

hu-berlin-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.«
[3, p. 195]

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1 Introduction

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

Following documents or documentclasses are available:

- **letter** (hu-berlin-letter.cls); via .tex and .md
- **base package** (hu-berlin-base.sty)

1.1 Installation of the bundle

hu-berlin 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 hu-berlin-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/hu-berlin-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 v1.0.8 (2020/10/30)

- (letter) replacing actual logo with a dummy text (due to possible copyright conflicts). The correct logo has to be called hu-berlin-logo.pdf and needs to be put somewhere in PATH so it will be found. If such file cannot be found a dummy text will be taken instead ('Humboldt-Universität zu Berlin')

1.2.2 v1.0.7 (2020/10/29)

- (letter) fixed missing \removeeffields

- (letter) added missing suffix for hu-logo (.pdf)

1.2.3 v1.0.6 (2020-10-22)

- (letter) changed address separator
- (letter) fixed empty minipage when no metadata given
- (letter) changed default backaddress

1.2.4 v1.0.5 (2020-04-28)

- (general) Changed logo format to .pdf
- (letter) Changed `\ifkomavareempty` to `\ifkomavareempty`, fixes [github-issue nr. 1](#)

1.2.5 v1.0.4 (2019-12-19)

- Added `hu-berlin-base.sty` as a package which contains all relevant code for documents and documentclasses of the bundle.

1.2.6 v1.0.3 (2019-06-26)

- Changed the main font for compatibility with UNIX-systems (TeX Gyre Heros instead of Verdana).

1.2.7 v1.0.2 (2019-06-22)

Renaming files for CTAN compatability.

1.2.8 v1.0.1 (2019-06-21)

Internal changes for publishing. Still one documentclass for a letter.

1.2.9 v1.0.0 (2019-06-21)

First release with a documentclass for letter.

1.3 Copyright

Various parts of this bundle have different copyrights. If not otherwise stated the copyright is [The LaTeX project public license \(LPPL\)](#), version 1.3c

1.3.1 Boilerplate / markdown-template

The template for the markdown conversion, forked from the pandoc-templates and [JensErat pandoc-scrlltr2](#) 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](#).

```

hu-berlin-bundle
├── hu-berlin-bundle.dtx ..... code and documentation
├── hu-berlin-bundle.pdf ..... documentation
├── hu-berlin-base.sty ..... basic components of the bundle
├── hu-berlin-letter-example-lualatex.tex ..... letter
├── hu-berlin-letter-example.lco ..... datafile for letter
├── hu-berlin-letter-example-lualatex.pdf ..... letter
├── hu-berlin-letter-example-markdown.pdf .... converted letter from markdown
├── hu-berlin-letter-example-markdown.md ..... example markdown file
├── hu-berlin-letter-template.latex ..... template for conversion
├── img ..... folder for images
│   └── texografie-logo.pdf ..... logo of maintainer
├── makefile ..... makefile to generate all required files
└── README.md ..... README file with information on installation

```

Figure 2.1: Structure of `hu-berlin` bundle

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

A large, light gray, 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{hu-berlin-letter-example.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}
19 }

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   \usekomavar{fromname}
32 }
33 </lco>

```

Example 1

```

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

```

```

30 }
31 %%

```

3.2 .tex-file

```

34 \let*letter)

35 \documentclass{hu-berlin-letter}

```

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

```

36 \LoadLetterOption{hu-berlin-letter-example}

```

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

```

37 % \setmainfont[%
38 %     BoldFont=ScalaSans-BoldLF,
39 %     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}{%
49     Erika Musterfrau\par
50     Musterweg 43\par
51     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\\
61   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

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

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

73 `sender: hu-berlin-letter-example`

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:

Example 3	
1	<code>---</code>
2	<code>documentclass: hu-berlin-letter</code>
3	<code>sender: hu-berlin-letter-example</code>
4	<code>subject: Short description</code>
5	<code>addressee:</code>
6	<code>- Alexander von Humboldt</code>
7	<code>- Unter den Linden 6</code>
8	<code>- 10099 Berlin</code>
9	<code>---</code>
10	<code>Thank you very much for your letter.</code>

81 `</letter-md>`

Here we close the example files.

82 $\langle /example \rangle$



Guide for Coders

1 `\<sty>`

4 hu-berlin-base-package

2 `\<base>`

Since we do want to compile with Lua^AT_EX, we make sure that it will be compilable only with that.

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

Now a fix.¹

```
4 \ifx\directlua\relax
5   \let\directlua\UnDeFiNeD
6 \fi

7 \ifluatex
8 \else
9 \GenericError{hu-berlin}%
10 {Please use 'LuaLaTeX' as Compiler.^^J I abort here.}
11 \fi
```

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

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

Common package for handling figures is **graphicx** [1].

```
13 \RequirePackage{graphicx}
```

For loading fonts.

```
14 \RequirePackage{fontspec}
```

Actually the corporate design says that the font Verdana should be used. But since this font is not included in UNIX-systems we use a derivative.

```
15 \setmainfont{TeX Gyre Heros}
```

If you have Verdana on your system you can uncomment the following line.

```
16 % \setmainfont{Verdana}
```

For the wheelchair symbol we load **marvosym** [9]

```
17 \RequirePackage{marvosym}
```

And we define various colors from the corporate design manual.

```
18 \RequirePackage{xcolor}
19 \definecolor{hu-berlin-blue}{RGB}{0, 65, 137}
20 \definecolor{hu-berlin-green}{RGB}{150, 190, 20}
21 \definecolor{hu-berlin-grey}{RGB}{169, 169, 169}
22 \definecolor{hu-berlin-brown}{RGB}{82, 79, 60}
```

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

```
23 \definecolor{hu-berlin-red}{RGB}{180,0,0}
```

That's all for the base package, so we close it.

```
24 \end{base}
```

```
25 \end{sty}
```

```
26 \end{cls}
```

5 Letter

```
27 \begin{letter}
```

We load `scrletter` [5] which is the documentclass for letters. Furthermore we set up some options.

```
28 \LoadClass[%
29   fontsize=10pt,
30   version=last,
```

If there is anything to debug, you can enable visualize

```
31   % visualize
32 ]{scrletter}
```

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

```
33 % \showfields{head, address, location, refline, foot}
```

Since all common and basic features of the bundle are located in a separate package we load that first.

```
34 \RequirePackage{hu-berlin-base}
```

To get the HU logo on the second and following pages we load `scrlayer-scrpage` [4].¹

```
35 \RequirePackage{scrlayer-scrpage}
36 \clearpairofpagestyles
37 \DeclareNewLayer[
38   foreground,
39   voffset=\useplength{firstheadvpos},
40   hoffset=\useplength{firstheadhpos},
41   width=\useplength{firstheadwidth},
42   mode=picture,
43   contents=\putUL{\raisebox{-\height}{\usekomavar{firsthead}}}]
44 ]{likefirstpage.head}
45 \AddLayersToPageStyle{scrheadings}{likefirstpage.head}
46 \DeclareNewLayer[
47   foreground,
```

¹ <https://tex.stackexchange.com/a/495258/98739>


```

48 align=r,
49 voffset=\useplength{locvpos},
50 hoffset=\paperwidth-\useplength{lochpos},
51 width=\useplength{locwidth},
52 height=\useplength{locheight},
53 contents=\usekomavar{nextlocation},
54 %pretoccontents=\layercontentsmeasure% to show the position of the layer
55 ]\likefirstpage.loc}
56 \AddLayersToPageStyle{scrheadings}{\likefirstpage.head,\likefirstpage.loc}

```

Now we apply the code for following pages.

```

57 \newkomavar{nextlocation}
58 \setkomavar{nextlocation}{%
59   \raggedright
60   \fontsize{7}{8.5}\selectfont
61   \pagemark
62 }

```

For better adjustments of the layout we load **geometry** [2].

```

63 \RequirePackage{geometry}
64 \geometry{%
65   a4paper
66   , left           =25mm
67   , bottom         =16mm
68   , foot           =4mm
69   , top            =77mm
70   , headheight     =15pt
71   , textwidth      =117mm
72   , marginparsep   =0mm
73   , marginparwidth =0mm
74 }

```

Main Text and signature should be raggedright.

```

75 \renewcommand*{\raggedsignature}{\raggedright}
76 \raggedright

```

We also want to put the enclosures at the bottom of the page.²

```

77 \def\stopletter{}
78 \let\enclold\encl
79 \renewcommand\encl[1]{\vskip0ptplus1filll\enclold{#1}}

```

We define new komavars.

First the possibility to name the faculty,

```

80 \newkomavar{faculty}
81 \newkomafont{faculty}{\bfseries\fontsize{8.5}{10}\selectfont}

```

then the institute

```

82 \newkomavar{institute}
83 \newkomafont{institute}{\fontsize{8.5}{10}\selectfont}

```

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

and further fields for information.

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

We pass the name of the head of the institute.

```
85 \newkomafont{institute.head}{\bfseries}
86 \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.

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

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

```
88 \newkomavar{local}
89 \setkomavar*{local}{Sitz:}
```

and how to get there.

```
90 \newkomavar{connections}
91 \setkomavar*{connections}{Verkehrsverbindungen:}
```

Furthermore we inform about office hours

```
92 \newkomavar{officehours}
93 \setkomavar*{officehours}{Sprechzeiten:}
```

and if there is accessibility for wheelchairs etc.

```
94 \newkomavar{accessibility}
95 \setkomavar*{accessibility}{\large\reflectbox{\Wheelchair}} Eingang:}

96 \newkomavar{bank}
97 \setkomavar*{bank}{Bankverbindung:}
98 \setkomavar{bank}{Deutsche Bank PGK AG}
99 \newkomavar{IBAN}
100 \setkomavar{IBAN}{\mbox{IBAN DE95 1007 0848 0512 6206 01}}
101 \newkomavar{BIC}
102 \setkomavar{BIC}{BIC DEUTDEDB110}
```

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

```
103 \setkomavar{location}{%}
```

First anything regarding the font

```
104 \raggedright
105 \fontsize{7}{8.5}\selectfont
106 % \begin{macrocode}
107 % and for the section of faculty, institute etc. we use \env{minipage}
108 % \begin{macrocode}
109 \begin{minipage}[t][64mm]{\uselength{locwidth}}
```

then the faculty

```
110 \Ifkomavareempty{faculty}
```

This is a fake space to avoid any trouble if no custom metadata are given.

```
111 {\hspace*{1em}}
112 {\usekomafont{faculty}%
113 \usekomavar{faculty}\\[1\baselineskip]}
```

and the institute.

```
114 \Ifkomavareempty{institute}
115 {}
116 {\usekomafont{institute}\usekomavar{institute}\[1\baselineskip]}
```

Now anything else regarding the institute.

```
117 \Ifkomavareempty{institute.additional}
118 {}
119 {\usekomavar{institute.additional}\[1\baselineskip]}
```

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

```
120 \Ifkomavareempty{institute.head}
121 {}
122 {\textbf{\usekomafont{institute.head}%
123 \usekomavar{institute.head}}\%
124 \usekomavar*{institute.head}}
```

We close this section and the minipage.

```
125 \end{minipage}
```

Let's turn to further information.

For example date:

```
126 \textbf{\usekomavar*{date}}\%
127 \usekomavar{date}\par
```

and the sender of the letter.

```
128 \Ifkomavareempty{fromname}
129 {}
130 {\textbf{\usekomavar*{fromname}}\%
131 \usekomavar{fromname}\par}
```

And the reference of correspondence.

```
132 \Ifkomavareempty{myref}
133 {}
134 {\textbf{\usekomavar*{myref}}\%
135 \usekomavar{myref}\par}
```

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

```
136 \Ifkomavareempty{yourref}
137 {}
138 {\textbf{\usekomavar*{yourref}}\%
139 \usekomavar{yourref}\par}

140 \Ifkomavareempty{yourmail}
141 {}
142 {\textbf{\usekomavar*{yourmail}}\%
143 \usekomavar{yourmail}\par}

144 \Ifkomavareempty{customer}
145 {}
146 {\textbf{\usekomavar*{customer}}\%
147 \usekomavar{customer}\par}
```

```

148 \Ifkomavareempty{invoice}
149 {}
150 {\textbf{\usekomavar*{invoice}}}\
151 \usekomavar{invoice}\par

152 \textbf{\usekomavar*{fromaddress}}\
153 \usekomavar{fromaddress}
154 \Ifkomavareempty{fromphone}
155 {\par}
156 {\usekomavar*{fromphone}\usekomavar{fromphone}
157 \Ifkomavareempty{fromfax}
158 {\par}
159 {\}}
160 \Ifkomavareempty{fromfax}
161 {}
162 {\usekomavar*{fromfax}\usekomavar{fromfax}\par}

```

Next, emails and url:

```

163 \Ifkomavareempty{institute.head.mail}
164 {}
165 {\usekomavar{institute.head.mail}
166 \Ifkomavareempty{fromemail}
167 {\Ifkomavareempty{fromurl}
168 {\par}
169 {\}}
170 {\}}

171 \Ifkomavareempty{fromemail}
172 {}
173 {\usekomavar{fromemail}
174 \Ifkomavareempty{fromurl}
175 {\par}
176 {\}}

177 \Ifkomavareempty{fromurl}
178 {}
179 {\usekomavar{fromurl}\par}

```

Now the actual location of the sender

```

180 \Ifkomavareempty{local}
181 {}
182 {\textbf{\usekomavar*{local}}}\
183 \usekomavar{local}\par}

```

The last information section should be pinned to the bottom.

```
184 \vfill
```

Inform your addressee about the connection possibilities.

```

185 \Ifkomavareempty{connections}
186 {}

```

```

187   {\textbf{\usekomavar*{connections}}}\
188   \usekomavar{connections}\par}

189 \Ifkomavareempty{officehours}
190   {}
191   {\textbf{\usekomavar*{officehours}}}\
192   \usekomavar{officehours}\par}

```

If there is a barrier free entrance, tell it.

```

193 \Ifkomavareempty{accessibility}
194   {}
195   {\textbf{\usekomavar*{accessibility}}}\
196   \usekomavar{accessibility}\par}

```

And last the bank connection

```

197 \Ifkomavareempty{bank}
198   {}
199   {\textbf{\usekomavar*{bank}}}\
200   \usekomavar{bank}\
201   \usekomavar{IBAN}\
202   \usekomavar{BIC}
203   }

```

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

```

204 }

```

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

```

205 \KOMAOptions{%
206   numericaldate =true
207   ,refline      =nodate
208   ,backaddress  =plain
209   ,parskip      =half-
210 }

```

Getting rid of all other fields and their default position.

```

211 \removeeffields

```

Redefining length.

```

212 \setlength{refvpos}{110mm}
213 \setlength{refaftervskip}{0pt}
214 \setlength{toaddrhpos}{25mm}
215 \setlength{firstheadhpos}{\useplength{toaddrhpos}}
216 \setlength{lochpos}{15mm}
217 \setlength{locvpos}{\useplength{toaddrvpos}}
218 \addtoplength{locvpos}{.75\baselineskip}
219 \setlength{locwidth}{45mm}
220 \setlength{locheight}{232mm}

```

Now resetting or pre-defining some variables.

First we set the head of the first page, which is the logo. Be sure that you have the right using it! Everything regarding the logo is defined in the corporate design guidelines.³ You need to have the actual logo of the Humboldt-Universität zu Berlin which has to be called `hu-berlin-logo.pdf`. It can be downloaded here: <http://zope.hu-berlin.de/hu-intern/design/downloads/logo> If this logo is not found a replacement text is shown instead.

```

221 \setkomavar{firsthead}{%
222 \IfFileExists{hu-berlin-logo.pdf}
223   {\includegraphics[width=145mm]{hu-berlin-logo.pdf}}
224   {\vspace*{2em}\hfil\scshape [humboldt-universität zu berlin]}}%
225 }

226 \setkomavar{backaddressseparator}{~\textbar~}

227 \setkomavar{fromphone}{0000}
228 \setkomavar*{fromphone}{Telefon +49 [30] 2093-}

229 \setkomavar{fromfax}{0000}
230 \setkomavar*{fromfax}{Telefax +49 [30] 2093-}

231 \setkomavar*{fromaddress}{Postanschrift:}
232 \setkomavar{fromaddress}{%
233   Humboldt-Universität zu Berlin\\
234   Unter den Linden 6\\
235   D-10099 Berlin}

```

The default backaddress is slightly changed:

```

236 \setkomavar{backaddress}{%
237   Humboldt-Universität zu Berlin\\
238   UdL 6\\
239   D-10099 Berlin}

240 \setkomavar*{date}{Datum:}

241 \setkomavar*{fromname}{Bearbeiter:}

242 \setkomavar*{myref}{Geschäftszeichen:}

243 \setkomavar*{enclseparator}{Anlage}

244 \setkomavar*{ccseparator}{Kopie an}

245 % \RequirePackage{hyperref}
246 % \AtBeginDocument{{
247 %   \usekomavar[\def\author]{fromname}
248 %   \usekomavar[\def\subject]{subject}
249 %   \hypersetup{%
250 %     pdftitle           = {\subject},
251 %     pdfauthor          = {\author},

```

³ <https://www.hu-berlin.de/de/hu-intern/design/basiselemente/leitfaden-corporate-design-hu.pdf>

```

252 %      pdfsubject          = {\subject},
253 %      pdfkeywords         = {\author, \subject},
254 %      pdflang              = de,
255 %      pdfdisplaydoctitle = true,
256 %      colorlinks          = true,
257 %      plainpages          = false,
258 %      hypertextnames      = false,
259 %      unicode,
260 %    }
261 %  }}

262 </letter>

263 </cls>

264 <*template>

```

6 Boilerplate / Template for letters

```

265 <*letter-md>

```

```

266 \documentclass{hu-berlin-letter}

```

We predefine two variables.

```

267 \newkomavar{opening}
268 \newkomavar{closing}
269 \setkomavar{opening}{Sehr geehrte Damen und Herren}
270 \setkomavar{closing}{Mit freundlichen Grüßen}

271 $for(letteroption)$
272 \LoadLetterOption{$letteroption$}
273 $endfor$

274 $if(sender)$\LoadLetterOption{$sender$}$endif$
275 $if(addresseeimage)$\setkomavar{addresseeimage}{$addresseeimage$}$endif$
276 $if(backaddress)$\setkomavar{backaddress}{$backaddress$}\KOMAOptions{backad
277 $if(fromalign)$\KOMAOptions{fromalign=$fromalign$}$endif$
278 $if(customer)$\setkomavar{customer}{$customer$}$endif$
279 $if(date)$\setkomavar{date}{$date$}$endif$
280 $if(fromaddress)$\setkomavar{fromaddress}{$fromaddress$}$endif$
281 $if(frombank)$\setkomavar{frombank}{$frombank$}$endif$
282 $if(fromemail)$\setkomavar{fromemail}{$fromemail$}\KOMAOptions{fromemail=tru
283 $if(fromfax)$\setkomavar{fromfax}{$fromfax$}\KOMAOptions{fromfax=true}$endi
284 $if(fromlogo)$\setkomavar{fromlogo}{$fromlogo$}\KOMAOptions{fromlogo=true}$Se
285 $if(frommobilephone)$\setkomavar{frommobilephone}{$frommobilephone$}\KOMAOpt
286 $if(fromname)$\setkomavar{fromname}{$fromname$}$endif$

```

```

287 $if(fromphone)$\setkomavar{fromphone}{$fromphone$}\KOMAOptions{fromphone=true}
288 $if(fromurl)$\setkomavar{fromurl}{$fromurl$}\KOMAOptions{fromurl=true}$endif$
289 $if(fromzipcode)$\setkomavar{fromzipcode}{$fromzipcode$}$endif$
290 $if(invoice)$\setkomavar{invoice}{$invoice$}$endif$
291 $if(location)$\setkomavar{location}{$location$}$endif$
292 $if(myref)$\setkomavar{myref}{$myref$}$endif$
293 $if(myrefname)$\setkomavar*{myref}{$myrefname$}$endif$
294 $if(place)$\setkomavar{place}{$place$}$endif$
295 $if(PPcode)$\setkomavar{PPcode}{$PPcode$}$endif$
296 $if(signature)$\setkomavar{signature}{$signature$}$endif$
297 $if(specialmail)$\setkomavar{specialmail}{$specialmail$}$endif$
298 $if(subject)$\setkomavar{subject}{$subject$}$endif$
299 $if(title)$\setkomavar{title}{$title$}$endif$
300 $if(yourmail)$\setkomavar{yourmail}{$yourmail$}$endif$
301 $if(yourref)$\setkomavar{yourref}{$yourref$}$endif$
302 $if(opening)$\setkomavar{opening}{$opening$}$endif$
303 $if(closing)$\setkomavar{closing}{$closing$}$endif$
304 $if(firstfoot)$\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.

```

305 $if (addressee) $
306 $else$
307 \KOMAOptions{addrfield=false}
308 $endif$

```

Now the actual content of the letter

```

309 \begin{document}
310 \begin{letter}{%
311 $for (addressee) $
312 $addressee$$sep$\\
313 $endfor$
314 }
315 $for (include-before) $
316 $include-before$
317 $endfor$
318 \opening{\usekomavar{opening}}
319 $body$
320 \closing{\usekomavar{closing}}
321 $if (ps) $\ps{$ps$}$endif$
322 $if (encl) $\encl{$encl$}$endif$
323 $for (include-after) $$include-after$$endfor$
324 \end{letter}
325 \end{document}

326 </letter-md>
327 </template>

```

7 Documentation preamble <style>

```

328 <*sty>
329 <*style>
330 \makeatletter
331 \addtolength\marginparwidth{-40pt}
332 \addtolength\marginparsep{4mm}
333 \addtolength\oddsidemargin{-20pt}
334 \addtolength\evensidemargin{-20pt}
335 \let\PrintDescribeMacro=\@gobble
336 \let\PrintDescribeEnv=\@gobble
337 % \def\Describe@Macro#1{\endgroup
338 %      %\marginnote{\PrintDescribeMacro{#1}}%

```

```

339 %      \SpecialUsageIndex{#1}\@esphack\ignorespaces%
340 %      }
341 %\def\Describe@Env#1{\endgroup
342 %      %\marginnote{\PrintDescribeEnv{#1}}%
343 %      \SpecialEnvIndex{#1}\@esphack\ignorespaces%
344 %      }
345 \makeatother
346 \AtBeginDocument{\normalmarginpar}
347 \setlength\MacrocodeTopsep{.5\baselineskip}
348 \setlength\MacroIndent{6mm}
349
350
351 \RequirePackage{luatexbase}
352 \RequirePackage[ngerman,english]{babel}
353 \RequirePackage{calc}
354
355 \RequirePackage[
356   paper      = a4paper,    % - use A4 paper size
357   foot       = 2cm,
358   inner      = 3cm,    % - total body: left margin (odd pages)
359   top        = 3cm,    % - total body: top margin
360   outer      = 3cm,    % - total body: right margin (odd pages)
361   bottom     = 3cm,    % - total body: bottom margin
362   marginparwidth = 2cm,  % - width for side note
363   marginparsep  = .5cm,  % - space between notes and body text (content)
364 %   showframe,
365 ]{geometry}
366
367 \newlength\fullwidth
368 \setlength\fullwidth{\textwidth+\marginparwidth+\marginparsep}
369
370 \KOMAOptions{
371   numbers      = noenddot,
372 }
373 \AtBeginDocument{
374   \KOMAOptions{
375     % headwidth  = {\fullwidth},
376     % footwidth  = {\fullwidth},
377     footheight  = 20pt,
378     headheight  = 29pt,
379     captions    = tableheading,
380   }}
381
382
383
384 \title{\huberlintitle}
385 %\subtitle{\huberlinsubtitle}

```

```

386 \author{\huberlinauthor}
387 \date{\Version}
388
389
390 %---- Required Packages
391 \RequirePackage{ifluatex, luatex85}
392 \ifx\directlua\relax
393   \let\directlua\UnDeFiNeD
394 \fi
395 \ifluatex
396 \else
397 \GenericError{hu-berlin}%
398 {Please use 'LuaLaTeX' as Compiler.^^J I abort here.}
399 \fi

```

For fonts we load the package **fontspec** [8] which has almost no limits handling font-stuff.

```

400 \RequirePackage{fontspec}

401 \RequirePackage[mono=false]{libertine}
402 \RequirePackage{amssymb}
403
404 \defaultfontfeatures{%
405   Ligatures = TeX
406 }

```

For fonts we use the available TeX Gyre Pagella as main font.¹

```

407 \setmainfont[%
408   Ligatures = TeX
409   ,Numbers = OldStyle]{TeX Gyre Pagella}

```

And we declare also the other fonts, too.

```

410 \setmonofont[%
411   Scale=1
412 ]{TeX Gyre Cursor}
413 \setsansfont[%
414   ,LetterSpace = .8
415 ]{TeX Gyre Adventor-Regular}
416 \linespread{1.05}

417
418
419
420 \RequirePackage{marginnote}
421 \renewcommand*{\marginfont}{%
422   \rule{0pt}{0.7\baselineskip}%
423   \footnotesize%
424   \color{hu-berlin-brown}}
425

```

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

```

426 \RequirePackage[
427   german = guillemets,
428   style   = german,
429 ]{csquotes}
430
431 \RequirePackage{enumitem}
432 \setlist{
433   nosep,
434   % itemindent=1em,
435   % labelindent=0.5\parindent,
436   leftmargin=*}
437 \newlist{tabitemize}{itemize}{2}% neue Listenumgebung
438 \setlist{tabitemize}{%
439   nosep,
440   leftmargin=*
441 }
442 \setlist{tabitemize,1}{label=\labelitemi}
443 \setlist{tabitemize,2}{label=\labelitemii}
444
445
446 \clubpenalty=10000 % prevent single lines at the beginning of a paragraph
447 \widowpenalty=10000 % prevent single lines at the end of a paragraph (Huren
448 \displaywidowpenalty=10000 %
449
450 \RequirePackage{pdfpages}
451 \RequirePackage{biblatex}
452 \addbibresource{\jobname-bibliography.bib}
453 \addbibresource{\jobname-ctan.bib}
454 \RequirePackage{ccicons} %creative commons
455 \RequirePackage{xparse}
456 \RequirePackage{ragged2e}
457 \RequirePackage{microtype}
458 \RequirePackage{xspace}
459 \RequirePackage{graphicx}
460 \graphicspath{{img/}}

461 \RequirePackage{etoolbox}
462 %https://tex.stackexchange.com/a/235881/98739
463 \AfterEndPreamble{%
464   \maketitle
465   \renewcommand\MacroFont{\ttfamily}
466   \renewcommand\AltMacroFont{\ttfamily\linespread{.8}}% slanted verbatim
467 }
468
469 % https://tex.stackexchange.com/a/401466/98739
470 \makeatletter
471 \renewcommand*\maketitle{%

```

```

472 % taken and shortened from /usr/share/texmf/tex/latex/koma-script/scrartcl.dtx
473 \begin{titlepage}
474 \newgeometry{left=3cm,right=3cm,top=1.5cm,bottom=2cm}
475 \global\@topnum=\z@
476 \setparsizes{\z@}{\z@}{\z@\@plus 1fil}\par@updaterelative
477 \null
478 {\large\@author\hfill \href{mailto:lukas@texografie.de}{lukas@texografie.de}
479 \vskip 10em%
480 {\begin{center}\color{hu-berlin-blue}
481 {\fontsize{50}{55}\selectfont\huberlinshort{} \par\vskip .5em%
482 \Large\sffamily\@title}\par
483 \vskip .5em
484 \end{center}}}%
485 {\ifx\@subtitle\@empty\else\usekomafont{subtitle}\@subtitle\par\fi}%
486 \null\vskip 5em%
487 \blockcquote[195]{Hoare1973}{Documentation must be regarded as an integral p
488 A good programming language will encourage and assist the programmer to wr
489 self-documenting code,
490 and even perhaps to develop
491 and display a pleasant style
492 of writing.}
493 \null\vfill
494 {\usekomafont{subtitle}{\@date \hfill
495 \includegraphics[width=4cm]{img/texografie-logo.pdf}\}\}%
496 \par
497 \vskip 0em
498 \restoregeometry
499 \end{titlepage}
500 }%
501 \makeatother
502
503 \RequirePackage{xcolor}
504 \definecolor{hu-berlin-blue}{RGB}{0,65,137} % HEX 004189
505 \definecolor{hu-berlin-green}{RGB}{150,190,20} % HEX 93C11A % Topoi
506 \definecolor{hu-berlin-grey}{RGB}{169,169,169}
507 \definecolor{hu-berlin-brown}{RGB}{82,79,60}
508 \definecolor{hu-berlin-red}{RGB}{180,0,0}
509
510
511 \RequirePackage{dirtree}
512 \renewcommand*{DTstylecomment}{%
513 \color{hu-berlin-grey}%
514 \footnotesize%
515 \sffamily}
516 \renewcommand*{DTstyle}{%
517 \ttfamily%
518 \small%

```

```

519 }
520
521 \RequirePackage[
522   markcase      = noupper,
523   footsepline   = .5pt,
524   % headsepline = .5pt,
525   autooneside   = false,% use left and right marks with a onesided document
526   automark,% set \leftmark and \rightmark automatically by *\section and \sub
527   draft         = false,
528 ]{scrlayer-scrpage}
529
530 \pagestyle{scrheadings}
531 \clearscrheadfoot
532 \rofoot*{\thepage}
533 \lofoot*{\textcolor{hu-berlin-blue}{\huberlintitle}\ \vrule\ \textcolor{hu-
   berlin-brown}{\huberlinsubtitle}}
534 \rohead*{hu-berlin-bundle}
535 \lohead*{Version: \Version}

536 % https://tex.stackexchange.com/a/352925/98739
537 \newcommand*\partnumber{}
538 \DeclareNewLayer[
539   background,
540   textarea,
541   addwidth=\marginparsep+\marginparwidth,
542   mode=picture,
543   contents={%
544 \putC{\makebox[0pt][c]{\raisebox{-.5\height}{\scalebox{50}{\textcolor{black}
545   }
546 ]{\partnumber}
547 \DeclareNewPageStyleByLayers{part}{partnumber}
548 \renewcommand\partpagestyle{part}
549 \renewcommand*\partformat{\gdef\partnumber{\thepart}}
550
551 % only a dirty workaround for the part title
552 \newcommand*\changedpartwidth[1]{%
553   \makebox[\linewidth][l]{%
554 \parbox{\dimexpr\textwidth+\marginparsep+\marginparwidth\relax}{\raggedpart
555   }%
556 }
557 % add \changedpartwidth as last command to the settings for font element par
558 \addtokomafont{part}{\Huge\changedpartwidth}
559
560
561
562 %-https://tex.stackexchange.com/a/339516/98739 | https://tex.stackexchange.
563 % footnotes in the footer:

```

```

564 \deffootnote%
565   %[\normalparindent]%<width of mark>
566   {0.0cm}%<indent of footnote text>
567   {\normalparindent}%<paragraph indent in the footnote text>
568   {\makebox[\normalparindent][r]%
569    {\thefootnotemark\hspace*{3pt}}}%<definition of mark>
570 \newlength{\normalparindent}
571 \AtBeginDocument{\setlength{\normalparindent}{\parindent}}
572 \setfootnoterule{0pt}% Kein Fußnotenstrich
573 %\setfootnoterule[<height>]{<length>}
574

```

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

```

575 \renewcommand\sectionlinesformat[4]{%
576   \makebox[0pt][r]{#3}#4%
577 }

578 \RequirePackage{url}
579 % \urlstyle{same}
580
581 \setkomafont{title}{\sffamily\color{hu-berlin-blue}\flushleft\bfseries}
582 \setkomafont{disposition}{\color{hu-berlin-brown}\sffamily\bfseries\large}
583 \setkomafont{section}{\usekomafont{disposition}}
584 \setkomafont{subsection}{\usekomafont{disposition}}
585 \setkomafont{subsubsection}{\usekomafont{disposition}}
586 % \setkomafont{paragraph}{\bfseries}
587 % \setkomafont{subsubsection}{\sffamilybold}
588 \setkomafont{subtitle}{\large\color{hu-berlin-brown}\sffamily\flushleft}
589 \setkomafont{pageheadfoot}{\footnotesize\sffamily\color{hu-berlin-
    grey}}
590 \setkomafont{descriptionlabel}{\bfseries}
591 \setkomafont{footnotelabel}{\bfseries}
592 \addtokomafont{titlehead}{\flushright}
593 % \setkomafont{headsepline}{\color{hu-berlin-blue}}
594 % \setkomafont{marginnote}{\MakeUppercase\color{hu-berlin-brown}}
595 \addtokomafont{caption}{\scriptsize}
596 \setkomafont{captionlabel}{\bfseries\sffamily}
597 \setkomafont{subject}{\bfseries\sffamily}
598 \setcapindent{0pt}
599
600 \raggedbottom
601
602 \RequirePackage{listings}
603 \PassOptionsToPackage{final}{listings}
604 \RequirePackage[%
605   skins
606   ,listings
607   ,breakable

```

```

608 , xparse
609 , documentation
610 ] {tcolorbox}
611 \lstMakeShortInline[language=TeX,basicstyle=\ttfamily]

```

Following we load **hyperxmp** [6] and **hyperref** [7] for PDF-meta data and interactive linked text.

```

612 \RequirePackage{hyperxmp}
613 \RequirePackage{hyperref}
614 \hypersetup{% setup the hyperref-package options
615   unicode      = true,
616   pdfauthor     = {hu-berlin}, % - author (PDF meta)
617   pdfauthortitle = {},
618   pdfcopyright  = {Copyright (c) \the\year . All rights reserved.},
619   pdfhighlight  = /N,
620   pdfdisplaydoctitle = true,
621   pdflang       = {}, % de en
622   pdfcaptionwriter = {Lukas C. Bossert},
623   pdfkeywords   = {hu-berlin},
624   pdfencoding   = auto,
625   pdfproducer   = {hu-berlin with LuaLaTeX},
626   bookmarksnumbered = true,
627   bookmarksopenlevel = 2,
628   bookmarksopen = true,
629   bookmarksdepth = 3,
630   colorlinks     = true, %Colours links instead of ugly boxes
631   urlcolor       = hu-berlin-blue, %Colour for external hyperlinks
632   linkcolor      = black, %Colour of internal links
633   citecolor      = black, %Colour of citations
634   linktoc        = page,
635   pdfborder      = {0 0 0},
636   breaklinks     = true, %allow line break inside links
637   final
638 }
639 \RequirePackage{bookmark}
640
641 \RequirePackage[
642   sort,
643   nameinlink,
644   compress,
645   ngerman, english
646 ] {cleveref}
647
648
649 %---- newcommands
650 \newcommand{\TeXografie}{Lukas C. Bossert
651   (www.texografie.de) }

```



```

652 \newcommand\huberlin{\huberlintitle\xspace}
653
654
655 \newcommand\huberlinFolder{%
656   \begingroup%
657   \normalfont%
658   \color{hu-berlin-blue}%
659   % \faFolderOpen% taken from fontawesome
660   \hspace{.3em}%
661   \endgroup}
662
663
664
665 \RedeclareSectionCommands[
666   tocraggedpagenumber,
667   toclinefill=\tocpageseparator,
668   tocindent=0em,
669   tocnumwidth=4em,
670   tocpagenumberbox=\tocpagenumberbox% <- added
671 %   tocpagenumberformat=\textsf,
672 ]{chapter, section, subsection, subsubsection, paragraph}
673
674 \newcommand\tocgobble[1]{}% <- added
675 \newcommand\tocpageseparator{\footnotesize\, \mbox{---}\, }
676 \newcommand\tocpagenumberbox[1]{\mbox{\#1}}% <- added
677 \KOMAoptions{toc=indentunnumbered}
678
679 \RedeclareSectionCommand[
680 %   tocbeforeskip=1.25em plus 1pt
681   ,tocentryformat=\large\scshape%
682   ,tocindent=0em
683   ,tocnumwidth=4em
684   ,tocpagenumberbox=\tocgobble% <- added
685 ]{part}
686 %\addtokomafont{partentry}{\scshape\sffamily\bfseries}
687
688 \RedeclareSectionCommand[%
689 %   ,beforeskip=1.15em plus 1pt%
690 ,tocentryformat=\textbf%
691 %   ,toclinefill={\TOCLineLeaderFill}%\TOCLineLeaderFill[\textbf{.}]
692 ]{chapter}
693
694
695
696
697 \newtcolorbox{example}[1][]{
698   breakable,

```

```

699 top=5pt,
700 bottom=5pt,
701 colback=hu-berlin-blue!10,
702 colframe=hu-berlin-blue,
703 left=5pt,
704 right=5pt,
705 sharp corners,
706 boxrule=0pt,
707 bottomrule=2pt,
708 toprule=2pt,
709 enhanced jigsaw,
710 lefttitle=0pt,
711 coltitle=white,
712 fonttitle=\bfseries,
713 fontupper=\small,%\ttfamily,
714 % colbacktitle=hu-berlin-blue!20
715 #1,
716 }
717
718 % Replace the squat-u symbol for spaces
719 % https://tex.stackexchange.com/a/488123/98739
720 \makeatletter
721 \def\lst@visiblespace{\lst@ttfamily{\char32}$\textcolor{hu-berlin-
  grey}{\cdot}$}
722 \makeatother
723
724
725 \lstset{%
726   basicstyle = \linespread{0.7}\ttfamily
727 ,breaklines = true
728 ,breakatwhitespace
729 ,alsoletter=\\{\}\*\[\\]\-
730 ,showstringspaces=true
731 }
732
733 \lstdefinestyle{hu-berlinlistingstyledef}{%
734   tabsize      = 4,
735   breaklines    = true,
736   breakatwhitespace = true,
737   postbreak=\mbox{$\hookrightarrow$},
738   %keepspace    = true,
739   escapeinside = {(*@}{@*)},
740   moredelim     = {[is][\ttfamily\bfseries\color{hu-berlin-blue}]{|}{|}},
741   moredelim     = {[is][\ttfamily\bfseries\color{hu-berlin-blue}]{|1}{1|}},
742   moredelim     = {[is][\ttfamily\bfseries\color{hu-berlin-red}]{|2}{2|}},
743   aboveskip=0pt,
744   belowskip=0pt,

```

```

745 captionpos=b,
746 resetmargins=true,
747 sensitive=true,
748 upquote=true,
749 showspaces=true,
750 showtabs=true,
751 tab=\textcolor{hu-berlin-grey}{\rightarrowfill},
752 %numbers=left,
753 %numberstyle=\footnotesize\ttfamily\color{hu-berlin-grey},
754 comment      = [l]{\%},
755 commentstyle = \footnotesize\color{hu-berlin-grey}\addfontfeature{LetterSp
756 % deletecomment = [l]{\%<}
757 % morecomment   = [l][\nullfont]{\%<},
758 % deletecomment = [is]{\%<}{>},
759 }
760
761 \lstdefinestyle{hu-berlinlistingstyle}{%
762   language   = {TeX},
763   style      = {hu-berlinlistingstyledef},
764 }
765
766
767
768
769
770
771 \tcbset{%
772 hu-berlinstyle/.style={%
773   enhanced,
774   before skip=2mm,
775   after skip=3mm,
776   boxrule=0.7pt,
777   left=2mm,
778   right=2mm,
779   top=2mm,
780   bottom=2mm,
781   sharp corners,
782   colback=white,
783   colbacklower=white,
784   % fonttitle=\sffamily\bfseries,
785   breakable,
786   %before skip=\baselineskip,
787   coltitle=white,
788   colbacktitle=hu-berlin-blue!50!black,
789   fonttitle=\bfseries\sffamily\footnotesize,
790   % before upper={\mynote{\thetcbcounter}},
791   title={\hfill{Example \thetcbcounter}},

```

```

792   },
793   codecomment/.style={%
794     listing outside comment,%
795     boxrule=0pt,
796     colback=white,
797   }
798 }
799
800 \newtcolorbox{warning}[1][]{
801   enhanced,
802   before skip=2mm,
803   after skip=3mm,
804   boxrule=0.7pt,
805   left=5mm,
806   right=2mm,
807   top=2mm,
808   bottom=2mm,
809   colback=white,
810   colframe=yellow!20!black,
811   sharp corners,
812   rounded corners=southeast,
813   arc is angular,
814   arc=3mm,
815   underlay={%
816     \path[fill=hu-berlin-grey!80!black] ([yshift=3mm]interior.south east)--
      ++(-0.4,-0.1)--++(0.1,-0.2);
817     \path[draw=hu-berlin-grey,shorten <=-0.05mm,shorten >=-0.05mm] ([yshift=3mm]
      ++(-0.4,-0.1)--++(0.1,-0.2);
818     \path[fill=red!50!black,draw=none] (interior.south west) rectangle node[white]
819   },
820   drop fuzzy shadow,
821   #1
822 }
823
824 \newtcblisting[%
825   auto counter,
826   crefname   = {example}{examples},
827   Crefname   = {Example}{Examples},
828 ]{codetext}[2][]{%
829   hu-berlinstyle,
830 %   side text,
831   rounded corners=northeast,
832   arc=6mm,
833   listing style=hu-berlinlistingstyle,
834   label = #2,
835   #1,
836 }

```

```

837
838 \newtcblisting[%
839   use counter from=codetext,
840   crefname={code example}{code examples},
841   Crefname={Code example}{Code examples}%
842 ]{code}[2][]{%
843   hu-berlinstyle,
844   rounded corners=southeast,
845   arc=6mm,
846   listing only,
847   listing style=hu-berlinlistingstyle,
848   label = #2,
849   #1,
850 }
851
852
853 \DeclareTCBInputListing[%
854   use counter from=codetext,
855   crefname={code example}{code examples},
856   Crefname={Code example}{Code examples}%
857 ]{\huberlinlisting}{ O{} m }{%
858   hu-berlinstyle,
859   listing file={#2},
860   listing only,
861   listing style=hu-berlinlistingstyle,
862   #1,
863 }
864
865 \makeatletter
866 \newrobustcmd*{\fnurl}[1][\hyper@normalise\ltd@fnurl{#1}]
867 \def\ltd@fnurl#1#2{\footnote{#1\hyper@linkurl{\Hurl{#2}}{#2}}}
868 \makeatother

```

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

```

869 \RequirePackage{newfile}
870 \newoutputstream{pkglist}

871 \NewDocumentCommand{\pkg}{om}{%
872   \IfNoValueTF{#1}
873   {\lowercase{\href{http://www.ctan.org/pkg/#2}}{\textbf{#2}}}
874   {\lowercase{\href{http://www.ctan.org/pkg/#1-#2}}{\textbf{#2}}}%
875   \space\cite{#2}%
876   \addtostream{pkglist}{#2}}

```

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

```

877 \newrobustcmd*{\lit}[1]{\textsf{#1}}
878 \newrobustcmd*{\Code}[1]{\texttt{#1}}
879 \newrobustcmd*{\tex}{\TeX}
880 \newrobustcmd*{\etex}{\mbox{e-TeX}}
881 \newrobustcmd*{\pdftex}{pdf\-\tex}
882 \newrobustcmd*{\xetex}{Xe\-\tex}
883 \newrobustcmd*{\luatex}{Lua\-\tex}
884 \newrobustcmd*{\latex}{\LaTeX}%{La\kern-0.07em TeX}
885 \newrobustcmd*{\pdflatex}{pdf\-\latex}
886 \newrobustcmd*{\xelatex}{Xe\-\latex}
887 \newrobustcmd*{\lualatex}{Lua\-\latex}
888 \newrobustcmd*{\miktex}{Mik\-\tex}
889 \newrobustcmd*{\texlive}{\tex~live}
890 \newrobustcmd*{\bibtex}{Bib\kern-0.07em TeX}
891 \newrobustcmd*{\lppl}{\latex{} Project Public License}
892 \newrobustcmd*{\pdf}{{PDF}}
893 \newrobustcmd*{\md}{{Markdown}}
894 \newrobustcmd*{\utf}{\mbox{{UTF}-8}}
895 % no \mbox here, we may have to break things
896 \newrobustcmd*{\bibfield}[1]{\Code{#1}}
897 \newrobustcmd*{\opt}[1]{\Code{#1}}
898 \newrobustcmd*{\bibmacro}[1]{\Code{#1}}
899 \newrobustcmd*{\bibtype}[1]{\Code{@#1}}
900 %\renewrobustcmd*{\cmd}[1]{\Code{\textbackslash #1}}
901 \renewrobustcmd\meta[1]{\normalfont\texttriangle{\itshape#1\!/\!}\texttriangle}
902
903 % directly taken from ltxdoc.dtx
904 \renewrobustcmd\marg[1]{%
905   {\ttfamily\textcolor{hu-berlin-red}{\{}}}%
906   \meta{#1}%
907   {\ttfamily\textcolor{hu-berlin-red}{\}}}%
908 }
909
910 \renewrobustcmd\oarg[1]{%
911   {\ttfamily\textcolor{hu-berlin-green}{[]}}%
912   \meta{#1}%
913   {\ttfamily\textcolor{hu-berlin-green}{[]}}}%
914 }
915
916 % adapted from listings.dtx (lstdoc.sty)
917 \renewrobustcmd\cmd[1]{%
918   \texttt{\color{hu-berlin-blue}\textbackslash string#1}\xspace%
919 }
920
921 \newrobustcmd\env[2][1]{%
922   \texttt{%
923     \color{hu-berlin-blue}%

```

```

924 \textbackslash begin\{\string#2\}\#1}%
925   \ldots
926   \texttt{%
927 \color{hu-berlin-blue}%
928 \textbackslash end\{\string#2\}}%
929   \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>}`.

```

930 \newcommand\param[1]{%
931   \begingroup%
932   \normalfont%
933   \ttfamily%
934   \bfseries%
935   \textless%
936   #1%
937   \ttfamily%
938   \bfseries%
939   \textgreater%
940   \endgroup}

941 \pdfstringdefDisableCommands{%
942   \def\lstinline#1{<#1>}
943   \def\tex{TeX}%
944   \def\etex{e-TeX}%
945   \def\xetex{XeTeX}%
946   \def\latex{LaTeX}%
947   \def\xelatex{XeLaTeX}%
948   \def\bibtex{BibTeX}%
949   \def\lppl{LaTeX Project Public License}%
950   \def\pdf{PDF}%
951   \def\utf{UTF-8}%
952   \def\\{\}%
953   \def\texttt#1{<#1>}%
954   \def\marg#1{\{#1\}}%
955   \def\oarg#1{[#1]}%
956   \def\color#1#2{}%
957   \def\env#1{<#1>}
958   \def\cmd#1{#1}
959 }

960 % https://tex.stackexchange.com/a/24067/98739
961 \makeatletter
962 \patchcmd{\scr@startchapter}{\if@openright\cleardoublepage\else\clearpage\fi}{}{}{}
963 \makeatother
964 %
965 \RequirePackage[tightLists=false]{markdown}
966 \markdownSetup{rendererPrototypes={%
967 link = {\href{#3}{#1}}}%

```

968 } }
 969 </style>

970 </sty>

References

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- [2] David Carlisle and Hideo Umeki. *The Geometry package. Flexible and complete interface to document dimensions.* Version 5.9. Jan. 2, 2020. URL: <http://www.ctan.org/pkg/geometry> (visited on 10/29/2020).
- [3] Charles Antony Richard Hoare. »Hints on programming language design«. In: *Computer Systems Reliability*. Ed. by C. Bunyan. State of the Art Report 20. 1973, pp. 193–216. URL: <http://flint.cs.yale.edu/cs428/doc/HintsPL.pdf> (visited on 09/06/2018).
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Example files

8 Letter

8.1 From `.tex`

[HUMBOLDT-UNIVERSITÄT ZU BERLIN]

[HUMBOLDT-UNIVERSITÄT ZU BERLIN]

Seite 2

Humboldt-Universität zu Berlin | Udl. 6 | D-10099 Berlin

Erika Musterfrau
Musterweg 43
56789 Musterhausen

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.

Philosophische Fakultät
Institut für Briefvorlagen
Here you can add more text.
Prof. Dr. Maike Musterfrau
Dekanin

Datum:
29.10.2020
Wissenschaftlicher Mitarbeiter
Dr. Max Mustermann
Postanschrift:
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IBAN DE95 1007 0648 0512 6206 01
BIC DEUTDE33HAN

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

8.2 From `.md`

[HUMBOLDT-UNIVERSITÄT ZU BERLIN]

Humboldt-Universität zu Berlin | Udl. 6 | D-10099 Berlin

Alexander von Humboldt
Unter den Linden 6
10099 Berlin

Philosophische Fakultät
Institut für Briefvorlagen

Here you can add more text.

Prof. Dr. Maike Musterfrau
Dekanin

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:
29.10.2020

Wissenschaftlicher Mitarbeiter
Dr. Max Mustermann

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