Extension to the kulemt class*

Luc Van Eycken

Abstract

The kulemt class provides a general LaTeX class to typeset a KU Leuven master's thesis. This package adds some additional features, such as extra layout settings and extra user commands. But none of these features are required by the guidelines of the Faculty of Engineering Science.

Contents

1 Options for extra layout settings

The kulemtx package provides some options to typeset a thesis with a look similar to the kulemt manual.

`manheadstyles` This package defines the chapter style kulemtman and the heading style kulemtman, which are the styles used by the kulemt manual. The option `manheadstyles` sets both styles.

`mantoc` The option `mantoc` changes the table of contents layout similar to the one used by the kulemt manual.

`kuldate` The option `kuldate` changes the long data formatting for the British language to the conventions used by the KU Leuven: "8 May 2023" instead of "8th May 2023".

`manual` The option `manual` combines the previous options into one. The document preamble of the manual contains the following snippet:

```
\usepackage[manual]{kulemtx}
```

2 Extra user commands

User commands are provided to print configuration data nicely. These commands only work if kulemt is used as the document class. Otherwise strange errors will be generated.

`\ConfigFileName` This variable holds the name of the configuration file. By default it is `kulemt.ini`, but it can be set to a different value by the option `cfgfile` of the kulemt class.

`\ReadConfigFile` This command reads the entire configuration file again.

`\PrintConfigFileDate` This command prints the date set in the configuration file.

`\PrintConfigFileAcYr` This command prints the academic year based on the date set in the configuration file.

`\PrintMastersInfo` `\PrintMastersInfo * {⟨type⟩} {⟨language⟩}`

This command prints the information for a set of masters. The ordering is the same as in the configuration file. The starred version only considers obsolete masters, while the unstarred version considers only non-obsolete masters. If ⟨*type*⟩ is non-empty, only masters with that ⟨*type*⟩ (`initial` or `advanced`) are considered. If ⟨*language*⟩ is non-empty, only masters with that ⟨*language*⟩ (`dutch` or `english`) are considered.

`\ListMastersAndOptions` `\ListMastersAndOptions {⟨type⟩} {⟨language⟩}`

This command prints a sorted itemized list of non-obsolete masters with their non-obsolete options. If ⟨*type*⟩ is non-empty, only masters with that ⟨*type*⟩ (`initial` or `advanced`) are considered. If ⟨*language*⟩ is non-empty, only masters with that ⟨*language*⟩ (`dutch` or `english`) are considered. The ordering is the same as in the configuration file.

`\ListMastersWithOptionType` `\ListMastersWithOptionType {⟨option type⟩} {⟨pre⟩}`

This command prints a sorted itemized list of non-obsolete masters with a given ⟨*option type*⟩ (either `required` or `forbidden`). The list is preceded by the text ⟨*pre*⟩. If no such masters are found, nothing is printed.

3 Compatibility with older versions

The command `\kulemtmanToC` is no longer available. It is replaced by the option `mantoc`.

*This document corresponds to kulemtx v1.0, dated 2025-03-30.

4 Implementation

The namespace kulemtx is claimed. In case you notice that other packages use this prefix too, please contact the author of this class!

```
⟨@@=kulemtx⟩
```

This package assumes that it is used together with the document class kulemt version 2 (or later). So we generate a critical error if this is not the case.

```
\msg_new:nnn {kulemtx} {no_kulemt}
  {
    The~ package~ 'kulemtx'~ can~ only~ be~ used~ with~
    the~ document~ class~ 'kulemt' #1.
  }
\@ifclassloaded {kulemt}
  {
    \@ifclasslater {kulemt} {2024-01-01} {}
      { \msg_critical:nnn {kulemtx} {no_kulemt} {~ version~ 2} }
  }
  { \msg_critical:nnn {kulemtx} {no_kulemt} {} }
```

The kulemt class requires an l3kernel of 2019-04-06, but some functions we need require a more recent version.

```
\cs_if_free:NT \str_compare:eNeTF
  {
    \cs_new:Npn \str_compare:eNeTF #1#2#3
      {
        \if_int_compare:w \tex_strcmp:D {#1} {#3} #2 \c_zero_int
          \prg_return_true:
        \else:
          \prg_return_false:
        \fi:
      }
  }
```

Some functions have been renamed the last couple of years

```
\cs_if_free:NT \str_casefold:n
  {
    \cs_if_exist:NTF \str_foldcase:n
      {
        \cs_set_eq:NN \str_casefold:n \str_foldcase:n
        \cs_set_eq:NN \str_casefold:V \str_foldcase:V
      }
      {
        \cs_set_eq:NN \str_casefold:n \str_fold_case:n
        \cs_set_eq:NN \str_casefold:V \str_fold_case:V
      }
  }
```

4.1 Headings and chapter style option

manheadstyles The option manheadstyles sets the heading styles, including the chapter style, to the ones used by the kulemt manual.

```
\keys_define:nn {kulemtx}
  {
```

```
    manheadstyles .code:n = { \headstyles {kulemtman} },
    manheadstyles .value_forbidden:n = true
  }
```

4.1.1 Heading style kulemtman

A heading style kulemtman is defined. Not only can it be used in the option `manheadstyles` but also together with any memoir based class.

```
\makeheadstyles {kulemtman}
  {
```

First define part title formatting.

```
    \tl_set:Nn \partnamefont  { \normalfont \huge \sffamily }
    \tl_set:Nn \partnumfont   { \normalfont \huge \sffamily }
    \tl_set:Nn \parttitlefont { \normalfont \Huge \sffamily }
```

Chapters are typeset using the kulemtman style.

```
    \chapterstyle {kulemtman}
```

Changing the styling of sections.

```
    \setsecheadstyle       { \Large \sffamily \raggedright }
    \setsubsecheadstyle    { \large \sffamily \raggedright }
    \setsubsubsecheadstyle { \large \sffamily \itshape \raggedright }
```

Paragraph headings use the small caps shape instead of bold with a medium space before them.

```
    \setparaheadstyle  { \normalsize \scshape }
    \setbeforeparaskip { \medskipamount }
  }
```

4.1.2 Chapter style kulemtman

A chapter style kulemtman is defined, based on the BlueBox chapter style. Not only can it be used in the heading style kulemtman but also together with any memoir based class.

```
\makechapterstyle {kulemtman}
  {
    \tl_set:Nn \chapnamefont { \sffamily \large }
    \tl_set:Nn \chapnumfont { \sffamily \Huge }
    \tl_set:Nn \chaptitlefont { \sffamily \raggedright \huge }
    \skip_zero:N \beforechapskip
    \skip_set:Nn \afterchapskip {40pt}
    \tl_clear:N \printchaptername
    \tl_clear:N \chapternamenum
    \tl_clear:N \afterchapternum
    \tl_set:Nn \printchapternum   { \__kulemtx_printchapternum:N \c_true_bool  }
    \tl_set:Nn \printchapternonum { \__kulemtx_printchapternum:N \c_false_bool }
    \cs_set_eq:NN \printchaptertitle \__kulemtx_printchaptertitle:n
  }
```

`\g__kulemtx_wd_num_dim` This global dimension variable stores the width of the last chapter number box. The width is set by `\__kulemtx_printchapternum:N` and can be used lateron by `\__kulemtx_printchaptertitle:n`.

```
\dim_new:N \g__kulemtx_wd_num_dim
```

(*End of definition for* `\g__kulemtx_wd_num_dim`.)

__kulemtx_printchapternum:N This function prints the chapter number box for the kulemtman chapter style. The argument is a boolean, specifying to print the chapter number itself or not.

```
\cs_new_protected:Nn \__kulemtx_printchapternum:N
  {
    \hbox_set:Nn \l_tmpb_box
      {
        \chapnumfont
        \skip_horizontal:n { 8pt + \fboxsep }
        \bool_if:NTF #1 { \use:n } { \hphantom } { \thechapter }
        \skip_horizontal:n { 8pt + \fboxsep }
        \strut
      }
    \box_set_ht:Nn \l_tmpb_box { \box_ht:N \l_tmpb_box + \fboxsep }
    \box_set_dp:Nn \l_tmpb_box { \box_dp:N \l_tmpb_box + \fboxsep + 55pt }
    \dim_gset:Nn \g__kulemtx_wd_num_dim { \box_wd:N \l_tmpb_box }
    \mode_leave_vertical:
    \vbox:n
      {
        \hbox_to_wd:nn { \g__kulemtx_wd_num_dim }
          {
            \hss
            \chapnamefont
            \bool_if:NT #1 { \@chapapp }
            \strut
            \hss
          }
        \hbox:n
          {
            {
              \color[gray]{.8}
              \vrule width \g__kulemtx_wd_num_dim \scan_stop:
            }
            \skip_horizontal:n { -\g__kulemtx_wd_num_dim }
            \box_use_drop:N \l_tmpb_box
          }
      }
  }
```

Since this function depends on the color package for the `\color` command, we require it here.

```
\RequirePackage{color}
```

(*End of definition for* `\__kulemtx_printchapternum:N`.)

__kulemtx_printchaptertitle:n This function prints the chapter title (given in the argument) for the kulemtman chapter style.

```
\cs_new_protected:Nn \__kulemtx_printchaptertitle:n
  {
    \hfill
    \vbox_top:n
      {
        \chaptitlefont
        \dim_sub:Nn \hsize { 12pt + \g__kulemtx_wd_num_dim }
        \hrule height 1pt \scan_stop:
```

```
        \skip_vertical:n {7pt}
        \strut #1 \par
      }
  }
```

(*End of definition for* `\__kulemtx_printchaptertitle:n`.)

4.2 Table of contents option

`mantoc` The option `mantoc` sets the table of contents formatting similar to the one used in the memoir manual.

```
\keys_define:nn {kulemtx}
  {
    mantoc .code:n = { \__kulemtx_manual_toc: },
    mantoc .value_forbidden:n = true
  }
```

`\__kulemtx_manual_toc:` This function reinitializes the necessary parameters for table of contents formatting.

```
\cs_new_protected:Nn \__kulemtx_manual_toc:
  {
    \cs_set_eq:NN \cftchapterfont \sffamily
    \cs_set_eq:NN \cftchapterdotsep \cftdotsep
    \tl_set:Nn \cftchapterleader
      { \normalfont \cftdotfill { \cftchapterdotsep} }
    \tl_clear:N \cftchapterpagefont
    \skip_set:Nn \cftbeforechapterskip { \medskipamount }
    \skip_set:Nn \cftbeforesectionskip { \smallskipamount }
    \settocdepth {subsection}
    \tl_put_left:Nn \cftchapterbreak { \par }
    \tl_set:Nn \cftsubsectionfont { \itshape }
    \cs_set:Npn \l@subsection ##1 ##2
      {
        \skip_set:Nn \leftskip { \cftsubsectionindent }
        \skip_set:Nn \rightskip { \@tocrmarg }
        \skip_set:Nn \parfillskip { \fill }
        \mode_if_horizontal:TF { , \quad } { \noindent }
        \group_begin:
          \cs_set_eq:NN \numberline \use_none:n
          \cftsubsectionfont ##1
        \group_end:
        \nobreakspace \nobreakspace
        \group_begin:
          \cftsubsectionpagefont ##2
        \group_end:
        \ignorespaces
      }
  }
```

(*End of definition for* `\__kulemtx_manual_toc:`.)

4.3 KU Leuven conventions option

kuldate The KU Leuven has decided to go for the British English spelling system for official documents in the English language. However they deviate from it for specifying dates. The option `kuldate` adjusts date printing commands to conform to the KU Leuven rules[1].

```
\keys_define:nn {kulemtx}
  {
    kuldate .code:n =
      {
```

\datebritish (Re)define `\datebritish` in case the language `british` is used with babel. We assume the language is already loaded by the kulemt class and not on the fly in the document.

```
        \cs_set_nopar:Npn \datebritish
          {
            \cs_set_nopar:Npn \today
              {
                \number\day \nobreakspace
                \ifcase \month \or January \or February \or March \or April
                  \or May \or June \or July \or August \or September
                  \or October \or November \or December \fi
                \space \number\year
              }
          }
```

(*End of definition for* `\datebritish`.)

\mkbibdatelong When biblatex is used, `\mkbibdatelong` is redefined for British.

```
        \RequireAtEndPackage {biblatex}
          {
            \DefineBibliographyExtras {british}
              { \cs_set_eq:NN \mkbibdatelong \__kulemtx_mkbibdatelong:nnn }
          }
      },
    kuldate .value_forbidden:n = true
  }
```

A replacement for the British `\mkbibdatelong` of biblatex with KU Leuven conventions.

__kulemtx_mkbibdatelong:nnn

```
\cs_new_protected_nopar:Nn \__kulemtx_mkbibdatelong:nnn
  {
    \iffieldundef {#3}
      {}
      {
        \stripzeros { \thefield {#3} }
        \iffieldundef {#2} {} { \nobreakspace }
      }
    \iffieldundef {#2}
      {}
      {
        \mkbibmonth { \thefield {#2} }
        \iffieldundef {#1} {} { \space }
      }
    \iffieldbibstring {#1}
```

[1] https://www.kuleuven.be/english/language-guide (requires a KU Leuven account to access)

```
      { \bibstring { \thefield {#1} } }
      { \dateeraprintpre {#1} \stripzeros { \thefield {#1} } }
  }
```

(*End of definition for* `\mkbibdatelong` *and* `\__kulemtx_mkbibdatelong:nnn`.)

4.4 Other options

`manual` The option `manual` sets all the options used in the kulemt manual.

```
\keys_define:nn {kulemtx}
  {
    manual .meta:n = { manheadstyles, mantoc, kuldate },
    manual .value_forbidden:n = true
  }
```

Finally process the options.

```
\ProcessKeyOptions \scan_stop:
```

4.5 Extra user commands

The following commands can be used to print information of the configuration file.

`\l__kulemtx_tmpa_seq` An internal sequence variable `\l__kulemtx_tmpa_seq` is made available.

```
\seq_new:N \l__kulemtx_tmpa_seq
```

(*End of definition for* `\l__kulemtx_tmpa_seq`.)

`\ConfigFileName` This makes the configuration file name (set by kulemt) available to the user.

```
\tl_new:N \ConfigFileName
\tl_set_eq:NN \ConfigFileName \l_kulemt_opt_cfgfile_tl
```

(*End of definition for* `\ConfigFileName`. *This variable is documented on page 2.*)

`\ReadConfigFile` (Re)read the entire configuration file.

```
\NewDocumentCommand { \ReadConfigFile } {}
  { \kulemt_read_config_file: }
```

(*End of definition for* `\ReadConfigFile`. *This function is documented on page 2.*)

`\PrintConfigFileDate` This command prints the date mentioned in the configuration file in the format used by `\today`.

```
\NewDocumentCommand { \PrintConfigFileDate } {}
  { \__kulemtx_use_configfile_date:n { \today } }
```

(*End of definition for* `\PrintConfigFileDate`. *This function is documented on page 2.*)

`\__kulemtx_use_configfile_date:n` This function temporarily sets the `\day`, `\month` and `year` to the date mentioned in the configuration file before using with `#1`.

```
\cs_new_protected:Nn \__kulemtx_use_configfile_date:n
  {
    \prop_get:NnNTF \l_kulemt_cfg_prop {date} \l_tmpa_tl
      {
        \exp_last_unbraced:NV \__kulemtx_use_isodate:w \l_tmpa_tl
          ---\q_stop {#1}
      }
      { ??? }
  }
```

(*End of definition for* `\__kulemtx_use_configfile_date:n`.)

`\__kulemtx_use_isodate:w` `\__kulemtx_use_isodate:w` ⟨*ISO data*⟩ `---` `\qstop` {⟨*use it*⟩}
This function reads an ⟨*ISO date*⟩ and lets you ⟨*use it*⟩.

```
\cs_new_protected:Npn \__kulemtx_use_isodate:w #1-#2-#3-#4 \q_stop #5
  {
    \group_begin:
      \int_set:Nn \day {#3}
      \int_set:Nn \month {#2}
      \int_set:Nn \year {#1}
      #5
    \group_end:
  }
```

(*End of definition for* `\__kulemtx_use_isodate:w`.)

`\PrintConfigFileAcYr` This command prints the academic year based on the date mentioned in the configuration file. For a configuration date before 1 September we assume the configuration file describes data for the academic year which ends in that year otherwise data for the academic year which starts in that year.

```
\NewDocumentCommand { \PrintConfigFileAcYr } {}
  {
    \__kulemtx_use_configfile_date:n
      {
        \int_set:Nn \l_tmpa_int
          { \year \int_compare:nNnT { \month } < {9} { - 1 } }
        \int_use:N \l_tmpa_int \, -- \, \int_eval:n { \l_tmpa_int + 1 }
      }
  }
```

(*End of definition for* `\PrintConfigFileAcYr`. *This function is documented on page 2.*)

`\PrintMastersInfo` `\PrintMastersInfo` `*` {⟨*type*⟩} {⟨*language*⟩}
Print the detailed information of non-obsolete masters, restricted to ⟨*type*⟩ (if non-empty) and ⟨*language*⟩ (if non-empty). The sequence is the same as in the configuration file. The starred version considers obsolete instead of non-obsolete masters.

```
\NewDocumentCommand { \PrintMastersInfo } { s m m }
  {
    \__kulemtx_handle_master:nnnn {#1} {#2} {#3}
      { \__kulemtx_print_masterinfo: }
  }
```

(*End of definition for* `\PrintMastersInfo`. *This function is documented on page 2.*)

`\__kulemtx_handle_master:nnnn` This function iterates over a restricted set of masters and uses `#4` on each of them. The master abbreviation is available as `##1`.
Depending on the boolean `#1` restrict the masters to obsolete (if true) or to non-obsolete (if false) ones. A non-empty `#2` restricts the masters to that type. A non-empty `#3` restricts the masters to that language.

```
\cs_new_protected:Nn \__kulemtx_handle_master:nnnn
  {
    \seq_map_inline:Nn \l_kulemt_masters_seq
      {
        \IfBooleanTF {#1}
```

```
          { \kulemt_master_obsolete_item:nT }
          { \kulemt_master_obsolete_item:nF }
            {##1}
            {
              \kulemt_set_master:n {##1}
              \tl_if_empty:nTF {#2}
                { \str_clear:N \l_tmpa_str }
                { \kulemt_master_get_required_item:nN {type} \l_tmpa_str }
              \tl_if_empty:nTF {#3}
                { \str_clear:N \l_tmpb_str }
                { \kulemt_master_get_required_item:nN {language} \l_tmpb_str }
              \bool_lazy_and:nnT
                { \str_if_eq_p:Vn \l_tmpa_str {#2} }
                { \str_if_eq_p:Vn \l_tmpb_str {#3} }
                { #4 }
            }
      }
  }
```

(*End of definition for* `\__kulemtx_handle_master:nnnn`.)

`\__kulemtx_print_masterinfo:` Function to print the information of the current master.

```
\cs_new_protected:Nn \__kulemtx_print_masterinfo:
  {
    \addvspace{\medskipamount}
    \skip_zero:N \parindent
    \sidepar
      {
        \raggedleft
        \texttt { \kulemt_master_print_required_item:n {abbreviation} }
      }
    \textsc { \kulemt_master_print_required_item:n {name} }
    \par \nobreak
    \kulemt_master_get_required_item:nN {language} \l_tmpa_str
    \kulemt_titlecase_first:V \l_tmpa_str
    \c_space_tl master
    \kulemt_master_get_faculty_name:N \l_tmpa_tl
    \tl_if_empty:NF \l_tmpa_tl { ~ of~ the~ \l_tmpa_tl }
    . \par \nobreak
    \__kulemtx_hangfrom:nn { Contact~ info:~ }
      { \kulemt_master_print_required_item:n {contact.address} }
    \nobreak
    \kulemt_master_get_item_or_fallback:nnN {option} {} \l_tmpa_tl
    \str_case:VnF \l_tmpa_tl
      {
        {required}  { A~ master's~ programme~ option~ must~ be~ specified. }
        {forbidden} { The~ master's~ programme~ doesn't~ allow~ you~ to~
                      mention~ an~ option. }
      }
      { The~ master's~ programme~ doesn't~ require~ you~ to~ mention~
        an~ option. }
    \par
    \kulemt_master_get_item:nN {options} \l_tmpb_seq
    \seq_if_empty:NF \l_tmpb_seq
```

```
      {
        \nobreak
        Known~ master's~ programme~ option~ abbreviations:
        \par
        \seq_clear:N \l_tmpa_seq
        \seq_map_inline:Nn \l_tmpb_seq
          {
            \kulemt_master_obsolete_item:nTF {##1}
              { \seq_put_right:Nn \l_tmpa_seq {##1} }
              {
                \nobreak \noindent \enskip
                \__kulemtx_print_option:n {##1}
                \par
              }
          }
        \seq_if_empty:NF \l_tmpa_seq
          {
            \nobreak
            \__kulemtx_hangfrom:nn { \quad obsolete: }
              {
                \seq_pop_left:NN \l_tmpa_seq \l_tmpa_tl
                \exp_args:NV \__kulemtx_print_option:n \l_tmpa_tl
                \seq_map_inline:Nn \l_tmpa_seq
                  { \\* \strut \__kulemtx_print_option:n {##1} }
              }
          }
      }
  }
```

(*End of definition for* `\__kulemtx_print_masterinfo:`.)

`\__kulemtx_hangfrom:nn` Function to typeset `#2` hanging from `#1`.

```
\cs_new_protected:Nn \__kulemtx_hangfrom:nn
  {
    \hbox_set:Nn \l_tmpa_box {#1}
    \dim_set:Nn \hangindent { \box_wd:N \l_tmpa_box }
    \noindent \box_use_drop:N \l_tmpa_box
    #2 \par
  }
```

(*End of definition for* `\__kulemtx_hangfrom:nn`.)

`\__kulemtx_print_option:n` Function to typeset master option `#1` as part of a list.

```
\cs_new_protected:Nn \__kulemtx_print_option:n
  {
    \enskip \textbf{--} \enskip \texttt{#1} \enskip
    (``\kulemt_master_print_required_item:n { option. #1 }'')
  }
```

(*End of definition for* `\__kulemtx_print_option:n`.)

`\ListMastersAndOptions` `\ListMastersAndOptions {`⟨*type*⟩`} {`⟨*language*⟩`}`
List the non-obsolete masters with their non-obsolete options. The masters are restricted to⟨*type*⟩ (if non-empty) and ⟨*language*⟩ (if non-empty).
The masters as well as the options are sorted alphabetically.

```
\NewDocumentCommand { \ListMastersAndOptions } { m m }
  {
    \seq_clear:N \l_tmpa_seq
    \__kulemtx_handle_master:nnnn { \BooleanFalse } {#1} {#2}
      { \seq_put_right:Nn \l_tmpa_seq {##1} }
    \seq_if_empty:NF \l_tmpa_seq
      {
        \seq_sort:Nn \l_tmpa_seq
          {
            \kulemt_set_master:n {##1}
            \kulemt_master_get_item:nN {name} \l_tmpa_tl
            \kulemt_set_master:n {##2}
            \kulemt_master_get_item:nN {name} \l_tmpb_tl
            \str_compare:eNeTF
              { \str_casefold:V \l_tmpa_tl } > { \str_casefold:V \l_tmpb_tl }
              { \sort_return_swapped: }
              { \sort_return_same: }
          }
        \begin{itemize}
          \seq_map_inline:Nn \l_tmpa_seq
            {
              \kulemt_set_master:n {##1}
              \item \kulemt_master_print_required_item:n {name} \par
                \__kulemtx_print_option_names:
            }
        \end{itemize}
      }
  }
```

(*End of definition for* `\ListMastersAndOptions`. *This function is documented on page* 2.)

`\__kulemtx_print_option_names:` Function to typeset a sorted list of non-obsolete options of the current master.

```
\cs_new_protected:Nn \__kulemtx_print_option_names:
  {
    \kulemt_master_get_item:nN {options} \l_tmpb_seq
    \seq_if_empty:NF \l_tmpb_seq
      {
        \seq_clear:N \l__kulemtx_tmpa_seq
        \seq_map_inline:Nn \l_tmpb_seq
          {
            \kulemt_master_obsolete_item:nF {##1}
              {
                \kulemt_master_get_item:nN { option.##1 } \l_tmpa_tl
                \seq_put_right:NV \l__kulemtx_tmpa_seq \l_tmpa_tl }
          }
        \seq_if_empty:NF \l__kulemtx_tmpa_seq
          {
            \seq_sort:Nn \l__kulemtx_tmpa_seq
              {
                \str_compare:eNeTF
                  { \str_casefold:n {##1} } > { \str_casefold:n {##2} }
                  { \sort_return_swapped: }
                  { \sort_return_same: }
              }
```

```
            \begin{itemize}
            \item \seq_use:Nn \l__kulemtx_tmpa_seq { \item }
            \end{itemize}
          }
      }
  }
```

(*End of definition for* `\__kulemtx_print_option_names:`.)

`\ListMastersWithOptionType` `\ListMastersWithOptionType {`⟨*option type*⟩`} {`⟨*pre*⟩`}`

Command to print ⟨*pre*⟩ followed by a sortedlist of masters with a given ⟨*option type*⟩. Nothing is printed if no masters are found.

```
\NewDocumentCommand {\ListMastersWithOptionType} { m m }
  {
    \seq_clear:N \l__kulemtx_tmpa_seq
    \seq_map_inline:Nn \l_kulemt_masters_seq
      {
        \kulemt_set_master:n {##1}
        \kulemt_master_get_item_or_fallback:nnN {option} {?} \l_tmpa_tl
        \str_if_eq:VnT \l_tmpa_tl {#1}
          {
            \kulemt_master_get_required_item:nN {name} \l_tmpa_tl
            \seq_put_right:NV \l__kulemtx_tmpa_seq \l_tmpa_tl
          }
      }
    \seq_if_empty:NF \l__kulemtx_tmpa_seq
      {
        \seq_sort:Nn \l__kulemtx_tmpa_seq
          {
            \str_compare:eNeTF
              { \str_casefold:n {##1} } > { \str_casefold:n {##2} }
              { \sort_return_swapped: }
              { \sort_return_same: }
          }
        #2
        \begin{itemize}
        \item \seq_use:Nn \l__kulemtx_tmpa_seq { \item }
        \end{itemize}
      }
  }
```

(*End of definition for* `\ListMastersWithOptionType`. *This function is documented on page* 2.)

Index

The italic numbers denote the pages where the corresponding entry is described, numbers underlined point to the definition, all others indicate the places where it is used.