

# HUBerlin-bundle

Documents and Documentations for  $\text{\LaTeX}$  at the Humboldt-Universität zu Berlin

»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.« [Hoare1973]

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# 1 Introduction

Following documents or documentclasses are available:

- **letter** (HUBerlin-letter.cls)

## 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](http://keepachangelog.com).

## 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-scr1ttr2> is dual-licensed, under both the GPL (v2 or higher, same as pandoc) and the BSD 3-clause license (included below).

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## 2 Preamble

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](#).

```
HUBerlin-bundle
├── HUBerlin-bundle.dtx..... code and documentation
├── HUBerlin-letter.tex ..... letter
├── HUBerlin-letter.lco ..... datafile for letter
├── HUBerlin-letter.pdf ..... letter
├── HUBerlin-letter-template.latex ..... template for conversion
├── HUBerlin-letter-markdown.pdf ..... converted letter from markdown
├── HUBerlin-letter.md ..... example markdown file
├── img ..... folder for images
│   └── texografie-logo.png..... logo of Lukas C. Bossert (www.TeXografie.de)
├── makefile..... makefile to generate all required files
└── README.md..... README file with information on installation
```

Figure 2.1: Structure of HUBerlin bundle

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

A large, light gray, sans-serif capital letter 'I' is centered vertically and horizontally on the page. It serves as a background element for the title.

# Guideline for Users

1 `<*example>`

### 3 Letter

We give an example on how to create a letter.

#### 3.1 `.lco`-file

2 `<*lco>`

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; [`<position>`]

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 too 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}{%`

18 `\mbox{Institut für Briefvorlagen}`

You could even put a figure/logo of the institute here. Just use `width=\useplength{locwidth}` to get the maximum possible width for the figure in the margin area.

```

19 %% \includegraphics[width=\useplength{locwidth}]{YOUR-LOGO.png}
20 }

21 \setkomavar{institute.additional}{Here you can more text.}

22 \setkomavar{institute.head}[Dekan]{Prof. Dr. Maike Musterfrau}

23 \setkomavar{institute.head.mail}{maike.musterfrau@hu-berlin.de}

24 \setkomavar{local}{%
25   Mohrenstraße 40/41\\
26   Zimmer X\\
27   D-10117 Berlin}

28 \setkomavar{connections}{U Bahnhof Hausvogteiplatz (U2)}

29 \setkomavar{accessibility}{Hausvogteiplatz}

30 \setkomavar{signature}{%
31   \usekomavar{institute.head} --
32   \usekomavar{fromname}
33 }

34 \lco

```

Example 1

```

1 \ProvidesFile{HUBerlin-letter.lco}
2 \setkomavar{fromname}
3 [Wissenschaftlicher Mitarbeiter]
4 {Dr. Max Mustermann}
5 \setkomavar{fromemail}{max.mustermann@hu-berlin.de}
6 \setkomavar{fromphone}{1234}
7 \setkomavar{fromfax}{5678}
8 \setkomavar{fromurl}{www.hu-berlin.de}
9 \setkomavar{backaddress}{HU Berlin\\
10 Unter den Linden 6\\
11 D-10099 Berlin}
12 \setkomavar{faculty}{%
13 Philosophische Fakultät
14 }
15 \setkomavar{institute}{%
16   \mbox{Institut für Briefvorlagen}
17 }
18 %%
19 \includegraphics[width=\useplength{locwidth}]{YOUR-LOGO.png}
20 }
21 \setkomavar{institute.additional}{Here you can more text.}
22 \setkomavar{institute.head}[Dekan]{Prof. Dr. Maike
23 Musterfrau}
24 \setkomavar{institute.head.mail}{maike.musterfrau@hu-berlin.de}
25 \setkomavar{local}{%
26   Mohrenstraße 40/41\\
27   Zimmer X\\
28   D-10117 Berlin}
29 \setkomavar{connections}{U Bahnhof Hausvogteiplatz (U2)}

```

```

27 \setkomavar{accessibility}{Hausvogteiplatz}
28 \setkomavar{signature}{%
29   \usekomavar{institute.head} --
30   \usekomavar{fromname}
31 }

```

### 3.2 .tex-file

```

35 ⟨*letter⟩

36 \documentclass{HUBerlin-letter}

```

Now we load the personal data-file which has the ending .lco.

```

37 \LoadLetterOption{HUBerlin-letter}

```

If you have the HU font installed on your computer, you can load it, too:

```

38 % \setmainfont[%
39 %   BoldFont=ScalaSans-BoldLF,
40 %   Numbers=OldStyle]{ScalaSans-RegularLF}

```

Now following the reference information

```

41 \setkomavar{myref}{}
42 \setkomavar{yourref}{}
43 \setkomavar{yourmail}{}
44 \setkomavar{customer}{}
45 \setkomavar{invoice}{}
46 \setkomavar{subject}{Betreff}
47 \usepackage{blindtext}

```

We close the preamble and start the letter

```

48 \begin{document}

```

The address is written as `{⟨address⟩}`

```

49 \begin{letter}{%
50   Erika Musterfrau\
51   Musterweg 43\
52   56789 Musterhausen%

```

Closing now again.

```

53 }

54 \opening{Sehr geehrte Frau Musterfrau, }

```

This is just some blindtext.

```

55 \blindtext[2]
56 \clearpage
57 \blindtext

```

Closing letter

```

58 \closing{Mit freundlichen Grüßen}

```



If you still have something to say/write.

```
59 \ps PS: \dots
```

Any amendment.

```
60 \encl{%
61   Anlage 1\\
62   Anlage 2%
63 }
```

This is the distribution

```
64 \cc{%
65   Verteiler 1\\
66   Verteiler 2%
67 }
```

That's it. Done.

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

And how does a example letter looks like?

Example 2

```
1  \LoadLetterOption{HUBerlin-letter}
2  \setkomavar{myref}{}
3  \setkomavar{yourref}{}
4  \setkomavar{yourmail}{}
5  \setkomavar{customer}{}
6  \setkomavar{invoice}{}
7  \setkomavar{subject}{Betreff}
8  \usepackage{blindtext}
9  \begin{document}
10 \begin{letter}{%
11   Erika Musterfrau\\
12   Musterweg 43\\
13   56789 Musterhausen%
14 }
15 \opening{Sehr geehrte Frau Musterfrau,}
16 \blindtext[2]
17 \clearpage
18 \blindtext
19 \closing{Mit freundlichen Grüßen}
20 \ps PS: \dots
21 \encl{%
22   Anlage 1\\
23   Anlage 2%
24 }
25 \cc{%
26   Verteiler 1\\
27   Verteiler 2%
28 }
29 \end{letter}
30 \end{document}
31 %%
```

```
70 \end{letter}
```

### 3.3 Letter from markdown

71 `<*`letter-md

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

Example 3

```
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.

```
72 ---
73 documentclass: HUBerlin-letter
```

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

```
74 senderdetails: HUBerlin-letter

75 opening: Sehr geehrte Damen und Herren
76 closing: Mit freundlichen Grüßen
77 date: 10. Mai 2010
```

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

```
78 addressee:
79 - Alexander von Humboldt
80 - Unter den Linden 6
81 - 10099 Berlin

82 ---
```

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

Now the content of your letter

```
83 Thank you very much for your letter.
```

Let's see how this example file looks like:

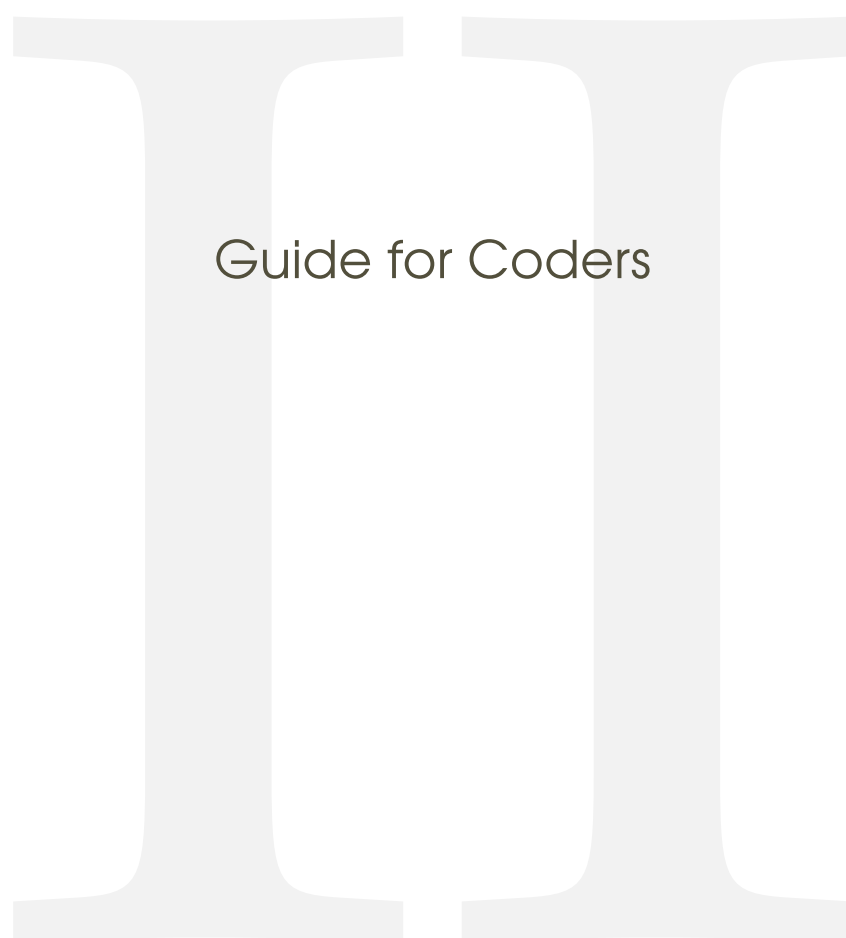
Example 4

```
1  ---
2  documentclass: HUBerlin-letter
3  senderdetails: HUBerlin-letter
4  opening: Sehr geehrte Damen und Herren
5  closing: Mit freundlichen Grüßen
6  date: 10. Mai 2010
7  addressee:
8  - Alexander von Humboldt
9  - Unter den Linden 6
10 - 10099 Berlin
11 ---
12 Thank you very much for your letter.
```

84 `</`letter-md

Here we close the example files.

85  $\langle /example \rangle$



## Guide for Coders

1 `\*cls`

## 4 Letter

2 `\*letter`

We load **scrllttr2** [**scrllttr2**] which is the documentclass for letters. Furthermore we set up some options.

```
3 \LoadClass[%
4   fontsize=10pt,
5   version=last,
```

If there is anything to debug, you can enable visualize

```
6   % visualize
7 ]{scrllttr2}
```

For debugging also uncomment the `\showfields{<fields>}` command.

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

Since we do want to compile with Lua<sup>1</sup>TeX, we make sure that it will be compilable only with that.

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

Now a fix.<sup>1</sup>

```
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** [**graphicx**].

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

For loading fonts.

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

Verdana font as main font.

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

For the wheelchair symbol we load **marvosym** [**marvosym**]

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

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

<sup>1</sup> <https://tex.stackexchange.com/a/75065>

```

23 \RequirePackage{scrlayer-scrpage}
24 \DeclareNewLayer[
25   foreground,
26   textarea,
27   voffset=\useplength{firsttheadvpos},
28   hoffset=\useplength{firsttheadhpos},
29   width=\useplength{firsttheadwidth},
30   mode=picture,
31   contents=\putUL{\raisebox{\dimexpr-\height}{\usekomavar{firsthead}}\hfill\thepage}
32 ]{likefirstpage.head}
33 \AddLayersToPageStyle{scrheadings}{likefirstpage.head}
34 \clearpairofpagestyles

```

For better adjustments of the layout we load **geometry** [geometry].

```

35 \RequirePackage{geometry}
36 \geometry{%
37   a4paper
38   , left           =25mm
39   , bottom         =16mm
40   , foot           =4mm
41   , top            =77mm
42   , nohead
43   , textwidth      =117mm
44   , marginparsep   =0mm
45   , marginparwidth =0mm
46 }

```

Main Text and signature should be raggedright.

```

47 \renewcommand*{\raggedsignature}{\raggedright}
48 \raggedright

```

We also want to put the enclosures at the bottom of the page.<sup>2</sup>

```

49 \def\stopletter{}
50 \let\enclold\encl
51 \renewcommand\encl[1]{\vskipoptplusifilll\enclold{#1}}

```

We define new komavars.

First the possibility to name the faculty,

```

52 \newkomavar{faculty}
53 \newkomafont{faculty}{\bfseries\fontsize{8.5}{10}\selectfont}

```

then the institute

```

54 \newkomavar{institute}
55 \newkomafont{institute}{\fontsize{8.5}{10}\selectfont}

```

and further fields for information.

```

56 \newkomavar{institute.additional}

```

We pass the name of the head of the institute.

```

57 \newkomafont{institute.head}{\bfseries}
58 \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.

<sup>2</sup> <https://tex.stackexchange.com/questions/77991/put-the-encl-at-the-bottom-of-the-page-lettre-cl>

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

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

```
60 \newkomavar{local}
61 \setkomavar*{local}{Sitz:}
```

and how to get there.

```
62 \newkomavar{connections}
63 \setkomavar*{connections}{Verkehrsverbindungen:}
```

Furthermore we inform about office hours

```
64 \newkomavar{officehours}
65 \setkomavar*{officehours}{Sprechzeiten:}
```

and if there is accessibility for wheelchairs etc.

```
66 \newkomavar{accessibility}
67 \setkomavar*{accessibility}{\large\reflectbox{\Wheelchair}} Eingang:}

68 \newkomavar{bank}
69 \setkomavar*{bank}{Bankverbindung:}
70 \setkomavar{bank}{Deutsche Bank PGK AG}
71 \newkomavar{IBAN}
72 \setkomavar{IBAN}{\mbox{IBAN DE95 1007 0848 0512 6206 01}}
73 \newkomavar{BIC}
74 \setkomavar{BIC}{BIC DEUTDEDB110}
```

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

```
75 \setkomavar{location}%
```

First anything regarding the font

```
76 \raggedright
77 \fontsize{7}{8.5}\selectfont
78 % \begin{macrocode}
79 % and for the section of faculty, institute etc. we use \env{minipage}
80 % \begin{macrocode}
81 \begin{minipage}[t][64mm]{\useplength{locwidth}}
```

then the faculty

```
82 {\usekomafont{faculty}%
83 \usekomavar{faculty}\[1\baselineskip]}
```

and the institute.

```
84 {\usekomafont{institute}\usekomavar{institute}\[1\baselineskip]}
```

Now anything else regarding the institute.

```
85 \ifkomavareempty{institute.additional}
86 {}
87 {\usekomavar{institute.additional}\[1\baselineskip]}
```

What follows is the head of institute and its position name.

```
88 \ifkomavareempty{institute.head}
89 {}
90 {\usekomafont{institute.head}%
91 \usekomavar{institute.head}}\%
92 \usekomavar*{institute.head}}
```

We close this section and the minipage.

```
93 \end{minipage}
```

Let's turn to further information.

For example date:

```
94 \textbf{\usekomavar*{date}}\
95 \usekomavar{date}\par
```

and the sender of the letter.

```
96 \ifkomavareempty{fromname}
97 {}
98 {\textbf{\usekomavar*{fromname}}\
99 \usekomavar{fromname}\par}
```

And the reference of correspondence.

```
100 \ifkomavareempty{myref}
101 {}
102 {\textbf{\usekomavar*{myref}}\
103 \usekomavar{myref}\par}
```

To complete this template we provide the possibility to name further reference fields.

```
104 \ifkomavareempty{yourref}
105 {}
106 {\textbf{\usekomavar*{yourref}}\
107 \usekomavar{yourref}\par}

108 \ifkomavareempty{yourmail}
109 {}
110 {\textbf{\usekomavar*{yourmail}}\
111 \usekomavar{yourmail}\par}

112 \ifkomavareempty{customer}
113 {}
114 {\textbf{\usekomavar*{customer}}\
115 \usekomavar{customer}\par}

116 \ifkomavareempty{invoice}
117 {}
118 {\textbf{\usekomavar*{invoice}}\
119 \usekomavar{invoice}\par}

120 \textbf{\usekomavar*{fromaddress}}\
121 \usekomavar{fromaddress}
122 \ifkomavareempty{fromphone}
123 {\par}
124 {\usekomavar*{fromphone}\usekomavar{fromphone}}
125 \ifkomavareempty{fromfax}
126 {\par}
127 {\}\}
128 \ifkomavareempty{fromfax}
129 {}
130 {\usekomavar*{fromfax}\usekomavar{fromfax}\par}
```

Next, emails and url:

```
131 \ifkomavareempty{institute.head.mail}
132 {}
133 {\usekomavar{institute.head.mail}}
```



```

134 \ifkomavareempty{fromemail}
135 {\ifkomavareempty{fromurl}
136   {\par}
137   {\}}
138 {\}}

139 \ifkomavareempty{fromemail}
140 {}
141 {\usekomavar{fromemail}
142  \ifkomavareempty{fromurl}
143   {\par}
144   {\}}

145 \ifkomavareempty{fromurl}
146 {}
147 {\usekomavar{fromurl}\par}

```

Now the actual location of the sender

```

148 \ifkomavareempty{local}
149 {}
150 {\textbf{\usekomavar*{local}}\}
151 \usekomavar{local}\par}

```

The last information section should be pinned to the bottom.

```

152 \vfill

```

Inform your addressee about the connection possibilities.

```

153 \ifkomavareempty{connections}
154 {}
155 {\textbf{\usekomavar*{connections}}\}
156 \usekomavar{connections}\par}

157 \ifkomavareempty{officehours}
158 {}
159 {\textbf{\usekomavar*{officehours}}\}
160 \usekomavar{officehours}\par}

```

If there is a barrier free entrance, tell it.

```

161 \ifkomavareempty{accessibility}
162 {}
163 {\textbf{\usekomavar*{accessibility}}\}
164 \usekomavar{accessibility}\par}

```

And last the bank connection

```

165 \ifkomavareempty{bank}
166 {}
167 {\textbf{\usekomavar*{bank}}\}
168 \usekomavar{bank}\}
169 \usekomavar{IBAN}\}
170 \usekomavar{BIC}
171 }

```

Finally we close `\setkomavar{<location>}`

```

172 }

```

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

```

173 \KOMAOptions{%
174   numericaldate =true
175   ,refline      =nodate
176   ,backaddress  =plain
177   ,parskip      =half-
178 }

```

Getting rid of the reference field

```
179 \removerefferds
```

Redefining length, which we ship to the end of the preamble.

```

180 \AtBeginDocument{
181 \setlength{refvpos}{110mm}
182 \setlength{refaftervskip}{opt}
183 \setlength{toaddrhpos}{25mm}
184 \setlength{firstheadpos}{\uselength{toaddrhpos}}
185 \setlength{lochpos}{15mm}
186 \setlength{locvpos}{\uselength{toaddrvpos}}
187 \addtoplength{locvpos}{.75\baselineskip}
188 \setlength{locwidth}{45mm}
189 \setlength{locheight}{232mm}
190 }

```

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!

```

191 \setkomavar{firsthead}{%
192 \includegraphics[width=148mm]{HUBerlin-logo.png}%
193 }

194 \setkomavar{backaddressseparator}{~\textbar~}

195 \setkomavar{fromphone}{0000}
196 \setkomavar*{fromphone}{Telefon +49 [30] 2093-}

197 \setkomavar{fromfax}{0000}
198 \setkomavar*{fromfax}{Telefax +49 [30] 2093-}

199 \setkomavar*{fromaddress}{Postanschrift:}
200 \setkomavar{fromaddress}{%
201   Humboldt-Universität zu Berlin\\
202   Unter den Linden 6\\
203   D-10099 Berlin}

204 \setkomavar*{date}{Datum:}

205 \setkomavar*{fromname}{Bearbeiter:}

206 \setkomavar*{myref}{Geschäftszeichen:}

207 \setkomavar*{enclseparator}{Anlage}

208 \setkomavar*{ccseparator}{Kopie an}

209 % \RequirePackage{hyperref}

```

```

210 % \AtBeginDocument{{
211 %   \usekomavar[\def\author]{fromname}
212 %   \usekomavar[\def\subject]{subject}
213 %   \hypersetup{%
214 %     pdftitle           = {\subject},
215 %     pdfauthor          = {\author},
216 %     pdfsubject         = {\subject},
217 %     pdfkeywords        = {\author, \subject},
218 %     pdflang            = de,
219 %     pdfdisplaydoctitle = true,
220 %     colorlinks         = true,
221 %     plainpages         = false,
222 %     hypertexnames      = false,
223 %     unicode,
224 %   }
225 % }}

226 </letter>

227 </cls>

228 <*template>

```

## 5 Boilerplate / Template for letters

```

229 <*letter-md>

230 \documentclass{HUBerlin-letter}

```

We define two new variables.

```

231 \newkomavar{opening}
232 \newkomavar{closing}

233 $for(letteroption)$
234 \LoadLetterOption{$letteroption$}
235 $endfor$
236 $if(senderdetails)$\LoadLetterOption{$senderdetails$}$endif$
237 $if(addresseeimage)$\setkomavar{addresseeimage}{$$addresseeimage$}$endif$
238 $if(backaddress)$\setkomavar{backaddress}{$$backaddress$}$\KOMAOPTIONS{backaddress=true}$endif$
239 $if(fromalign)$\KOMAOPTIONS{fromalign=$$fromalign$}$endif$
240 $if(customer)$\setkomavar{customer}{$$customer$}$endif$
241 $if(date)$\setkomavar{date}{$$date$}$endif$
242 $if(fromaddress)$\setkomavar{fromaddress}{$$fromaddress$}$endif$
243 $if(frombank)$\setkomavar{frombank}{$$frombank$}$endif$
244 $if(fromemail)$\setkomavar{fromemail}{$$fromemail$}$\KOMAOPTIONS{fromemail=true}$endif$
245 $if(fromfax)$\setkomavar{fromfax}{$$fromfax$}$\KOMAOPTIONS{fromfax=true}$endif$
246 $if(fromlogo)$\setkomavar{fromlogo}{$$fromlogo$}$\KOMAOPTIONS{fromlogo=true}$endif$
247 $if(frommobilephone)$\setkomavar{frommobilephone}{$$frommobilephone$}$\KOMAOPTIONS{frommobilephone=true}$endif$
248 $if(fromname)$\setkomavar{fromname}{$$fromname$}$endif$

```

```

249 $if(fromphone)$\setkomavar{fromphone}{${fromphone$}}\KOMAOptions{fromphone=true}$endif$
250 $if(fromurl)$\setkomavar{fromurl}{${fromurl$}}\KOMAOptions{fromurl=true}$endif$
251 $if(fromzipcode)$\setkomavar{fromzipcode}{${fromzipcode$}}$endif$
252 $if(invoice)$\setkomavar{invoice}{${invoice$}}$endif$
253 $if(location)$\setkomavar{location}{${location$}}$endif$
254 $if(myref)$\setkomavar{myref}{${myref$}}$endif$
255 $if(myrefname)$\setkomavar*{myref}{${myrefname$}}$endif$
256 $if(place)$\setkomavar{place}{${place$}}$endif$
257 $if(PPcode)$\setkomavar{PPcode}{${PPcode$}}$endif$
258 $if(signature)$\setkomavar{signature}{${signature$}}$endif$
259 $if(specialmail)$\setkomavar{specialmail}{${specialmail$}}$endif$
260 $if(subject)$\setkomavar{subject}{${subject$}}$endif$
261 $if(title)$\setkomavar{title}{${title$}}$endif$
262 $if(yourmail)$\setkomavar{yourmail}{${yourmail$}}$endif$
263 $if(yourref)$\setkomavar{yourref}{${yourref$}}$endif$
264 $if(opening)$\setkomavar{opening}{${opening$}}$endif$
265 $if(closing)$\setkomavar{closing}{${closing$}}$endif$
266 $if(firstfoot)$\setkomavar{firstfoot}{${firstfoot$}}$endif$

```

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

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

```

267 $if (addressee) $
268 $else$
269 \KOMAOPTIONS{addrfield=false}
270 $endif$

```

Now the actual content of the letter

```

271 \begin{document}
272 \begin{letter}{%
273 $for (addressee) $
274 $addressee$$sep$\\
275 $endfor$
276 }
277 $for (include-before) $
278 $include-before$
279 $endfor$
280 \opening{\usekomavar{opening}}
281 $body$
282 \closing{\usekomavar{closing}}
283 $if (ps) $\ps{$ps$}$endif$
284 $if (encl) $\encl{$encl$}$endif$
285 $for (include-after) $$include-after$$endfor$
286 \end{letter}
287 \end{document}

288 </letter-md>
289 </template>

```

## 6 Documentation preamble <style>

```

290 <*sty>
291 <*style>
292 \makeatletter
293 \addtolength\marginparwidth{-40pt}
294 \addtolength\marginparsep{4mm}
295 \addtolength\oddsidemargin{-20pt}
296 \addtolength\evensidemargin{-20pt}
297 \let\PrintDescribeMacro=\@gobble
298 \let\PrintDescribeEnv=\@gobble
299 % \def\Describe@Macro#1{\endgroup
300 % %\marginnote{\PrintDescribeMacro{#1}}%
301 % \SpecialUsageIndex{#1}\@esphack\ignorespaces%
302 % }
303 % \def\Describe@Env#1{\endgroup
304 % %\marginnote{\PrintDescribeEnv{#1}}%
305 % \SpecialEnvIndex{#1}\@esphack\ignorespaces%
306 % }

```

```

307 \makeatother
308 \AtBeginDocument{\normalmarginpar}
309 \setlength\MacrocodeTopsep{.5\baselineskip}
310 \setlength\MacroIndent{6mm}
311
312
313 \RequirePackage{luatexbase}
314 \RequirePackage[ngerman,english]{babel}
315 \RequirePackage{calc}
316
317 \RequirePackage[
318   paper      = a4paper,    % - use A4 paper size
319   foot       = 2cm,
320   inner      = 3cm,    % - total body: left margin (odd pages)
321   top        = 3cm,    % - total body: top margin
322   outer      = 3cm,    % - total body: right margin (odd pages)
323   bottom     = 3cm,    % - total body: bottom margin
324   marginparwidth = 2cm,  % - width for side note
325   marginparsep = .5cm,  % - space between notes and body text (content)
326 % showframe,
327 ]{geometry}
328
329 \newlength\fullwidth
330 \setlength\fullwidth{\textwidth+\marginparwidth+\marginparsep}
331
332 \KOMAOptions{
333 numbers      = noenddot,
334 }
335 \AtBeginDocument{
336   \KOMAOptions{
337 % headwidth  = {\fullwidth},
338 % footwidth  = {\fullwidth},
339 footheight = 20pt,
340 headheight = 29pt,
341 captions   = tableheading,
342 }}
343
344
345
346 \title{\HUBerlintitle}
347 %\subtitle{\HUBerlinsubtitle}
348 \author{\HUBerlinauthor}
349 \date{\Version}
350
351
352 %---- Required Packages
353 \RequirePackage{ifluatex,luatex85}
354 \ifx\directlua\relax
355   \let\directlua\UnDeFiNeD
356 \fi
357 \ifluatex
358 \else
359 \GenericError{HUBerlin}%

```

```

360 {Please use 'LuaLaTeX' as Compiler.^J I abort here.}
361 \fi

```

For fonts we load the package **fontspec** [fontspec] which has almost no limits handling font-stuff.

```

362 \RequirePackage{fontspec}

363 \RequirePackage[mono=false]{libertine}
364 \RequirePackage{amssymb}
365
366 \defaultfontfeatures{%
367   Ligatures = TeX
368   , Scale    = MatchLowercase
369   , Numbers  = OldStyle
370 }

```

For fonts we use the available TeX Gyre Pagella as main font.<sup>1</sup>

```

371 \setmainfont[%
372   Ligatures = TeX
373   , Numbers  = OldStyle]{TeX Gyre Pagella}

```

And we declare also the other fonts, too.

```

374 \setmonofont[Scale=1]{TeX Gyre Cursor}
375 \setsansfont[%
376   , LetterSpace = .8]{TeX Gyre Adventor-Regular}
377 \linespread{1.05}

378 \newfontfamily\listingsfont[
379   Scale    = MatchLowercase,
380 ]{TeX Gyre Cursor}
381 \renewcommand\MacroFont{\listingsfont}
382
383 \RequirePackage{marginnote}
384 \renewcommand*{\marginfont}{%
385   \rule{opt}{0.7\baselineskip}%
386   \footnotesize%
387   \color{HUBerlin-brown}}
388
389 \RequirePackage[
390   german = guillemets,
391   style   = german,
392 ]{csquotes}
393
394 \RequirePackage{enumitem}
395 \setlist{
396   nosep,
397   % itemindent=1em,
398   % labelindent=0.5\parindent,
399   leftmargin=*}
400 \newlist{tabitemize}{itemize}{2}% neue Listenumgebung
401 \setlist[tabitemize]{%
402   nosep,
403   leftmargin=*
404 }

```

<sup>1</sup> <http://www.gust.org.pl/projects/e-foundry/tex-gyre>

```

405 \setlist[tabitemize,1]{label=\labelitemi}
406 \setlist[tabitemize,2]{label=\labelitemii}
407
408
409 \clubpenalty=10000 % prevent single lines at the beginning of a paragraph (Schust
410 \widowpenalty=10000 % prevent single lines at the end of a paragraph (Hurenkinder)
411 \displaywidowpenalty=10000 %
412
413 \RequirePackage{pdfpages}
414 \RequirePackage{biblatex}
415 \addbibresource{\jobname-bibliography.bib}
416 \addbibresource{\jobname-ctan.bib}
417 \RequirePackage{ccicons} %creative commons
418 \RequirePackage{xparse}
419 \RequirePackage{ragged2e}
420 \RequirePackage{microtype}
421 \RequirePackage{xspace}
422 \RequirePackage{graphicx}
423 \graphicspath{{img/}}

424 \RequirePackage{etoolbox}
425 %https://tex.stackexchange.com/a/235881/98739
426 \AfterEndPreamble{\maketitle}
427
428 % https://tex.stackexchange.com/a/401466/98739
429 \makeatletter
430 \renewcommand*{\maketitle}{%
431 % taken and shortened from /usr/share/texmf/tex/latex/koma-script/scrartcl.cls
432 \begin{titlepage}
433 \newgeometry{left=3cm,right=3cm,top=1.5cm,bottom=2cm}
434 \global\@topnum=\z@
435 \setparsizes{\z@}{\z@}{\z@}{\@plus 1fil}\par@updaterelative
436 \null
437 {\large\@author\hfill Guideline and Documentation\par}
438 \vskip 10em%
439 {\begin{center}\color{HUBerlin-blue}
440 {\fontsize{50}{55}\selectfont\HUBerlinshort{} \par\vskip .5em%
441 \Large\sffamily\@title}\par
442 \vskip .5em
443 \end{center}}%
444 {\ifx\@subtitle\@empty\else\usekomafont{subtitle}\@subtitle\par\fi}%
445 \null\vskip 5em%
446 \blockquote[195]{Hoare1973}{Documentation must be regarded as an integral part of
447 A good programming language will encourage and assist the programmer to write clea
448 self-documenting code,
449 and even perhaps to develop
450 and display a pleasant style
451 of writing.}
452 \null\vfill
453 {\usekomafont{subtitle}{\@date \hfill
454 \includegraphics[width=4cm]{texografie}\}}}%
455 \par
456 \vskip oem

```



```

457 \restoregeometry
458 \end{titlepage}
459 }%
460 \makeatother
461
462 \RequirePackage{xcolor}
463 \definecolor{HUBerlin-blue}{RGB}{0,65,137} % HEX 004189
464 \definecolor{HUBerlin-green}{RGB}{150,190,20} % HEX 93C11A % Topoi
465 \definecolor{HUBerlin-grey}{RGB}{169,169,169}
466 \definecolor{HUBerlin-brown}{RGB}{82,79,60}
467 \definecolor{HUBerlin-red}{RGB}{180,0,0}
468
469
470 \RequirePackage{dirtree}
471 \renewcommand*{DTstylecomment}{%
472   \color{HUBerlin-grey}%
473   \footnotesize%
474   \sffamily}
475 \renewcommand*{DTstyle}{%
476   \ttfamily%
477   \small%
478   }
479
480 \RequirePackage[
481   markcase = noupper,
482   footsepline = .5pt,
483   % headsepline = .5pt,
484   autooneside = false,% use left and right marks with a onesided document
485   automark,% set \leftmark and \rightmark automatically by *\section and \subsection
486   draft = false,
487 ]{scrlayer-scrpage}
488
489 \pagestyle{scrheadings}
490 \clearscrheadfoot
491 \rofoot*{\thepage}
492 \lofoot*{\textcolor{HUBerlin-blue}{\HUBerlintitle}\ \vrule\ \textcolor{HUBerlin-
493   brown}{\HUBerlinsubtitle}}
494 \rohead*{HUBerlin-bundle}
495 \lohead*{Version: \Version}
496
497 % https://tex.stackexchange.com/a/352925/98739
498 \newcommand*\partnumber{}
499 \DeclareNewLayer[
500   background,
501   textarea,
502   addwidth=\marginparsep+\marginparwidth,
503   mode=picture,
504   contents={%
505     \putC{\makebox[opt][c]{\raisebox{-.5\height}{\scalebox{50}{\textcolor{black!5}{\part
506     }
507   }]{partnumber}
508 \DeclareNewPageStyleByLayers{part}{partnumber}
509 \renewcommand\partpagestyle{part}

```

```

508 \renewcommand*{\partformat}{\gdef\partnumber{\thepart}}
509
510 % only a dirty workaround for the part title
511 \newcommand*{\changedpartwidth[1]}{
512   \makebox[\linewidth][l]{
513     \parbox{\dimexpr\textwidth+\marginparsep+\marginparwidth\relax}{\raggedpart#1}%
514   }%
515 }
516 % add \changedpartwidth as last command to the settings for font element part
517 \addtokomafont{part}{\Huge\changedpartwidth}
518
519
520
521 %-https://tex.stackexchange.com/a/339516/98739 | https://tex.stackexchange.com/a/9
522 % footnotes in the footer:
523 \deffootnote%
524   %[\normalparindent]%<width of mark>
525   {0.0cm}%<indent of footnote text>
526   {\normalparindent}%<paragraph indent in the footnote text>
527   {\makebox[\normalparindent][r]}%
528   {\thefootnotemark\hspace*{3pt}}}%<definition of mark>
529 \newlength{\normalparindent}
530 \AtBeginDocument{\setlength{\normalparindent}{\parindent}}
531 \setfootnoterule{opt}% Kein Fußnotenstrich
532 %\setfootnoterule[<height>]{<length>}
533

```

This will put the numbers of the chapters and sections into the margin.

```

534 \renewcommand\sectionlinesformat[4]{
535   \makebox[opt][r]{#3}#4%
536 }
537 \RequirePackage{url}
538 % \urlstyle{same}
539
540 \setkomafont{title}{\sffamily\color{HUBerlin-blue}\flushleft\bfseries}
541 \setkomafont{disposition}{\color{HUBerlin-brown}\sffamily\bfseries\large}
542 \setkomafont{section}{\usekomafont{disposition}}
543 \setkomafont{subsection}{\usekomafont{disposition}}
544 \setkomafont{subsubsection}{\usekomafont{disposition}}
545 % \setkomafont{paragraph}{\bfseries}
546 % \setkomafont{subsubsection}{\sffamilybold}
547 \setkomafont{subtitle}{\large\color{HUBerlin-brown}\sffamily\flushleft}
548 \setkomafont{pageheadfoot}{\footnotesize\sffamily\color{HUBerlin-grey}}
549 \setkomafont{descriptionlabel}{\bfseries}
550 \setkomafont{footnotelabel}{\bfseries}
551 \addtokomafont{titlehead}{\flushright}
552 % \setkomafont{headsepline}{\color{HUBerlin-blue}}
553 %\setkomafont{marginnote}{\MakeUppercase\color{HUBerlin-brown}}
554 \addtokomafont{caption}{\scriptsize}
555 \setkomafont{captionlabel}{\bfseries\sffamily}
556 \setkomafont{subject}{\bfseries\sffamily}
557 \setcapindent{opt}
558

```

```

559 \raggedbottom
560
561 \RequirePackage{listings}
562 \PassOptionsToPackage{final}{listings}
563 \RequirePackage[%
564     skins
565     , listings
566     , breakable
567     , xparse
568     , documentation
569 ]{tcolorbox}
570 \lstMakeShortInline[language=TeX,basicstyle=\ttfamily]|

```

Following we load **hyperxmp** [hyperxmp] and **hyperref** [hyperref] for PDF-meta data and interactive linked text.

```

571 \RequirePackage{hyperxmp}
572 \RequirePackage{hyperref}
573 \hypersetup{% setup the hyperref-package options
574     unicode      = true,
575     pdfauthor     = {HUBerlin}, % - author (PDF meta)
576     pdfauthortitle = {},
577     pdfcopyright  = {Copyright (c) \the\year . All rights reserved.},
578     pdfhighlight  = /N,
579     pdfdisplaydoctitle = true,
580     pdfdate       = {\today},
581     pdflang       = {}, % de en
582     pdfcaptionwriter = {Lukas C. Bossert},
583     pdfkeywords   = {HUBerlin},
584     pdfencoding   = auto,
585     pdfproducer   = {HUBerlin with LuaLaTeX},
586     bookmarksnumbered = true,
587     bookmarksopenlevel = 2,
588     bookmarksopen = true,
589     bookmarksdepth = 3,
590     colorlinks    = true, %Colours links instead of ugly boxes
591     urlcolor      = HUBerlin-blue, %Colour for external hyperlinks
592     linkcolor     = black, %Colour of internal links
593     citecolor     = black, %Colour of citations
594     linktoc       = page,
595     pdfborder     = {0 0 0},
596     breaklinks    = true, %allow line break inside links
597     final
598 }
599 \RequirePackage{bookmark}
600
601 \RequirePackage[
602     sort,
603     nameinlink,
604     compress,
605     ngerman, english
606 ]{cleveref}
607
608

```

```

609 %---- newcommands
610 \newcommand{\TeXografie}{Lukas C. Bossert
611   (www.TeXografie.de) }
612 \newcommand\HUBerlin{\HUBerlintitle\xspace}
613
614
615 \newcommand\HUBerlinFolder{%
616   \begingroup%
617   \normalfont%
618   \color{HUBerlin-blue}%
619   % \faFolderOpen% taken from fontawesome
620   \hspace{.3em}%
621   \endgroup}
622
623
624
625 \RedeclareSectionCommands[
626   tocraggedpagenumber,
627   toclinefill=\tocpageseparator,
628   tocindent=oem,
629   tocnumwidth=4em,
630   tocpagenumberbox=\tocpagenumberbox% <- added
631 %   tocpagelumberformat=\textsf,
632 ]{chapter, section, subsection, subsubsection, paragraph}
633
634 \newcommand\tocgobble[1]{}% <- added
635 \newcommand\tocpageseparator{\footnotesize\, \mbox{---}\, }
636 \newcommand\tocpagenumberbox[1]{\mbox{#1}}% <- added
637 \KOMAOptions{toc=indentunnumbered}
638
639 \RedeclareSectionCommand[
640 %   tocbeforeskip=1.25em plus 1pt
641   ,tocentryformat=\large\scshape%
642   ,tocindent=oem
643   ,tocnumwidth=4em
644   ,tocpagenumberbox=\tocgobble% <- added
645 ]{part}
646 %\addtokomafont{partentry}{\scshape\sffamily\bfseries}
647
648 \RedeclareSectionCommand[%
649 %   ,beforeskip=1.15em plus 1pt%
650 ,tocentryformat=\textbf%
651 %   ,toclinefill={\TOCLineLeaderFill}%\TOCLineLeaderFill[\textbf{.}]
652 ]{chapter}
653
654
655
656
657 \newtcolorbox{example}[1][]{
658   breakable,
659   top=5pt,
660   bottom=5pt,
661   colback=HUBerlin-blue!10,

```

```

662 colframe=HUBerlin-blue,
663 left=5pt,
664 right=5pt,
665 sharp corners,
666 boxrule=opt,
667 bottomrule=2pt,
668 top rule=2pt,
669 enhanced jigsaw,
670 lefttitle=opt,
671 coltitle=white,
672 fonttitle=\bfseries,
673 fontupper=\small,%\ttfamily,
674 % colbacktitle=HUBerlin-blue!20
675 #1,
676 }
677
678 % Replace the squat-u symbol for spaces
679 % https://tex.stackexchange.com/a/488123/98739
680 \makeatletter
681 \def\lst@visiblespace{\lst@ttfamily{\char32}$\textcolor{HUBerlin-grey}{\cdot}$}
682 \makeatother
683
684
685 \lstset{%
686   basicstyle = \linespread{0.7}\listingsfont
687 ,breaklines = true
688 ,breakatwhitespace
689 ,alsoletter=\\{\}\*\[\]\-
690 ,showstringspaces=true
691 }
692
693 \lstdefinestyle{HUBerlinlistingstyledef}{%
694   tabsize      = 4,
695   breaklines    = true,
696   breakatwhitespace = true,
697   postbreak=\mbox{$\hookrightarrow$},
698   %keepspaces    = true,
699   escapeinside  = {(*@){@*}},
700   moredelim     = {[is][\ttfamily\bfseries\color{HUBerlin-blue}]{|}{|}},
701   moredelim     = {[is][\ttfamily\bfseries\color{HUBerlin-blue}]{|_}{|_}},
702   moredelim     = {[is][\ttfamily\bfseries\color{HUBerlin-red}]{|_2}{|_2}},
703   aboveskip=opt,
704   belowskip=opt,
705   captionpos=b,
706   resetmargins=true,
707   sensitive=true,
708   upquote=true,
709   showspaces=true,
710   showtabs=true,
711   tab=\textcolor{HUBerlin-grey}{\rightarrowfill},
712   %numbers=left,
713   %numberstyle=\footnotesize\ttfamily\color{HUBerlin-grey},
714   comment       = [l]{\%},

```

```

715 commentstyle = \footnotesize\color{HUBerlin-grey}\addfontfeature{LetterSpace=.7},
716 % deletecomment = [1]{\%<}
717 % morecomment = [1][\nullfont]{\%<},
718 % deletecomment = [is]{\%<}{>},
719 }
720
721 \lstdefinestyle{HUBerlinlistingstyle}{%
722 language = {TeX},
723 style = {HUBerlinlistingstyledef},
724 }
725
726
727
728
729
730
731 \tcbset{%
732 HUBerlinstyle/.style={%
733 enhanced,
734 before skip=2mm,
735 after skip=3mm,
736 boxrule=0.7pt,
737 left=2mm,
738 right=2mm,
739 top=2mm,
740 bottom=2mm,
741 sharp corners,
742 colback=white,
743 colbacklower=white,
744 % fonttitle=\sffamily\bfseries,
745 breakable,
746 %before skip=\baselineskip,
747 coltitle=white,
748 colbacktitle=HUBerlin-blue!50!black,
749 fonttitle=\bfseries\sffamily\footnotesize,
750 % before upper={\mynote{\thetcbcounter}},
751 title={\hfill{Example \thetcbcounter}},
752 },
753 codecomment/.style={%
754 listing outside comment,%
755 boxrule=opt,
756 colback=white,
757 }
758 }
759
760 \newtcolorbox{warning}[1][]{
761 enhanced,
762 before skip=2mm,
763 after skip=3mm,
764 boxrule=0.7pt,
765 left=5mm,
766 right=2mm,
767 top=2mm,

```

```

768 bottom=2mm,
769 colback=white,
770 colframe=yellow!20!black,
771 sharp corners,
772 rounded corners=southeast,
773 arc is angular,
774 arc=3mm,
775 underlay={%
776 \path[fill=HUBerlin-grey!80!black] ([yshift=3mm]interior.south east)--
    ++(-0.4,-0.1)--++(0.1,-0.2);
777 \path[draw=HUBerlin-grey,shorten <=-0.05mm,shorten >=-0.05mm] ([yshift=3mm]interior
    ++(-0.4,-0.1)--++(0.1,-0.2);
778 \path[fill=red!50!black,draw=none] (interior.south west) rectangle node[white]{\Huge
779 },
780 drop fuzzy shadow,
781 #1
782 }
783
784 \newtcblisting[%
785 auto counter,
786 crefname = {example}{examples},
787 Crefname = {Example}{Examples},
788 ]{codetext}[2][]{%
789 HUBerlinstyle,
790 % side text,
791 rounded corners=northeast,
792 arc=6mm,
793 listing style=HUBerlinlistingstyle,
794 label = #2,
795 #1,
796 }
797
798 \newtcblisting[%
799 use counter from=codetext,
800 crefname={code example}{code examples},
801 Crefname={Code example}{Code examples}%
802 ]{code}[2][]{%
803 HUBerlinstyle,
804 rounded corners=southeast,
805 arc=6mm,
806 listing only,
807 listing style=HUBerlinlistingstyle,
808 label = #2,
809 #1,
810 }
811
812
813 \DeclareTCBInputListing[%
814 use counter from=codetext,
815 crefname={code example}{code examples},
816 Crefname={Code example}{Code examples}%
817 ]{\HUBerlinlisting}{ O{} m }{%
818 HUBerlinstyle,

```

```

819  listing file={#2},
820  listing only,
821  listing style=HUBerlinlistingstyle,
822  #1,
823 }
824
825 \makeatletter
826 \newrobustcmd*{\fnurl}[1][\hyper@normalise\ltd@fnurl{#1}]
827 \def\ltd@fnurl#1#2{\footnote{#1\hyper@linkurl{Hurl{#2}}{#2}}}
828 \makeatother

```

The first command is used to reference packages with: `\pkg{<package name>}`.<sup>2</sup> The name of the package is linked to its entry on CTAN and referenced to the bibliography in the end of this documentation.

```

829 \RequirePackage{newfile}
830 \newoutputstream{pkglist}

831 \NewDocumentCommand{\pkg}{om}{%
832   \IfNoValueTF{#1}
833   {\lowercase{\href{http://www.ctan.org/pkg/#2}}{\textbf{#2}}}
834   {\lowercase{\href{http://www.ctan.org/pkg/#1-#2}}{\textbf{#2}}}%
835   \space\cite{#2}%
836   \addtostream{pkglist}{#2}}

837 \newrobustcmd*{\lit}[1]{\textsf{#1}}
838 \newrobustcmd*{\Code}[1]{\texttt{#1}}
839 \newrobustcmd*{\tex}{\TeX}
840 \newrobustcmd*{\etex}{\mbox{e-TeX}}
841 \newrobustcmd*{\pdftex}{pdf-\tex}
842 \newrobustcmd*{\xetex}{Xe-\tex}
843 \newrobustcmd*{\luatex}{Lua-\tex}
844 \newrobustcmd*{\latex}{\LaTeX}%{La\kern-0.07em TeX}
845 \newrobustcmd*{\pdflatex}{pdf-\latex}
846 \newrobustcmd*{\xelatex}{Xe-\latex}
847 \newrobustcmd*{\lualatex}{Lua-\latex}
848 \newrobustcmd*{\miktex}{Mik-\tex}
849 \newrobustcmd*{\texlive}{\tex~live}
850 \newrobustcmd*{\bibtex}{Bib\kern-0.07em TeX}
851 \newrobustcmd*{\lppl}{\latex{} Project Public License}
852 \newrobustcmd*{\pdf}{\PDF}
853 \newrobustcmd*{\md}{\Markdown}
854 \newrobustcmd*{\utf}{\mbox{UTF-8}}
855 % no \mbox here, we may have to break things
856 \newrobustcmd*{\bibfield}[1]{\Code{#1}}
857 \newrobustcmd*{\opt}[1]{\Code{#1}}
858 \newrobustcmd*{\bibmacro}[1]{\Code{#1}}
859 \newrobustcmd*{\bibtype}[1]{\Code{@#1}}
860 %\renewrobustcmd*{\cmd}[1]{\Code{\textbackslash #1}}
861 \renewrobustcmd\meta[1]{\normalfont\texttriangle\itshape#1\!/\!}{\texttriangle}
862
863 % directly taken from ltxdoc.dtx
864 \renewrobustcmd\marg[1]{%

```

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



```

865  {\ttfamily\textcolor{HUBerlin-red}{\{}}}%
866  \meta{#1}%
867  {\ttfamily\textcolor{HUBerlin-red}{\{}}}%
868  }
869
870 \renewrobustcmd\oarg[1]{%
871  {\ttfamily\textcolor{HUBerlin-green}{[]}}%
872  \meta{#1}%
873  {\ttfamily\textcolor{HUBerlin-green}{[]}}%
874  }
875
876 % adapted from listings.dtx (lstdoc.sty)
877 \renewrobustcmd\cmd[1]{%
878  \texttt{\color{HUBerlin-blue}\textbackslashstring#1}\xspace%
879  }
880
881 \newrobustcmd\env[2][ ]{%
882  \texttt{%
883  \color{HUBerlin-blue}%
884  \textbackslash begin\{\string#2\}\#1}%
885  \ldots
886  \texttt{%
887  \color{HUBerlin-blue}%
888  \textbackslash end\{\string#2\}}%
889  \xspace}

```

For a common layout of the parameter style to identify code of the different documents, files and packages we use `\param{(name of the parameter)}`.

```

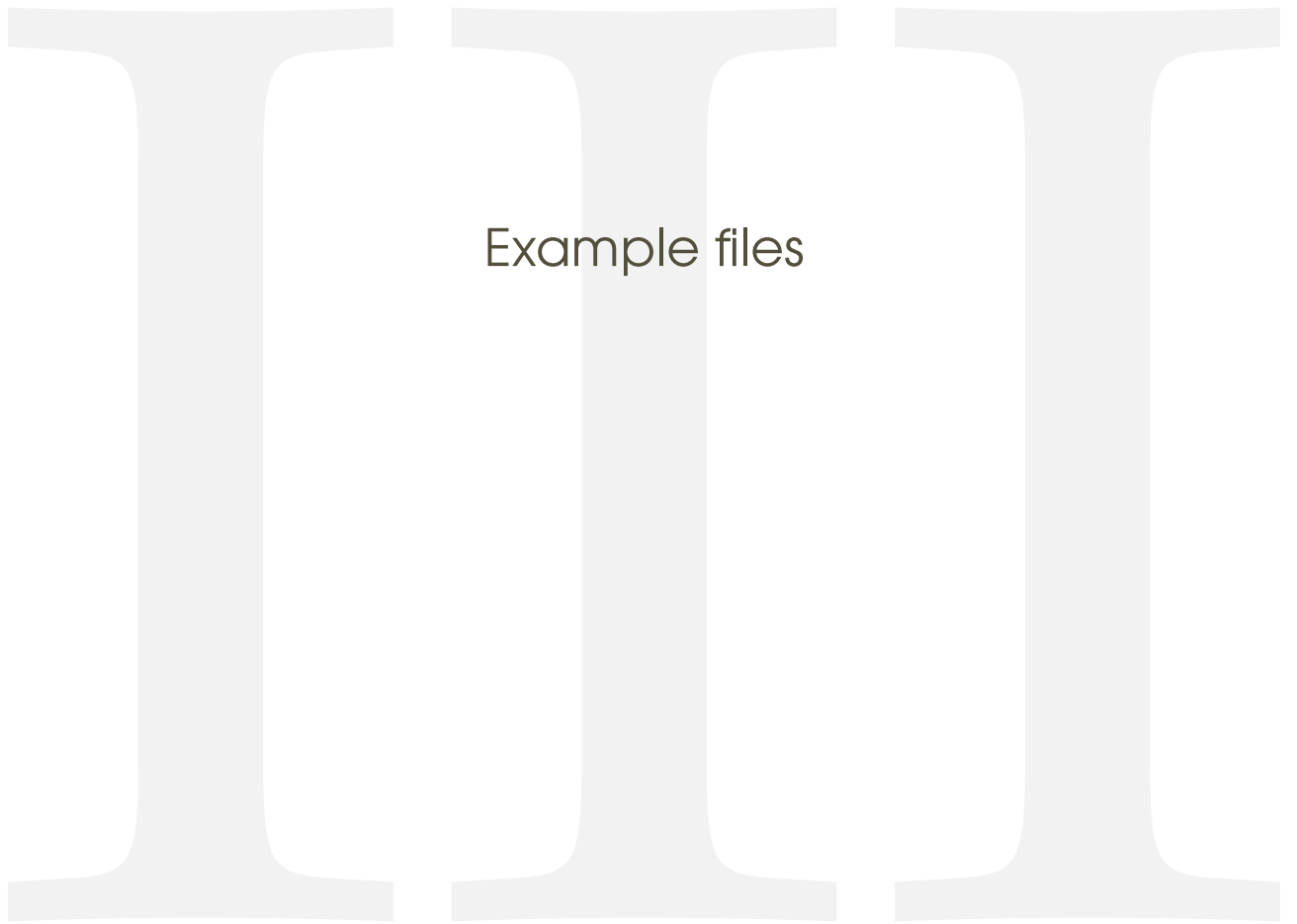
890 \newcommand\param[1]{%
891  \begingroup%
892  \normalfont%
893  \ttfamily%
894  \bfseries%
895  \textless%
896  #1%
897  \ttfamily%
898  \bfseries%
899  \textgreater%
900  \endgroup}

901 \pdfstringdefDisableCommands{%
902  \def\lstinline#1{<#1>}
903  \def\tex{TeX}%
904  \def\etex{e-TeX}%
905  \def\xetex{XeTeX}%
906  \def\latex{LaTeX}%
907  \def\xelatex{XeLaTeX}%
908  \def\bibtex{BibTeX}%
909  \def\lppl{LaTeX Project Public License}%
910  \def\pdf{PDF}%
911  \def\utf{UTF-8}%
912  \def\{\}%
913  \def\texttt#1{<#1>}%
914  \def\marg#1{\{#1\}}%

```

```
915 \def\oarg#1{[#1]}%
916 \def\color#1#2{}%
917 \def\env#1{<#1>}
918 \def\cmd#1{#1}
919 }
920 % https://tex.stackexchange.com/a/24067/98739
921 \makeatletter
922 \patchcmd{\scr@startchapter}{\if@openright\cleardoublepage\else\clearpage\fi}{}{}{}
923 \makeatother
924 %
925 \RequirePackage[tightLists=false]{markdown}
926 \markdownSetup{rendererPrototypes={%
927 link = {\href{#3}{#1}}}%
928 }}
929 \</style>

930 \</sty>
```



Example files

## 7 Letter

### 7.1 From **.tex**

HUBerlin-letter.pdf missing!

### 7.2 From **.md**

HUBerlin-letter-markdown.pdf missing!