- `$toAddress` : The text to enter if the document is a letter (default "To Address")
- `$opening` : The text to enter in the argument to `\opening` if the document is a letter (default "Dear Sir/Madam")
- `$closing` : The text to enter in the argument to `\closing` if the document is a letter (default "Yours Faithfully")
- `&isLetter` : subroutine to determine whether the argument (a string containing the name of the document class) is a letter. Default:

```
sub isLetter{
  local($_) = @_;
  m/le?tte?r/;
}
```

- `&preambleHook` : subroutine to add extra bits just before `\begin{document}` for example, the following will detect if you are using the letter class file, and if so, add the `\signature` command:

```
sub preambleHook{
   if ($opt_t eq 'letter')
   {
      &write_tex("\\signature{$author}\n");
   }
}
```

- `&documentHook` : subroutine to add extra bits just before `\\end{document}` for example, the following will add a `\tableofcontents` if the document isn't a letter:

```
sub documentHook{
   unless (&isLetter($opt_t))
   {
      &write_tex("\\tableofcontents\n");
   }
}
```

4 Contact Details

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