HUBerlin-bundle

Documents and Documentations for LATEX at the Humboldt-Universität zu Berlin (unofficial)

»Documentation must be regarded as an integral part of the process of design and coding. A good programming language will encourage and assist the programmer to write clear, self-documenting code, and even perhaps to develop and display a pleasant style of writing.« [2, p. 195]



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1 Introduction

With this (unofficial) bundle you have several documents which are designed according to the coporate design of the Humboldt-Universität zu Berlin.

Following documents or documentclasses are available:

• letter (HUBerlin-letter.cls); via .tex and .md

1.1 Installation of the bundle

HUBerlin is part of the distributions MiKTeX and TeXLive – thus, you can easily install it using the respective package manager. If you would like to install HUBerlin—bundle into your local folder manually, do the following: Go to your terminal, browse to the folder of this bundle and run make install

If you are using macOS you might be asked for your user account password for the installation. Further options of this makefile are:

- clean: deletes all unnecessary files
- cleanbundle: deletes all files except .dtx, .md. You will get the plain version of this bundle. This might be helpful if you send the bundle to someone else.
- ctan: this will create a zip file which can be used to send to CTAN.
- files: will only create the files from the .dtx-scratch.
- uninstall: will erase the locally installed files.

This bundle is constantly updated. For hints, errors or suggestions use the GitHub repository https://github.com/LukasCBossert/HUBerlin-bundle.

1.2 Changelog

All notable changes to this project will be documented in the README.md. This project **does not** adhere to Semantic Versioning. The markdown syntax is inspired by the conventions proposed by keepachangelog.com.

1.2.1 1.0.0 (2019-06-21)

First release with a document class for letter.

1.3 Copyright

Various parts of this bundle have different copyrights.

1.3.1 Boilerplate / markdown-template

This template, forked from the pandoc-templates and https://github.com/JensErat/pandoc-scrlttr2 is dual-licensed, under both the GPL (v_2 or higher, same as pandoc) and the BSD 3-clause license (included below).

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2 Preambel

POSSIBILITY OF SUCH DAMAGE.

This bundle consists of various files which are either generated by the core file (.dtx) or are part of the basic structure of this bundle. You can easily pick up the basic file structure from fig. 2.1.

Figure 2.1: Structure of HUBerlin bundle

When you run the makefile you get all these various files described above.

Guideline for Users

```
1 (*example)
```

3 Letter

19 }

We give an example on how to create a letter.

```
3.1 .1co-file
     2 (*ICO)
   This is the file you load into your .tex letter. The information you provide here do normally not
   change from letter to letter. That's why we put it in a separate file.
     The first line should provide this information.
     3 \ProvidesFile{HUBerlin-letter.lco}
   Now we set up the personal data.
     We start with the name of the sender.
     4 \setkomavar{fromname}
   you can also write the position of this person in brackets, this is optional; [\langle position \rangle]
     5 [Wissenschaftlicher Mitarbeiter]
   But you need to give a name:
     6 {Dr. Max Mustermann}
   The mail address
     7 \setkomavar{fromemail} {max.mustermann@hu-berlin.de}
   For phone and fax number you only need to type the last digits.
     8 \setkomavar{fromphone} {1234}
   If you don't have a fax (or a phone), leave it empty. Do not delete it.
     9\setkomavar{fromfax}{5678}
   And finally the URL.
     10 \setkomavar{fromurl}{www.hu-berlin.de}
   If your backaddress is to long – it will be set up automatically – you can redefine it.
     11 \setkomavar{backaddress}{HU Berlin\\
     12 Unter den Linden 6\\
     13 D-10099 Berlin}
   Selfexplaining: the faculty.
     14 \setkomavar{faculty}{%
     15 Philosophische Fakultät
     16 }
    17 \setkomavar{institute}{%
        \mbox{Institut für Briefvorlagen}
```

```
20 \setkomavar{institute.additional}{Here you can add more text.}
21 \setkomavar{institute.head}[Dekanin]{Prof. Dr. Maike Musterfrau}
22 \setkomavar{institute.head.mail}{maike.musterfrau@hu-berlin.de}
23 \setkomavar{local}{%}
24    Mohrenstraße 40/41\\
25    Zimmer X\\
26    D-10117   Berlin}
27 \setkomavar{connections}{U Bahnhof Hausvogteiplatz (U2)}
28 \setkomavar{accessibility}{Hausvogteiplatz}
29 \setkomavar{signature}{%}
30   \usekomavar{institute.head} --
31   \usekomavarar{fromname}
32 }
33 \( \loo \)
```

```
Example 1
   \ProvidesFile{HUBerlin-letter.lco}
   \setkomavar{fromname}
   [Wissenschaftlicher Mitarbeiter]
   {Dr. Max Mustermann}
   \setkomavar{fromemail} {max.mustermann@hu-berlin.de}
   \setkomavar{fromphone} {1234}
   \setkomavar{fromfax}{5678}
   \setkomavar{fromurl} {www.hu-berlin.de}
   \setkomavar{backaddress}{HU Berlin\\
   Unter den Linden 6\\
   D-10099 Berlin}
11
   \setkomavar{faculty}{%
   Philosophische Fakultät
   \setkomavar{institute}{%
     \mbox{Institut für Briefvorlagen}
17
   \setkomavar{institute.additional}{Here you can add more
     text.}
   \setkomavar{institute.head} [Dekanin] {Prof. Dr. Maike
      Musterfrau}
   \setkomavar{institute.head.mail}{maike.musterfrau@hu-berlin.de}
   \setkomavar{local}{%
    Mohrenstraße 40/41\\
     Zimmer X\\
23
     D-10117 Berlin}
   \setkomavar{connections}{U Bahnhof Hausvogteiplatz (U2)}
   \setkomavar{accessibility}{Hausvogteiplatz}
   \setkomavar{signature} {%
     \usekomavar{institute.head} --
     \usekomavar{fromname}
   응응
```

```
3.2 .tex-file
     34 (*letter)
     35 \documentclass{HUBerlin-letter}
   Now we load the personal data-file which has the ending .lco.
     36 \LoadLetterOption{HUBerlin-letter}
   If you have the HU font installed on your computer, you can load it, too:
     37 % \setmainfont[%
           BoldFont=ScalaSans-BoldLF,
     39 응
           Numbers=OldStyle]{ScalaSans-RegularLF}
   Now following the reference information
     40 \setkomavar{myref}{}
     41 \setkomavar{yourref}{}
     42 \setkomavar{yourmail}{}
     43 \setkomavar{customer}{}
     44 \setkomavar{invoice}{}
     45 \setkomavar{subject} {Betreff}
     46 \usepackage{blindtext}
   We close the preamble and start the letter
     47 \begin{document}
   The address is written as { ⟨address⟩ }
     48 \begin{letter}{%
        Erika Musterfrau\\
        Musterweg 43\\
        56789 Musterhausen%
   Closing now again.
     52 }
     53 \opening{Sehr geehrte Frau Musterfrau,}
   This is just some blindtext.
     54 \blindtext[2]
     55 \clearpage
     56 \blindtext
   Closing letter
     57 \closing{Mit freundlichen Grüßen}
   If you still have something to say/write.
     58 \ps PS: \dots
   Any amendment.
     59 \encl{%
     60 Anlage 1 \\
        Anlage 2%
```

62 }

This is the distribution

```
63 \cc{%
64  Verteiler 1\\
65  Verteiler 2%
66}
```

That's it. Done.

```
67 \end{letter}
68 \end{document}
```

And how does a example letter looks like?

```
Example 2
   \documentclass{HUBerlin-letter}
   \LoadLetterOption{HUBerlin-letter}
   \setkomavar{myref}{}
   \setkomavar{yourref}{}
   \setkomavar{yourmail}{}
   \setkomavar{customer}{}
   \setkomavar{invoice}{}
   \setkomavar{subject}{Betreff}
   \usepackage{blindtext}
   \begin{document}
   \begin{letter}{%
     Erika Musterfrau\\
     Musterweg 43\\
     56789 Musterhausen%
   \opening{Sehr geehrte Frau Musterfrau,}
   \blindtext[2]
   \clearpage
   \blindtext
   \closing{Mit freundlichen Grüßen}
20
   \ps PS: \dots
   \encl{%
     Anlage 1\\
     Anlage 2%
   \cc{%
     Verteiler 1\\
27
     Verteiler 2%
   \end{letter}
   \end{document}
```

69 (/letter)

3.3 Letter from markdown

```
70 (*letter-md)
```

You need to have pandoc installed on your computer. To create letters via markdown and pandoc run from the command line:

!

pandoc –pdf-engine=lualatex –template HUBerlin-letter-template.latex -o YOUR-FILE.pdf YOUR-FILE.md

The .md file needs a section with metadata.

It starts and ends with three ---. All necessary metadata information are listed inbetween.

```
71 ---
72 documentclass: HUBerlin-letter
```

The following will load the .lco-file, you replace that with the name of your .lco-file.

```
73 sender: HUBerlin-letter
```

You should also tell a short subject

```
74 subject: Short description
```

The information for the addressee has to be written like this:

```
75 addressee:
76 - Alexander von Humboldt
77 - Unter den Linden 6
78 - 10099 Berlin
79 ---
```

You find a list with possible options for this metadata information header below.

Now the content of your letter

80 Thank you very much for your letter.

Let's see how this example file looks like:

```
documentclass: HUBerlin-letter
sender: HUBerlin-letter
subject: Short description
addressee:
- Alexander von Humboldt
- Unter den Linden 6
- 10099 Berlin
---
Thank you very much for your letter.
```

81 (/letter-md)

Here we close the example files.

```
82 (/example)
```

Guide for Coders

```
_1 \langle *cls \rangle
```

4 Letter

```
2 (*letter)
```

We load scrlttr2 [4] which is the documentclass for letters. Furthermore we set up some options.

```
3 \LoadClass[%
4 fontsize=1opt,
5 version=last,
```

If there is anything to debug, you can enable visualize

```
6 % visualize
7]{scrlttr2}
```

For debugging also uncomment the $\showfields{\langle fields \rangle}$ commanand.

```
8% \showfields{head, address, location, refline, foot}
```

Since we do want to compile with Lual-TFX, we make sure that it will be compilable only with that.

```
9 \RequirePackage{ifluatex, luatex85}
```

```
Now a fix.1
```

```
10 \ifx\directlua\relax
11 \let\directlua\UnDeFiNeD
12 \fi
13 \ifluatex
14 \else
15 \GenericError{HUBerlin}%
16 {Please use 'LuaLaTeX' as Compiler.^^J I abort here.}
17 \fi
```

We do not need many packages. The ones we need are loaded now.

```
18 \RequirePackage[english, ngerman] {babel}
```

Common package for handling figures is graphicx [8].

```
19 \RequirePackage{graphicx}
```

For loading fonts.

```
20 \RequirePackage{fontspec}
```

Verdana font as main font.

```
21 \setmainfont{Verdana}
```

For the wheelchair symbol we load marvosym [1]

```
22 \RequirePackage{marvosym}
```

To get the HU logo on the second and following pages we load scrlayer-scrpage [3].²

```
1 https://tex.stackexchange.com/a/75065
2 https://tex.stackexchange.com/a/495258/98739
```

```
23 \RequirePackage{scrlayer-scrpage}
  24 \clearpairofpagestyles
  25 \DeclareNewLayer[
  26 foreground,
  27 voffset=\useplength{firstheadvpos},
  28 hoffset=\useplength{firstheadhpos},
  29 width=\useplength{firstheadwidth},
  30 mode=picture,
  31 contents=\putUL{\raisebox{-\height}{\usekomavar{firsthead}}}}
  32 ] {likefirstpage.head}
  33 \AddLayersToPageStyle{scrheadings}{likefirstpage.head}
  34 \DeclareNewLayer[
  35 foreground,
  36 align=r,
  37 voffset=\useplength{locvpos},
  38 hoffset=\paperwidth-\useplength{lochpos},
  39 width=\useplength{locwidth},
  40 height=\useplength{locheight},
  41 contents=\usekomavar{nextlocation},
  42 %pretocontents=\layercontentsmeasure% to show the position of the layer
  43 ] {likefirstpage.loc}
  44 \AddLayersToPageStyle{scrheadings}{likefirstpage.head,likefirstpage.loc}
 Now we apply the code for following pages.
  45 \newkomavar{nextlocation}
  46 \setkomavar{nextlocation} {%
  47 \raggedright
     \fontsize{7}{8.5}\selectfont
  49
      \pagemark
  50 }
 For better adjustments of the layout we load geometry [9].
  51 \RequirePackage{geometry}
  52 \ geometry { %
  53 a4paper
  54 ,left
                     =25mm
  55 , bottom
                     =1 6mm
  56 , foot
                       =4mm
  57 ,top
                       =77mm
  <sub>58</sub> , headheight
                     =15pt
                    =117mm
  59 , textwidth
  60 , marginparsep =omm
  61 , marginparwidth = omm
  62 }
 Main Text and signature should be raggedright.
  63 \renewcommand* { \raggedsignature } { \raggedright }
  64 \raggedright
 We also want to put the enclosures at the bottom of the page.<sup>3</sup>
  65 \def\stopletter{}
  66 \let\enclold\encl
  67 \renewcommand\encl[1] {\vskipoptplus1filll\enclold{#1}}
3 https://tex.stackexchange.com/questions/77991/put-the-encl-at-the-bottom-of-the-page-lettre-cl
```

```
We define new komavars.
```

```
First the possibility to name the faculty,
```

```
68 \newkomavar{faculty}
```

```
69 \newkomafont {faculty} {\bfseries\fontsize{8.5}{10}\selectfont}
```

then the institute

```
70 \newkomavar{institute}
71 \newkomafont{institute}{\fontsize{8.5}{10}\selectfont}
```

and further fields for information.

```
72 \newkomavar{institute.additional}
```

We pass the name of the head of the institute.

```
73 \newkomafont{institute.head} {\bfseries}
74 \newkomavar{institute.head} %
```

Its position will be written as the optional argument.

There is even the possibility to print the email-address onto the letter.

```
75 \newkomavar{institute.head.mail}%
```

Since there are many buildings with offices we tell where to find the sender

```
76 \newkomavar{local}
77 \setkomavar*{local}{Sitz:}
```

and how to get there.

```
78 \newkomavar{connections}
79 \setkomavar*{connections} {Verkehrsverbindungen:}
```

Furthermore we inform about office hours

```
80 \newkomavar{officehours}
81 \setkomavar*{officehours}{Sprechzeiten:}
```

and if there is accessibility for wheelchairs etc.

```
82 \newkomavar{accessibility}
83 \setkomavar*{accessibility}{{\large\reflectbox{\Wheelchair}} Eingang:}
84 \newkomavar{bank}
85 \setkomavar*{bank}{Bankverbindung:}
86 \setkomavar{bank}{Deutsche Bank PGK AG}
87 \newkomavar{IBAN}
88 \setkomavar{IBAN} {\mbox{IBAN DE95 1007 0848 0512 6206 01}}
89 \newkomavar{BIC}
90 \setkomavar{BIC} {BIC DEUTDEDB110}
```

Now we set the location field, which is the section on the right with additional information:

```
91\setkomavar{location}{%
```

First anything regarding the font

```
92 \raggedright
93 \fontsize{7}{8.5}\selectfont
94 % \begin{macrocode}
95 % and for the section of faculty, institute etc. we use \env{minipage}
96 % \begin{macrocode}
97 \begin{minipage}[t][64mm]{\useplength{locwidth}}
```

then the faculty

```
98 {\usekomafont{faculty}%
```

```
\usekomavar{faculty}\\[1\baselineskip]}
 99
and the institute.
     {\usekomafont\{institute\} \setminus \{usekomavar\{institute\} \setminus \{1 \setminus baselineskip\}\}}
Now anything else regarding the institute.
 101 \ifkomavarempty{institute.additional}
     {\usekomavar{institute.additional}\\[1\baselineskip]}
103
What follows is the head of institute and its position name.
104 \ifkomavarempty{institute.head}
105 {}
106 {{\usekomafont{institute.head}}%
    \usekomavar{institute.head}}\\%
108 \usekomavar*{institute.head}}
We close this section and the minipage.
109 \end{minipage}
Let's turn to further information.
 For example date:
     \textbf{\usekomavar*{date}}\\
     \usekomavar{date}\par
and the sender of the letter.
 112 \ifkomavarempty{fromname}
 113 {}
 114 {\textbf{\usekomavar*{fromname}}\\
    \usekomavar{fromname}\par}
And the reference of correspondence.
 116 \ifkomavarempty{myref}
117 {}
 118 {\textbf{\usekomavar*{myref}}\\
    \usekomavar{myref}\par}
To complete this template we provide the possibility to name further reference fields.
120 \ifkomavarempty{yourref}
 121 {}
122 {\textbf{\usekomavar*{yourref}}\\
123 \usekomavar{yourref}\par}
124 \ifkomavarempty{yourmail}
125 {}
126 {\textbf{\usekomavar*{yourmail}}\\
    \usekomavar{yourmail}\par}
128 \ifkomavarempty{customer}
130 {\textbf{\usekomavar*{customer}}\\
 131 \usekomavar{customer}\par}
132 \ifkomavarempty{invoice}
133 {}
134 {\textbf{\usekomavar*{invoice}}\\
 135 \usekomavar{invoice}\par}
```

```
\textbf{\usekomavar*{fromaddress}}\\
     \usekomavar{fromaddress}
     \ifkomavarempty{fromphone}
138
        {\par}
139
        {\\\usekomavar*{fromphone}\usekomavar{fromphone}
140
         \ifkomavarempty{fromfax}
        {\par}
142
        {\\}}
143
     \ifkomavarempty{fromfax}
144
        { }
 145
        {\usekomavar*{fromfax}\usekomavar{fromfax}\par}
Next, emails and url:
147 \ifkomavarempty{institute.head.mail}
148
     {\usekomavar{institute.head.mail}
149
     \ifkomavarempty{fromemail}
     {\ifkomavarempty{fromurl}
      {\par}
 152
      { \ \ } }
 153
     { \ \ } }
154
 155 \ifkomavarempty{fromemail}
     {\usekomavar{fromemail}
157
    \ifkomavarempty{fromurl}
 158
    {\par}
159
     { \ \ } }
 160
 161 \ifkomavarempty{fromurl}
     {\usekomavar{fromurl}\par}
 163
Now the actual location of the sender
164 \ifkomavarempty{local}
165
    { }
     {\textbf{\usekomavar*{local}}\\
 166
     \usekomavar{local}\par}
The last information section should be pinned to the bottom.
168 \ Vfill
Inform your addressee about the connection possibilities.
169 \ifkomavarempty{connections}
170
     {\textbf{\usekomavar*{connections}}\\
 171
     \usekomavar{connections}\par}
173 \ifkomavarempty{officehours}
 174
     {\textbf{\usekomavar*{officehours}}\\
 175
     \usekomavar{officehours}\par}
If there is a barrier free entrance, tell it.
177 \ifkomavarempty{accessibility}
```

```
178 {}
179 {\textbf{\usekomavar*{accessibility}}\\
180 \usekomavar{accessibility}\par}
And last the bank connection
181 \ifkomavarempty{bank}
182 {}
183 {\textbf{\usekomavar*{bank}}\\
184 \usekomavar{bank}\\
185 \usekomavar{IBAN}\\
186 \usekomavar{BIC}
187 }
Finally we close \setkomavar{{location}}
```

100)

To fulfill the Corporate Design rules we adjust a few things.

```
189 \KOMAoptions{%
190    numericaldate =true
191   ,refline =nodate
192   ,backaddress =plain
193   ,parskip =half-
194 }
```

Redefining length.

```
195 \setplength{refvpos}{110mm}
196 \setplength{refaftervskip}{opt}
197 \setplength{toaddrhpos}{25mm}
198 \setplength{firstheadhpos}{\useplength{toaddrhpos}}
199 \setplength{lochpos}{15mm}
200 \setplength{locvpos}{\useplength{toaddrvpos}}
201 \addtoplength{locvpos}{.75 \baselineskip}
202 \setplength{locwidth}{45mm}
203 \setplength{locheight}{232mm}
```

Now resetting or pre-defining some variables.

First we set the head of the first page.

You need to have the logo of the HU stored on your computer!

```
204 \setkomavar{firsthead}{%
205 \includegraphics[width=148mm]{HUBerlin-logo.png}%
206 }
207 \setkomavar{backaddressseparator}{~\textbar~}
208 \setkomavar{fromphone}{0000}
209 \setkomavar*{fromphone}{Telefon +49 [30] 2093-}
210 \setkomavar{fromfax}{0000}
211 \setkomavar*{fromfax}{Telefax +49 [30] 2093-}
212 \setkomavar*{fromaddress}{Postanschrift:}
213 \setkomavar{fromaddress}{%
214 Humboldt-Universität zu Berlin\\
215 Unter den Linden 6\\
```

```
216 D-10099 Berlin}
217 \setkomavar*{date} {Datum:}
218 \setkomavar*{fromname}{Bearbeiter:}
219 \setkomavar*{myref}{Geschäftszeichen:}
220 \setkomavar*{enclseparator}{Anlage}
221 \setkomavar*{ccseparator}{Kopie an}
222 % \RequirePackage{hyperref}
223 % \AtBeginDocument { {
224 % \usekomavar[\def\author] {fromname}
225 % \usekomavar[\def\subject] {subject}
     \hypersetup{%
227 % pdftitle
                              = {\subject},
        pdfauthor
                             = \{ \{ author \}, \}
228 %
       pdfsubject
                             = {\subject},
= {\author, \subject},
229 응
       pdfkeywords
230 %
       pdflang
231 %
                             = de,
232 % pdfdisplaydoctitle = true,
233 % colorlinks = true,
234 % plainpages = false
                              = false,
      hypertexnames = false,
235 응
236 %
        unicode,
237 % }
238 % } }
_{239}\left</\text{letter}\right>
240 (/cls)
241 (*template)
```

5 Boilerplate / Template for letters

```
242 \*letter-md\>
243 \documentclass{HUBerlin-letter}

We predefine two variables.
244 \newkomavar{opening}
245 \newkomavar{closing}
246 \setkomavar{opening}{Sehr geehrte Damen und Herren}
247 \setkomavar{closing}{Mit freundlichen Grüßen}

248 $for(letteroption)$
249 \LoadLetterOption{$letteroption$}
250 $endfor$
```

```
251 $if (sender) $\LoadLetterOption{$sender$}$endif$
252 $if(addresseeimage)$\setkomavar{addresseeimage}{$addresseeimage$}$endif$
253 $if (backaddress) $\setkomavar{backaddress} {$backaddress$} \KOMAoptions{backaddress=t.
255 $if(customer)$\setkomavar{customer}{$customer$}$endif$
256 $if (date) $\setkomavar{date}{$date$}$endif$
257 $if(fromaddress)$\setkomavar{fromaddress}{$fromaddress}$$endif$
258 $if(frombank) $\setkomavar{frombank}{$frombank$}$endif$
259 $if(fromemail) $\setkomavar{fromemail} {\final fromemail \} \KOMAoptions {\fromemail = true} \frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac
260 \% (from fax) \% set komavar {from fax} {\% from fax} \ KOMA options {from fax=true} \% end if \%
261 $if(fromlogo) $\setkomavar{fromlogo}{$fromlogo$}\KOMAoptions{fromlogo=true}$endif$
 \textbf{262} \ \texttt{Sif(frommobilephone)} \\ \texttt{Setkomavar\{frommobilephone\}} \\ \texttt{SfrommobilephoneS} \\ \texttt{NOMAoptions\{frommobilephoneS\}} \\ \texttt{Softantial} \\ \texttt{Softantial}
263 Sif(fromname) S \setminus fromname \}  SendifS
265 $if(fromurl) $\setkomavar{fromurl} {$fromurl$} \KOMAoptions{fromurl=true}$endif$
266 $if(fromzipcode) $\setkomavar{fromzipcode}}{$fromzipcode$}$endif$
267 $if(invoice) $\setkomavar{invoice}{$invoice$}$endif$
268 $if (location) $\setkomavar{location} {$location$} $endif$
269 $if (myref) $\setkomavar{myref} {$myref$}$endif$
270 f(myrefname) \ \setkomavar* \{myref} \{myrefname\}\$ endif\$
271 $if(place)$\setkomavar{place}{$place$}$endif$
272 $if(PPcode)$\setkomavar{PPcode}{$PPcode$}$endif$
273 $if(signature) $\setkomavar{signature} {\$signature$} $\endif$
274 $if(specialmail)$\setkomavar{specialmail}{$specialmail$}$endif$
275 $if(subject)$\setkomavar{subject}{$subject$}$endif$
276 $if(title)$\setkomavar{title}{$title$}$endif$
277 $if(yourmail)$\setkomavar{yourmail}{$yourmail$}$endif$
278 $if (yourref) $\setkomavar{yourref}{$yourref$}$endif$
279 $if(opening)$\setkomavar{opening}{$opening$}$endif$
280 $if (closing) $\setkomavar{closing} {$closing$}$endif$
```

Ok, let's sum up the possible options you can use to pass data to the letter:

- addresseeimage
- backaddress
- customer
- date
- fromaddress
- frombank
- fromemail
- fromfax
- fromlogo
- frommobilephone
- fromname
- fromphone
- fromurl
- fromzipcode
- invoice
- location
- myref
- myrefname

- place
- PPcode
- signature
- specialmail

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- subject
- title
- yourmail
- yourref
- opening
- closing
- firstfoot

Sometimes you might not have an addressee – we are checking this, too.

```
282 $if(addressee)$
283 $else$
284 \KOMAoptions{addrfield=false}
285 $endif$
```

Now the actual content of the letter

```
286 \begin{document}
287 \begin{letter}{%
288 $for (addressee) $
289 $addressee$$sep$\\
290 $endfor$
291 }
292 $for (include-before) $
293 $include-before$
294 $endfor$
295 \opening{\usekomavar{opening}}
296 $body$
297 \closing{\usekomavar{closing}}
298 \% (ps) \% ps{\$ps\$} \endif
299 $if (encl) $\encl{$encl$}$endif$
300 $for(include-after) $$include-after$$endfor$
301 \end{letter}
302 \end{document}
303 (/letter-md)
304 (/template)
```

6 Documentation preamble <style>

```
305 (*sty)
306 (*style)
307 \makeatletter
308 \addtolength\marginparwidth{-4opt}
309 \addtolength\marginparsep{4mm}
```

```
310 \addtolength\oddsidemargin{-20pt}
311 \addtolength\evensidemargin{-20pt}
312 \let\PrintDescribeMacro=\@gobble
313 \let\PrintDescribeEnv=\@gobble
314 % \def\Describe@Macro#1{\endgroup
        %\marginnote{\PrintDescribeMacro{#1}}%
315 %
316 %
        \SpecialUsageIndex{#1}\@esphack\ignorespaces%
317 응
318 % \def \Describe@Env#1 { \endgroup
       %\marginnote{\PrintDescribeEnv{#1}}%
        \SpecialEnvIndex{#1}\@esphack\ignorespaces%
       }
321 %
322 \setminus makeatother
323 \AtBeginDocument {\normalmarginpar}
324 \setlength\MacrocodeTopsep{.5\baselineskip}
325 \setlength\MacroIndent{6mm}
326
327
328 \RequirePackage { luatexbase }
329 \RequirePackage[ngerman, english] {babel}
330 \RequirePackage{calc}
332 \RequirePackage[
333 paper = a4paper, % - use A4 paper size
334 foot
              = 2Cm,
              = 3cm, % - total body: left margin (odd pages)
335 inner
   top
              = 3cm, % - total body: top margin
337 outer
                       % - total body: right margin (odd pages)
               = 3cm,
              = 3cm, % - total body: bottom margin
338 bottom
339 marginparwidth = 2cm, % - width for side note
340 marginparsep = .5cm, % - space between notes and body text (content)
341 % showframe,
342]{geometry}
344 \newlength \fullwidth
345 \setlength\fullwidth{\textwidth+\marginparwidth+\marginparsep}
346
347 \KOMAoptions{
348 numbers = noenddot,
350 \AtBeginDocument {
351 \KOMAoptions{
352 % headwidth = {\fullwidth},
353 % footwidth = {\fullwidth},
354 footheight = 20pt,
355 headheight = 29pt,
356 captions = tableheading,
357 } }
358
359
361 \title{\HUBerlintitle}
362 %\subtitle{\HUBerlinsubtitle}
```

```
363 \author{\HUBerlinauthor}
 364 \date{\Version}
 365
 367 %---- Required Packages
  368 \RequirePackage { ifluatex, luatex85 }
 369 \ifx\directlua\relax
 370 \let\directlua\UnDeFiNeD
 371 \fi
 372 \ifluatex
 373 \else
 374 \GenericError{HUBerlin}%
 375 {Please use 'LuaLaTeX' as Compiler.^^J I abort here.}
 376 \fi
 For fonts we load the package fontspec [7] which has almost no limits handling font-stuff.
 377 \RequirePackage{fontspec}
 378 \RequirePackage[mono=false] {libertine}
 379 \RequirePackage{amssymb}
 380
  381 \defaultfontfeatures {%
 _{382} Ligatures = TeX
  383 , Scale = MatchLowercase
               = OldStyle
 384 , Numbers
 385 }
 For fonts we use the available TeX Gyre Pagella as main font. 1
 386 \setmainfont[%
       Ligatures = TeX
     , Numbers = OldStyle]{TeX Gyre Pagella}
 And we declare also the other fonts, too.
 389 \setmonofont[Scale=1]{TeX Gyre Cursor}
 390 \setsansfont[%
  391  ,LetterSpace = .8]{TeX Gyre Adventor-Regular}
 392 \linespread{1.05}
 393 \newfontfamily\listingsfont[
 394 Scale = MatchLowercase,
  395 | {TeX Gyre Cursor}
 396 \renewcommand\MacroFont{\listingsfont}
 398 \RequirePackage{marginnote}
  399 \renewcommand*{\marginfont}{%
 400 \rule{opt}{o.7\baselineskip}%
  401 \footnotesize%
 402 \color{HUBerlin-brown}}
 404 \RequirePackage[
  405 german = guillemets,
 406 style = german,
 407 ] {csquotes}
1 http://www.gust.org.pl/projects/e-foundry/tex-gyre
```

```
409 \RequirePackage {enumitem}
410 \setlist{
411 nosep,
412 % itemindent=1em,
   % labelindent=0.5\parindent,
   leftmargin=*}
415 \newlist{tabitemize}{itemize}{2}% neue Listenumgebung
416 \setlist[tabitemize] {%
417 nosep,
418
   leftmargin=*
419 }
420 \setlist[tabitemize, 1] {label=\labelitemi}
421 \setlist[tabitemize, 2] {label=\labelitemii}
423
424 \clubpenalty=10000 % prevent single lines at the beginning of a paragraph (Schuste
425\widowpenalty=10000 % prevent single lines at the end of a paragraph (Hurenkinder,
426 \displaywidowpenalty=10000
427
428 \RequirePackage{pdfpages}
429 \RequirePackage{biblatex}
430 \addbibresource { \ jobname-bibliography.bib}
431 \addbibresource { \ jobname-ctan.bib}
432 \RequirePackage{ccicons} %creative commons
433 \RequirePackage {xparse}
434 \RequirePackage{ragged2e}
435 \RequirePackage{microtype}
436 \RequirePackage {xspace}
437 \RequirePackage { graphicx }
438 \graphicspath{{img/}}
439 \RequirePackage{etoolbox}
440 %https://tex.stackexchange.com/a/235881/98739
441 \AfterEndPreamble { \maketitle }
443 % https://tex.stackexchange.com/a/401466/98739
444 \makeatletter
445 \renewcommand* { \maketitle } { %
   % taken and shortened from /usr/share/texmf/tex/latex/koma-script/scrartcl.cls
    \begin{titlepage}
    \newgeometry{left=3cm, right=3cm, top=1.5cm, bottom=2cm}
    \global\@topnum=\z@
    \setparsizes{\z@}{\z@}{\z@\@plus 1fil}\par@updaterelative
451
     {\large\@author\hfill Guideline and Documentation\par}
    \vskip 10em%
454 {\begin{center}\color{HUBerlin-blue}
455 {\fontsize{50}{55}\selectfont\HUBerlinshort{} \par\vskip .5em%
456 \Large\sffamily\@title}\par
457 \vskip .5em
458 \end{center}}%
459 {\ifx\@subtitle\@empty\else\usekomafont{subtitle}\@subtitle\par\fi}%
```

```
460 \null\vskip 5em%
461 \blockcquote[195]{Hoare1973}{Documentation must be regarded as an integral part of
462 A good programming language will encourage and assist the programmer to write clear
463 self-documenting code,
464 and even perhaps to develop
465 and display a pleasant style
466 of writing.}
467 \null\vfill
468 {\usekomafont{subtitle}{\@date \hfill
469 \includegraphics[width=4cm] {texografie} \\}}%
471 \vskip oem
472 \restoregeometry
   \end{titlepage}
474 } %
475 \makeatother
477 \RequirePackage {xcolor}
478 \definecolor{HUBerlin-blue}{RGB}{0,65,137} % HEX 004189
479 \definecolor{HUBerlin-green}{RGB}{150,190,20} % HEX 93C11A % Topoi
480 \definecolor{HUBerlin-grey} {RGB} {169,169,169}
481 \definecolor{HUBerlin-brown} {RGB} {82,79,60}
482 \definecolor{HUBerlin-red} {RGB} {180,0,0}
483
484
485 \RequirePackage { dirtree }
486 \renewcommand*\DTstylecomment {%
487 \color{HUBerlin-grey}%
   \footnotesize%
488
   \sffamily}
490 \renewcommand*\DTstyle{%
   \ttfamily%
   \small%
492
493
494
495 \RequirePackage[
496 markcase
               = noupper,
   footsepline = .5pt,
497
   % headsepline = .5pt,
498
    autooneside = false, % use left and right marks with a onesided document
    automark, % set \leftmark and \rightmark automatically by *\section and \subsection
    draft = false,
    ]{scrlayer-scrpage}
502
504 \pagestyle {scrheadings}
505 \clearscrheadfoot
506 \rofoot*{\thepage}
507 \lofoot*{\textcolor{HUBerlin-blue}{\HUBerlintitle}\ \vrule\ \textcolor{HUBerlin-
  508 \rohead*{HUBerlin-bundle}
509 \lohead*{Version: \Version}
510 % https://tex.stackexchange.com/a/352925/98739
```

```
511 \newcommand*\partnumber{}
 512 \DeclareNewLayer[
 513 background,
 514 textarea,
 515 addwidth=\marginparsep+\marginparwidth,
        mode=picture,
         contents={%
 518 \putC{\makebox[opt][c]{\raisebox{-.5}\height}{\scalebox{50}{\textcolor{black!5}{\parbox{50}{\color{black!5}}}}} \parbox{-.5} \par
 520 ] {partnumber}
 521 \DeclareNewPageStyleByLayers{part}{partnumber}
 522 \renewcommand\partpagestyle{part}
 523 \renewcommand*{\partformat}{\qdef\partnumber{\thepart}}
 524
 525% only a dirty workaround for the part title
 526 \newcommand*\changedpartwidth[1] {%
 527 \makebox[\linewidth][1]{%
 528 \parbox{\dimexpr\textwidth+\marginparsep+\marginparwidth\relax}{\raggedpart#1}%
 530 }
 _{531} % add \changedpartwidth as last command to the settings for font element part
 532 \addtokomafont{part}{\Huge\changedpartwidth}
 534
 536 %-https://tex.stackexchange.com/a/339516/98739 | https://tex.stackexchange.com/a/90
 537 % footnotes in the footer:
 538 \deffootnote%
        %[\normalparindent]%<width of mark>
        {o.ocm}%<indent of footnote text>
 540
        {\normalparindent}%<paragraph indent in the footnote text>
         {\makebox[\normalparindent][r]%
          {\thefootnotemark\hspace*{3pt}}}%<definition of mark>
 544 \newlength{\normalparindent}
 545 \AtBeginDocument {\setlength {\normalparindent} {\parindent}}
 546 \setfootnoterule{opt}% Kein Fußnotenstrich
 547 %\setfootnoterule[<height>]{<length>}
 548
This will put the numbers of the chapters and sections into the margin.
 549 \renewcommand\sectionlinesformat[4] {%
 550 \makebox[opt][r]{#3}#4%
 551 }
 552 \RequirePackage {url}
 553 % \urlstyle{same}
 555 \setkomafont{title}{\sffamily\color{HUBerlin-blue}\flushleft\bfseries}
 556 \setkomafont {disposition} {\color{HUBerlin-brown}\sffamily\bfseries\large}
 557 \setkomafont{section} {\usekomafont{disposition}}
 558 \setkomafont{subsection}{\usekomafont{disposition}}
 559 \setkomafont{subsubsection} {\usekomafont{disposition}}
 560 % \setkomafont {paragraph} { \bfseries}
 561 % \setkomafont{subsubsection}{\sffamilybold}
```

```
562 \setkomafont{subtitle}{\large\color{HUBerlin-brown}\sffamily\flushleft}
563 \setkomafont {pageheadfoot} {\footnotesize\sffamily\color{HUBerlin-grey}}
564 \setkomafont {descriptionlabel} {\bfseries}
565 \setkomafont {footnotelabel} {\bfseries}
566 \addtokomafont{titlehead}{\flushright}
567 % \setkomafont{headsepline}{\color{HUBerlin-blue}}
568 %\setkomafont{marginnote}{\MakeUppercase\color{HUBerlin-brown}}
569 \addtokomafont{caption}{\scriptsize}
570 \setkomafont{captionlabel}{\bfseries\sffamily}
571 \setkomafont{subject}{\bfseries\sffamily}
572 \setcapindent { opt }
573
574 \raggedbottom
576 \RequirePackage{listings}
577 \PassOptionsToPackage{final}{listings}
578 \RequirePackage[%
    skins
579
    ,listings
581
   ,breakable
582 , xparse
583 , documentation
584] {tcolorbox}
585 \lstMakeShortInline[language=TeX, basicstyle=\ttfamily]|
Following we load hyperxmp [6] and hyperref [5] for PDF-meta data and interactive linked text.
586 \RequirePackage{hyperxmp}
587 \RequirePackage{hyperref}
588 \hypersetup{% setup the hyperref-package options
   unicode = true,
589
   pdfauthor = {HUBerlin}, % - author (PDF meta)
590
    pdfauthortitle
                      = \{ \},
    pdfcopyright = {Copyright (c) \the\year . All rights reserved.},
593 pdfhighlight = /N,
594 pdfdisplaydoctitle = true,
   pdfdate = \{ \setminus today \},
              = {},%de en
    pdflang
596
597 pdfcaptionwriter = {Lukas C. Bossert},
   pdfkeywords = \{HUBerlin\},
598
   pdfencoding = auto,
                  = {HUBerlin with LuaLaTeX},
    pdfproducer
    bookmarksnumbered = true,
   bookmarksopenlevel = 2,
   bookmarksopen = true,
603
    bookmarksdepth = 3,
    colorlinks = true, %Colours links instead of ugly boxes
605
   urlcolor
                   = HUBerlin-blue, %Colour for external hyperlinks
   linkcolor
                  = black, %Colour of internal links
607
   citecolor
                  = black,
                              %Colour of citations
608
   linktoc
                    = page,
pdfborder = {o o o},
610 breaklinks = true, %allow line break inside links
612 final
```

```
613 }
614 \RequirePackage {bookmark}
615
616 \RequirePackage[
617 sort,
618 nameinlink,
619 compress,
620 ngerman, english
621 | {cleveref}
622
623
624 %---- newcommands
625 \newcommand{\TeXografie}{Lukas C. Bossert
626 (www.TeXografie.de) }
627 \newcommand\HUBerlin{\HUBerlintitle\xspace}
630 \newcommand\HUBerlinFolder{%
   \begingroup%
632 \normalfont%
633 \color{HUBerlin-blue}%
634 % \faFolderOpen% taken from fontawesome
    \hspace{.3em}%
636
    \endgroup}
637
638
640 \RedeclareSectionCommands[
641 tocraggedpagenumber,
642 toclinefill=\tocpageseparator,
643 tocindent=oem,
   tocnumwidth=4em,
645 tocpagenumberbox=\tocpagenumberbox% <- added
646 % tocpagenumberformat=\textsf,
647 ] {chapter, section, subsection, subsubsection, paragraph}
649 \newcommand\tocgobble[1]{}% <- added
650 \newcommand\tocpageseparator{\footnotesize\, \mbox{---}\,}
651 \newcommand\tocpagenumberbox[1] {\mbox{#1}}% <- added
652 \KOMAoptions{toc=indentunnumbered}
654 \RedeclareSectionCommand[
655 % tocheforeskip=1.25em plus 1pt
   ,tocentryformat=\large\scshape%
656
     ,tocindent=oem
657
658 ,tocnumwidth=4em
     ,tocpagenumberbox=\tocgobble% <- added</pre>
660 ] {part}
661 % \addtokomafont {partentry} { \scshape\sffamily\bfseries}
663 \RedeclareSectionCommand[%
664 %
      ,beforeskip=1.15em plus 1pt%
665, tocentryformat=\textbf%
```

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```
% ,toclinefill={\TOCLineLeaderFill}%\TOCLineLeaderFill[\textbf{.}]
667 | {chapter}
668
669
670
672 \newtcolorbox{example}[1][]{
673 breakable,
674 top=5pt,
   bottom=5pt,
   colback=HUBerlin-blue!10,
676
677 colframe=HUBerlin-blue,
678 left=5pt,
679 right=5pt,
     sharp corners,
681 boxrule=opt,
682 bottomrule=2pt,
683
   toprule=2pt,
    enhanced jigsaw,
   lefttitle=opt,
685
686
   coltitle=white,
   fonttitle=\bfseries,
687
     fontupper=\small, %\ttfamily,
689
    % colbacktitle=HUBerlin-blue!20
690
    #1,
691 }
692
693 % Replace the squat-u symbol for spaces
694 % https://tex.stackexchange.com/a/488123/98739
695 \makeatletter
696 \def\lst@visiblespace{\lst@ttfamily{\char32}$\textcolor{HUBerlin-grey}{\cdot}$}
697 \makeatother
698
699
700 \lstset{%
701 basicstyle = \linespread{0.7}\listingsfont
702 , breaklines = true
703 , breakatwhitespace
705 , showstringspaces=true
706 }
708 \lstdefinestyle{HUBerlinlistingstyledef}{%
709 tabsize
                = 4,
   breaklines
                = true,
711 breakatwhitespace = true,
712 postbreak=\mbox{$\hookrightarrow$},
   %keepspaces = true,
   escapeinside = \{(*@)\{@*)\},
714
715 moredelim = {[is][\ttfamily\bfseries\color{HUBerlin-blue}]{|}},
   moredelim = \{[is] \mid ttfamily \setminus bfseries \setminus color\{HUBerlin-blue\}\} \{\{1\}\} \},
716
   moredelim = \{[is][\ttfamily\bfseries\color{HUBerlin-red}]\{|2\}\{2|\}\},
717
   aboveskip=opt,
```

```
719 belowskip=opt,
   captionpos=b,
721 resetmargins=true,
722 sensitive=true,
723 upquote=true,
   showspaces=true,
725 showtabs=true,
726 tab=\textcolor{HUBerlin-grey}{\rightarrowfill},
727
   %numbers=left,
   %numberstyle=\footnotesize\ttfamily\color{HUBerlin-grey},
728
              = [1] \{ \ \},
   comment
729
   commentstyle = \footnotesize\color{HUBerlin-grey}\addfontfeature{LetterSpace=.7},
731 % deletecomment = [1]\{\
   % morecomment = [1][\nullfont]{\%<},
732
    % deletecomment = [is]{\%<}{>},
733
734 }
735
736 \lstdefinestyle {HUBerlinlistingstyle} {%
   language = {TeX},
738
   style = \{HUBerlinlistingstyledef\},
739 }
740
741
742
743
744
746 \tcbset{%
747 HUBerlinstyle/.style={%
748 enhanced,
749 before skip=2mm,
750 after skip=3mm,
751 boxrule=0.7pt,
752 left=2mm,
753 right=2mm,
754 top=2mm,
755 bottom=2mm,
756 sharp corners,
   colback=white,
757
   colbacklower=white,
   % fonttitle=\sffamily\bfseries,
759
   breakable,
760
   %before skip=\baselineskip,
761
   coltitle=white,
762
763 colbacktitle=HUBerlin-blue!50!black,
764 fonttitle=\bfseries\sffamily\footnotesize,
765 % before upper={\mynote{\thetcbcounter}},
   title={\hfill{Example \thetcbcounter}},
766
767
    },
768 codecomment/.style={%
769 listing outside comment, %
770 boxrule=opt,
771 colback=white,
```

```
772 }
773 }
774
775 \newtcolorbox{warning}[1][]{
776 enhanced,
777 before skip=2mm,
778 after skip=3mm,
779 boxrule=0.7pt,
_{780} left=5mm,
781 right=2mm,
782 top=2mm,
783 bottom=2mm,
784 colback=white,
785 colframe=yellow!20!black,
786 sharp corners,
787 rounded corners=southeast,
788 arc is angular,
789 arc=3mm,
790 underlay={%
791 \path[fill=HUBerlin-grey!80!black] ([yshift=3mm]interior.south east)--
  ++(-0.4,-0.1)--++(0.1,-0.2);
792 \path[draw=HUBerlin-grey, shorten <=-0.05mm, shorten >=-0.05mm] ([yshift=3mm]interio.
  ++(-0.4,-0.1)--++(0.1,-0.2);
793 \path[fill=red!50!black, draw=none] (interior.south west) rectangle node[white] {\Huge
795 drop fuzzy shadow,
   #1
796
   }
797
798
799 \newtcblisting[%
800 auto counter,
   crefname = {example} {examples},
802 Crefname = \{Example\}\{Examples\},\
803]{codetext}[2][]{%
804 HUBerlinstyle,
805% side text,
806 rounded corners=northeast,
807 arc=6mm,
808 listing style=HUBerlinlistingstyle,
   label = #2,
810
    #1,
811
    }
812
813 \newtcblisting[%
814 use counter from=codetext,
815 crefname={code example}{code examples},
816 Crefname={Code example} {Code examples} %
817 ] {code} [2] [] {%
818 HUBerlinstyle,
819 rounded corners=southeast,
820 arc=6mm,
821 listing only,
   listing style=HUBerlinlistingstyle,
```

```
label = #2,
824
    #1,
825 }
826
827
828 \DeclareTCBInputListing[%
829 use counter from=codetext,
830 crefname={code example} {code examples},
831 Crefname={Code example} {Code examples} %
832 ] {\HUBerlinlisting} { O{} m } {%
833 HUBerlinstyle,
834 listing file={#2},
835 listing only,
     listing style=HUBerlinlistingstyle,
836
837
   #1,
838 }
839
840 \makeatletter
841\newrobustcmd*{\fnurl}[1][]{\hyper@normalise\ltd@fnurl{#1}}
842 \def \t {#1} \def \t {#2}}{#2}}
843 \makeatother
```

The first command is used to refrence packages with: \\pkg{\package name\}.\2 The name of the package is linked to its entry on CTAN and refrenced to the bibliography in the end of this documentation.

```
844 \RequirePackage{newfile}
845 \newoutputstream{pkglist}
846 \NewDocumentCommand { \pkg } { om } { %
847 \IfNoValueTF{#1}
848 {\lowercase{\href{http://www.ctan.org/pkg/#2}}{\textbf{#2}}}
849 {\lowercase{\href{http://www.ctan.org/pkg/#1-#2}}{\textbf{#2}}%
850 \space\cite{#2}%
851 \addtostream{pkglist}{#2}}
852 \newrobustcmd*{\lit}[1]{\textsf{#1}}
853 \newrobustcmd*{\Code}[1]{\texttt{#1}}
854 \newrobustcmd* { \tex} { \TeX}
855 \newrobustcmd*{\etex}{\mbox{e-TeX}}
856 \newrobustcmd*{\pdftex}{pdf}-\tex}
857 \newrobustcmd*{\xetex}{Xe}-\tex}
858 \newrobustcmd*{\luatex}{Lua\-\tex}
859 \newrobustcmd*{\latex}{\LaTeX}%{La\kern-o.o7em TeX}
860 \newrobustcmd*{\pdflatex}{pdf\-\latex}
861 \newrobustcmd* {\xelatex} {Xe\-\latex}
862 \newrobustcmd*{\lualatex}{Lua\-\latex}
863 \newrobustcmd*{\miktex}{Mik\-\tex}
864 \newrobustcmd*{\texlive}{\tex~live}
865 \newrobustcmd*{\bibtex}{Bib\kern-o.o7em TeX}
866 \newrobustcmd*{\lppl}{\latex{} Project Public License}
867 \newrobustcmd*{\pdf}{{PDF}}
868 \newrobustcmd*{\md}{{MarkDown}}
```

2 Do not forget to insert the name of the package into the makefile in the definition of PKG.

```
869 \newrobustcmd*{\utf}{\mbox{{UTF}-8}}
870% no \mbox here, we may have to break things
871 \newrobustcmd*{\bibfield}[1]{\Code{#1}}
872 \newrobustcmd*{\opt}[1]{\Code{#1}}
873 \newrobustcmd*{\bibmacro}[1]{\Code{#1}}
874 \newrobustcmd*{\bibtype}[1]{\Code{@#1}}
875\%\renewrobustcmd*{\cmd}[1]{\Code{\textbackslash #1}}
876 \ renewrobustcmd \ [1] {\ normal font {\ text langle } {\ its hape #1 \ /} {\ text rangle }}
877
878 % directly taken from ltxdoc.dtx
879 \renewrobustcmd\marg[1] {%
    {\ttfamily\textcolor{HUBerlin-red}{\{}}%
      \meta{#1}%
     {\ttfamily\textcolor{HUBerlin-red}{\}}}%
882
883
884
885 \renewrobustcmd\oarg[1] {%
    {\ttfamily\textcolor{HUBerlin-green}{[}}%
887
     \meta{#1}%
888
     {\ttfamily\textcolor{HUBerlin-green}{]}}%
889
     }
890
891 % adapted from listings.dtx (lstdoc.sty)
892 \renewrobustcmd\cmd[1]{%
893 \texttt{\color{HUBerlin-blue}\textbackslash\string#1}\xspace%
894
     }
895
896 \newrobustcmd\env[2][]{%
   \texttt{%
898 \color{HUBerlin-blue} %
899 \textbackslash begin\{\string#2\}#1}%
   \ldots
    \texttt{%
902 \color{HUBerlin-blue} %
903 \textbackslash end\{\string#2\}}%
904 \xspace}
packages we use \param{\( \name \) of the parameter\)}.
```

For a common layout of the parameter style to identify code of the different documents, files and

```
905 \newcommand\param[1] {%
906
    \begingroup%
    \normalfont%
907
    \ttfamily%
908
    \bfseries%
    \textless%
910
    #18
    \ttfamily%
912
    \bfseries%
    \textgreater%
914
    \endgroup}
916 \pdfstringdefDisableCommands { %
917 \def\lstinline#1{<#1>}
918 \langle def \rangle tex\{TeX\}%
```

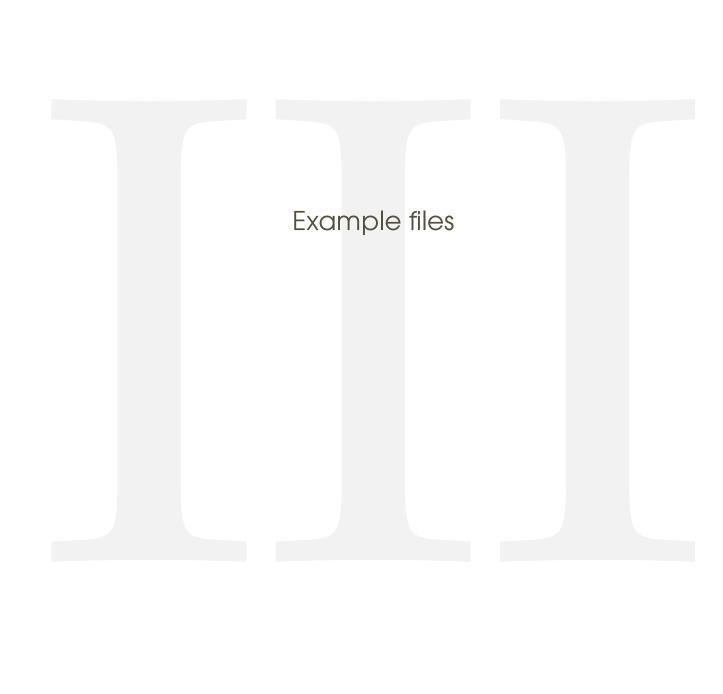
```
919 \def\etex{e-TeX}%
920 \def\xetex{XeTeX}%
921 \def\latex{LaTeX}%
922 \def\xelatex{XeLaTeX}%
923 \def\bibtex{BibTeX}%
924 \def\lppl{LaTeX Project Public License}%
925 \def\pdf{PDF}%
926 \def\utf{UTF-8}%
927 \def\\{}%
928 \def\texttt#1{<#1>}%
929 \def\marg#1{\{#1\}}%
930 \def\oarg#1{[#1]}%
931 \def\color#1#2{}%
932 \def\env#1{<#1>}
933 \def\cmd#1{#1}
934 }
935 % https://tex.stackexchange.com/a/24067/98739
936 \makeatletter
937 \patchcmd{\scr@startchapter}{\if@openright\cleardoublepage\else\clearpage\fi}{}{}{}
938 \makeatother
939 8
940 \RequirePackage[tightLists=false] {markdown}
941 \markdownSetup{rendererPrototypes={%
942 \ link = \{ \href{\#3}{\#1} \} \%
943 } }
944 (/style)
_{945}\left</\mathrm{sty}\right>
```

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7 Letter

7.1 From .tex

Version: 2019/06/21 V1.0.0

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Erika Musterfrau Musterweg 43 56789 Musterhausen

Philosophische Fakultät

Institut für Briefvorlagen

Here you can add more text.

Prof. Dr. Maike Musterfrau

Betreff

Sehr geehrte Frau Musterfrau,

Dies hier ist ein Blindtext zum Testen von Textausgaben. Wer diesen Text liest, ist selbst schuld. Der Text gibt lediglich den Grauwert der Schrift an. Ist das wirklich so? Ist es gleichgültig, ob ich schreibe: "Dies ist ein Blindtext" oder "Huardest gefburn"? Kjift - mitnichten! Ein Blindtext bietet mir wichtige Informationen. An ihm messe ich die Lesbarkeit einer Schrift, ihre Anmutung, wie harmonisch die Figuren zueinander stehen und prüfe, wie breit oder schmal sie läuft. Ein Blindtext sollte möglichst viele verschiedene Buchstaben enthalten und in der Originalsprache gesetzt sein. Er muss keinen Sinn ergeben, sollte aber lesbar sein. Fremdsprachige Texte wie "Lorem ipsum" dienen nicht dem eigentlichen Zweck, da sie eine falsche Anmutung vermitteln. Dies hier ist ein Blindtext zum Testen von Textausgaben. Wer diesen Text liest, ist selbst schuld. Der Text gibt lediglich den Grauwert der Schrift an. Ist das wirklich so? Ist es gleichgültig, ob ich schreibe: "Dies ist ein Blindtext" oder "Huardest gefburn"? Kjift - mitnichten! Ein Blindtext bietet mir wichtige Informationen. An ihm messe ich die Lesbarkeit einer Schrift, ihre Anmutung, wie harmonisch die Figuren zueinander stehen und prüfe, wie breit oder schmal sie läuft. Ein Blindtext sollte möglichst viele verschiedene Buchstaben enthalten und in der Originalsprache gesetzt sein. Er muss keinen Sinn ergeben, sollte aber lesbar sein. Fremdsprachige Texte wie "Lorem ipsum" dienen nicht dem eigentlichen Zweck, da sie eine falsche Anmutung vermitteln.

Datum: 21. 6. 2019

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Seite 2

Dies hier ist ein Blindtext zum Testen von Textausgaben. Wer diesen Text liest, ist selbst schuld. Der Text gibt lediglich den Grauwert der Schrift an. Ist das wirklich so? Ist es gleichgültig, ob ich schreibe: "Dies ist ein Blindtext" oder "Huardest gefburn"? Kjift – mitnichten! Ein Blindtext bietet mir wichtige Informationen. An ihm messe ich die Lesbarkeit einer Schrift, ihre Anmutung, wie harmonisch die Figuren zueinander stehen und prüfe, wie breit oder schmal sie läuft. Ein Blindtext sollte möglichst viele verschiedene Buchstaben enthalten und in der Originalsprache gesetzt sein. Er muss keinen Sinn ergeben, sollte aber lesbar sein. Fremdsprachige Texte wie "Lorem ipsum" dienen nicht dem eigentlichen Zweck, da sie eine falsche Anmutung vermitteln.

Mit freundlichen Grüßen

Prof. Dr. Maike Musterfrau - Dr. Max Mustermann

PS: ...

Anlage: Anlage 1 Anlage 2

Kopie an: Verteiler 1 Verteiler 2

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7.2 From **.md**

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Institut für Briefvorlagen

Here you can add more text.

Prof. Dr. Maike Musterfrau

Short description

Sehr geehrte Damen und Herren

Thank you very much for your letter.

Mit freundlichen Grüßen

Prof. Dr. Maike Musterfrau - Dr. Max Mustermann

Datum: 21. 6. 2019

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