

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.«
[2, p. 195]

Contents

1	Introduction—3
1.1	Installation of the bundle—3
1.2	Changelog—3
1.2.1	v1.0.9 (2021/01/10)—3
1.2.2	v1.0.8 (2020/10/30)—3
1.2.3	v1.0.7 (2020/10/29)—4
1.2.4	v1.0.6 (2020-10-22)—4
1.2.5	v1.0.5 (2020-04-28)—4
1.2.6	v1.0.4 (2019-12-19)—4
1.2.7	v1.0.3 (2019-06-26)—4
1.2.8	v1.0.2 (2019-06-22)—4
1.2.9	v1.0.1 (2019-06-21)—4
1.2.10	v1.0.0 (2019-06-21)—4
1.3	Copyright—4
1.3.1	Boilerplate / markdown-template—5
2	Preamble—6
I	GUIDELINE FOR USERS
3	Letter—8
3.1	.lco-file—8
3.2	.tex-file—10
3.3	Letter from markdown—12
II	GUIDE FOR CODERS
4	hu-berlin-base-package—15
5	Letter—16
6	Boilerplate / Template for letters—24
7	Documentation preamble <style>—26
III	EXAMPLE FILES
8	Letter—43
8.1	From .tex—43
8.2	From .md—45

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 v1.0.9 (2021/01/10)

- (letter) making everything multi-lingual (at least German and English); German is default language. You can load English e.g. by `documentclass[english]{hu-berlin-letter}` (addresses [issue No. 3](#))

1.2.2 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')

1.2.3 v1.0.7 (2020/10/29)

- (letter) fixed missing `\removerefferfields`
- (letter) added missing suffix for hu-logo (`.pdf`)

1.2.4 v1.0.6 (2020-10-22)

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

1.2.5 v1.0.5 (2020-04-28)

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

1.2.6 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.

1.2.7 v1.0.3 (2019-06-26)

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

1.2.8 v1.0.2 (2019-06-22)

Renaming files for CTAN compatability.

1.2.9 v1.0.1 (2019-06-21)

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

1.2.10 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-scrilttr2](#) is dual-licensed, under both the GPL (v2 or higher, same as pandoc) and the BSD 3-clause license (included below).

Copyright (c) 2014, John MacFarlane Copyright (c) 2014, Jens Erat All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- Neither the name of John MacFarlane nor the names of other contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

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{office}{%
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{office}{%
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 <*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** [7].

```
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` [4] which is the documentclass for letters. Furthermore we set up some options. The default language is German. But all strings are also available for English. You can load English as option to the documentclass.

```
28 \DeclareOption*{\PassOptionsToClass{\CurrentOption}{scrletter}}
```

```
29 \DeclareOption{english}{\PassOptionsToPackage{ngerman,main=english}{babel}}
```

```
30 \DeclareOption{ngerman}{\PassOptionsToPackage{ngerman}{babel}}
```

```
31 \ExecuteOptions{ngerman}
```

```
32 \ProcessOptions\relax
```

Now the documentclass itself.

```
33 \LoadClass[%
```

```
34   fontsize=10pt,
```

```
35   version=last,
```

If there is anything to debug, you can enable visualize

```
36   % visualize
```

```
37 ]{scrletter}
```

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

```
38 % \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.

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

To get the HU logo on the second and following pages we load `scrlayer-scrpage` [3].¹

```
40 \RequirePackage{scrlayer-scrpage}
```

```
41 \clearpairstyles
```

```
42 \DeclareNewLayer[
```

```
43   foreground,
```

```
44   voffset=\useplength{firstheadvpos},
```

```
45   hoffset=\useplength{firstheadhpos},
```

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


```

46 width=\useplength{firstheadwidth},
47 mode=picture,
48 contents=\putUL{\raisebox{-\height}{\usekomavar{firsthead}}}{\likefirstpage.head}
49 ]{\likefirstpage.head}
50 \AddLayersToPageStyle{scrheadings}{\likefirstpage.head}
51 \DeclareNewLayer[
52 foreground,
53 align=r,
54 voffset=\useplength{locvpos},
55 hoffset=\paperwidth-\useplength{lochpos},
56 width=\useplength{locwidth},
57 height=\useplength{locheight},
58 contents=\usekomavar{nextlocation},
59 %pretoccontents=\layercontentsmeasure% to show the position of the layer
60 ]{\likefirstpage.loc}
61 \AddLayersToPageStyle{scrheadings}{\likefirstpage.head,\likefirstpage.loc}

```

Now we apply the code for following pages.

```

62 \newkomavar{nextlocation}
63 \setkomavar{nextlocation}{%
64   \raggedright
65   \fontsize{7}{8.5}\selectfont
66   \pagemark
67 }

```

For better adjustments of the layout we load **geometry** [1].

```

68 \RequirePackage{geometry}
69 \geometry{%
70   a4paper
71   ,left           =25mm
72   ,bottom         =16mm
73   ,foot          =4mm
74   ,top           =77mm
75   ,headheight     =15pt
76   ,textwidth      =117mm
77   ,marginparsep   =0mm
78   ,marginparwidth =0mm
79 }

```

Main Text and signature should be raggedright.

```

80 \renewcommand*{\raggedsignature}{\raggedright}
81 \raggedright

```

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

```

82 \def\stopletter{}
83 \let\enclold\encl
84 \renewcommand\encl[1]{\vskip0ptplus1filll\enclold{#1}}

```

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

We define new komavars and we make it for German and for English as well.

```

85 \providecaptionname{english}{\hubCCseparator}{Copy to}
86 \providecaptionname{english}{\hubEnclSeparator}{Attachment}
87 \providecaptionname{english}{\hubMyRef}{Reference:}
88 \providecaptionname{english}{\hubFromName}{Clerk:}
89 \providecaptionname{english}{\hubDate}{Date:}
90 \providecaptionname{english}{\hubAddress}{Postal address:}
91 \providecaptionname{english}{\hubConnections}{Public transport:}
92 \providecaptionname{english}{\hubOffice}{Office:}
93 \providecaptionname{english}{\hubBank}{Bank:}
94 \providecaptionname{english}{\hubOfficeHours}{Consultation hours:}
95 \providecaptionname{english}{\hubAccessibility}{Entrance:}

```

Now for German.

```

96 \providecaptionname{ngerman}{\hubCCseparator}{Kopie an}
97 \providecaptionname{ngerman}{\hubEnclSeparator}{Anlage}
98 \providecaptionname{ngerman}{\hubMyRef}{Geschäftszeichen:}
99 \providecaptionname{ngerman}{\hubFromName}{Bearbeiter:}
100 \providecaptionname{ngerman}{\hubDate}{Datum:}
101 \providecaptionname{ngerman}{\hubAddress}{Postanschrift:}
102 \providecaptionname{ngerman}{\hubConnections}{Verkehrsverbindungen:}
103 \providecaptionname{ngerman}{\hubOffice}{Sitz:}
104 \providecaptionname{ngerman}{\hubBank}{Bank:}
105 \providecaptionname{ngerman}{\hubOfficeHours}{Sprechzeiten:}
106 \providecaptionname{ngerman}{\hubAccessibility}{Eingang:}

```

First the possibility to name the faculty,

```

107 \newkomavar{faculty}
108 \newkomafont{faculty}{\bfseries\fontsize{8.5}{10}\selectfont}

```

then the institute

```

109 \newkomavar{institute}
110 \newkomafont{institute}{\fontsize{8.5}{10}\selectfont}

```

and further fields for information.

```

111 \newkomavar{institute.additional}

```

We pass the name of the head of the institute.

```

112 \newkomafont{institute.head}{\bfseries}
113 \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.

```

114 \newkomavar{institute.head.mail}%

```

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

```

115 \newkomavar{office}
116 \setkomavar*{office}{\hubOffice}

```

and how to get there.

```

117 \newkomavar{connections}

```

```
118 \setkomavar*{connections}{\hubConnections}
```

Furthermore we inform about office hours

```
119 \newkomavar{officehours}
120 \setkomavar*{officehours}{\hubOfficeHours}
```

and if there is accessibility for wheelchairs etc.

```
121 \newkomavar{accessibility}
122 \setkomavar*{accessibility}{\large\reflectbox{\Wheelchair}} \hubAccessibilit

123 \newkomavar{bank}
124 \setkomavar*{bank}{\hubBank}
125 \setkomavar{bank}{Deutsche Bank PGK AG}
126 \newkomavar{IBAN}
127 \setkomavar{IBAN}{\mbox{IBAN DE95 1007 0848 0512 6206 01}}
128 \newkomavar{BIC}
129 \setkomavar{BIC}{BIC DEUTDEDB110}
```

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

```
130 \setkomavar{location}{%}
```

First anything regarding the font

```
131 \raggedright
132 \fontsize{7}{8.5}\selectfont
133 % \begin{macrocode}
134 % and for the section of faculty, institute etc. we use \env{minipage}
135 % \begin{macrocode}
136 \begin{minipage}[t][64mm]{\useplength{locwidth}}
```

then the faculty

```
137 \Ifkomavareempty{faculty}
```

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

```
138 {\hspace*{1em}}
139 {\usekomafont{faculty}%
140 \usekomavar{faculty}\\[1\baselineskip]}
```

and the institute.

```
141 \Ifkomavareempty{institute}
142 {}
143 {\usekomafont{institute}\usekomavar{institute}\\[1\baselineskip]}
```

Now anything else regarding the institute.

```
144 \Ifkomavareempty{institute.additional}
145 {}
146 {\usekomavar{institute.additional}\\[1\baselineskip]}
```

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

```
147 \Ifkomavareempty{institute.head}
148 {}
149 {\usekomafont{institute.head}%
150 \usekomavar{institute.head}}\\%
```

```
151 \usekomavar*{institute.head}}
```

We close this section and the minipage.

```
152 \end{minipage}
```

Let's turn to further information.

For example date:

```
153 \textbf{\usekomavar*{date}}\%
```

```
154 \usekomavar{date}\par
```

and the sender of the letter.

```
155 \Ifkomavareempty{fromname}
```

```
156 {}
```

```
157 {\textbf{\usekomavar*{fromname}}\%
```

```
158 \usekomavar{fromname}\par}
```

And the reference of correspondence.

```
159 \Ifkomavareempty{myref}
```

```
160 {}
```

```
161 {\textbf{\usekomavar*{myref}}\%
```

```
162 \usekomavar{myref}\par}
```

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

```
163 \Ifkomavareempty{yourref}
```

```
164 {}
```

```
165 {\textbf{\usekomavar*{yourref}}\%
```

```
166 \usekomavar{yourref}\par}
```

```
167 \Ifkomavareempty{yourmail}
```

```
168 {}
```

```
169 {\textbf{\usekomavar*{yourmail}}\%
```

```
170 \usekomavar{yourmail}\par}
```

```
171 \Ifkomavareempty{customer}
```

```
172 {}
```

```
173 {\textbf{\usekomavar*{customer}}\%
```

```
174 \usekomavar{customer}\par}
```

```
175 \Ifkomavareempty{invoice}
```

```
176 {}
```

```
177 {\textbf{\usekomavar*{invoice}}\%
```

```
178 \usekomavar{invoice}\par}
```

```
179 \textbf{\usekomavar*{fromaddress}}\%
```

```
180 \usekomavar{fromaddress}
```

```
181 \Ifkomavareempty{fromphone}
```

```
182 {\par}
```

```
183 {\usekomavar*{fromphone}\usekomavar{fromphone}
```

```
184 \Ifkomavareempty{fromfax}
```

```
185 {\par}
```

```
186 {\}}
```

```

187 \Ifkomavareempty{fromfax}
188 {}
189 {\usekomavar*{fromfax}\usekomavar{fromfax}\par}

```

Next, emails and url:

```

190 \Ifkomavareempty{institute.head.mail}
191 {}
192 {\usekomavar{institute.head.mail}
193 \Ifkomavareempty{fromemail}
194 {\Ifkomavareempty{fromurl}
195 {\par}
196 {\}}
197 {\}}

198 \Ifkomavareempty{fromemail}
199 {}
200 {\usekomavar{fromemail}
201 \Ifkomavareempty{fromurl}
202 {\par}
203 {\}}

204 \Ifkomavareempty{fromurl}
205 {}
206 {\usekomavar{fromurl}\par}

```

Now the actual location of the sender

```

207 \Ifkomavareempty{office}
208 {}
209 {\textbf{\usekomavar*{office}}}\
210 \usekomavar{office}\par}

```

The last information section should be pinned to the bottom.

```

211 \vfill

```

Inform your addressee about the connection possibilities.

```

212 \Ifkomavareempty{connections}
213 {}
214 {\textbf{\usekomavar*{connections}}}\
215 \usekomavar{connections}\par}

216 \Ifkomavareempty{officehours}
217 {}
218 {\textbf{\usekomavar*{officehours}}}\
219 \usekomavar{officehours}\par}

```

If there is a barrier free entrance, tell it.

```

220 \Ifkomavareempty{accessibility}
221 {}
222 {\textbf{\usekomavar*{accessibility}}}\
223 \usekomavar{accessibility}\par}

```

And last the bank connection

```

224 \Ifkomavareempty{bank}
225   {}
226   {\textbf{\usekomavar*{bank}}}\
227   \usekomavar{bank}\
228   \usekomavar{IBAN}\
229   \usekomavar{BIC}
230   }

```

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

```

231 }

```

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

```

232 \KOMAOptions{%
233   numericaldate =true
234   ,refline      =nodate
235   ,backaddress  =plain
236   ,parskip      =half-
237 }

```

Getting rid of all other fields and their default position.

```

238 \removereffield

```

Redefining length.

```

239 \setlength{refvpos}{110mm}
240 \setlength{refaftervskip}{0pt}
241 \setlength{toaddrhpos}{25mm}
242 \setlength{firstheadhpos}{\uselength{toaddrhpos}}
243 \setlength{lochpos}{15mm}
244 \setlength{locvpos}{\uselength{toaddrvpos}}
245 \addtoplength{locvpos}{.75\baselineskip}
246 \setlength{locwidth}{45mm}
247 \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.

```

248 \setkomavar{firsthead}{%
249 \IfFileExists{hu-berlin-logo.pdf}
250   {\includegraphics[width=145mm]{hu-berlin-logo.pdf}}
251   {\vspace*{2em}\hfil\scshape [humboldt-universität zu berlin]}}%
252 }

253 \setkomavar{backaddressseparator}{~\textbar~}

```

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

```

254 \setkomavar{fromphone}{0000}
255 \setkomavar*{fromphone}{Telefon +49 [30] 2093-}

256 \setkomavar{fromfax}{0000}
257 \setkomavar*{fromfax}{Telefax +49 [30] 2093-}

258 \setkomavar*{fromaddress}{\hubAddress}
259 \setkomavar{fromaddress}{%
260 Humboldt-Universität zu Berlin\\
261 Unter den Linden 6\\
262 D-10099 Berlin}

```

The default backaddress is slightly changed:

```

263 \setkomavar{backaddress}{%
264 Humboldt-Universität zu Berlin\\
265 UdL 6\\
266 D-10099 Berlin}

267 \setkomavar*{date}{\hubDate}

268 \setkomavar*{fromname}{\hubFromName}

269 \setkomavar*{myref}{\hubMyRef}

270 \setkomavar*{enclseparator}{\hubEnclSeparator}

271 \setkomavar*{ccseparator}{\hubCCseparator}

272 % \RequirePackage{hyperref}
273 % \AtBeginDocument{
274 %   \usekomavar[\def\author]{fromname}
275 %   \usekomavar[\def\subject]{subject}
276 %   \hypersetup{%
277 %     pdftitle           = {\subject},
278 %     pdfauthor          = {\author},
279 %     pdfsubject         = {\subject},
280 %     pdfkeywords        = {\author, \subject},
281 %     pdflang            = de,
282 %     pdfdisplaydoctitle = true,
283 %     colorlinks         = true,
284 %     plainpages         = false,
285 %     hypertexnames      = false,
286 %     unicode,
287 %   }
288 % }

289 </letter>

290 </cls>

291 <*template>

```

6 Boilerplate / Template for letters

292 `*letter-md)`

293 `\documentclass{hu-berlin-letter}`

We predefine two variables.

294 `\newkomavar{opening}`

295 `\newkomavar{closing}`

296 `\setkomavar{opening}{Sehr geehrte Damen und Herren}`

297 `\setkomavar{closing}{Mit freundlichen Grüßen}`

298 `$for(letteroption)$`

299 `\LoadLetterOption{$letteroption$}`

300 `$endfor$`

301 `$if(sender)$\LoadLetterOption{$sender$}$endif$`

302 `$if(adresseeimage)$\setkomavar{adresseeimage}{$adresseeimage$}$endif$`

303 `$if(backaddress)$\setkomavar{backaddress}{$backaddress$}\KOMAOPTIONS{backad`

304 `$if(fromalign)$\KOMAOPTIONS{fromalign=$fromalign$}$endif$`

305 `$if(customer)$\setkomavar{customer}{$customer$}$endif$`

306 `$if(date)$\setkomavar{date}{$date$}$endif$`

307 `$if(fromaddress)$\setkomavar{fromaddress}{$fromaddress$}$endif$`

308 `$if(frombank)$\setkomavar{frombank}{$frombank$}$endif$`

309 `$if(fromemail)$\setkomavar{fromemail}{$fromemail$}\KOMAOPTIONS{fromemail=tru`

310 `$if(fromfax)$\setkomavar{fromfax}{$fromfax$}\KOMAOPTIONS{fromfax=true}$endi`

311 `$if(fromlogo)$\setkomavar{fromlogo}{$fromlogo$}\KOMAOPTIONS{fromlogo=true}$Se`

312 `$if(frommobilephone)$\setkomavar{frommobilephone}{$frommobilephone$}\KOMAopt`

313 `$if(fromname)$\setkomavar{fromname}{$fromname$}$endif$`

314 `$if(fromphone)$\setkomavar{fromphone}{$fromphone$}\KOMAOPTIONS{fromphone=tru`

315 `$if(fromurl)$\setkomavar{fromurl}{$fromurl$}\KOMAOPTIONS{fromurl=true}$endi`

316 `$if(fromzipcode)$\setkomavar{fromzipcode}{$fromzipcode$}$endif$`

317 `$if(invoice)$\setkomavar{invoice}{$invoice$}$endif$`

318 `$if(location)$\setkomavar{location}{$location$}$endif$`

319 `$if(myref)$\setkomavar{myref}{$myref$}$endif$`

320 `$if(myrefname)$\setkomavar*{myref}{$myrefname$}$endif$`

321 `$if(place)$\setkomavar{place}{$place$}$endif$`

322 `$if(PPcode)$\setkomavar{PPcode}{$PPcode$}$endif$`

323 `$if(signature)$\setkomavar{signature}{$signature$}$endif$`

324 `$if(specialmail)$\setkomavar{specialmail}{$specialmail$}$endif$`

325 `$if(subject)$\setkomavar{subject}{$subject$}$endif$`

326 `$if(title)$\setkomavar{title}{$title$}$endif$`

327 `$if(yourmail)$\setkomavar{yourmail}{$yourmail$}$endif$`

328 `$if(yourref)$\setkomavar{yourref}{$yourref$}$endif$`

329 `$if(opening)$\setkomavar{opening}{$opening$}$endif$`


```

330 $if(closing)$\setkomavar{closing}{$closing$}$endif$
331 $if(firstfoot)$\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.

```

332 $if(addressee)$
333 $else$
334 \KOMAOPTIONS{addrfield=false}
335 $endif$

```

Now the actual content of the letter

```

336 \begin{document}
337 \begin{letter}{%
338 $for(addressee)$
339 $addressee$$sep$\\
340 $endfor$
341 }
342 $for(include-before)$

```

```

343 $include-before$
344 $endfor$
345 \opening{\usekomavar{opening}}
346 $body$
347 \closing{\usekomavar{closing}}
348 $if (ps) $\ps{$ps$}$endif$
349 $if (encl) $\encl{$encl$}$endif$
350 $for (include-after) $$include-after$$endfor$
351 \end{letter}
352 \end{document}

353 </letter-md>
354 </template>

```

7 Documentation preamble <style>

```

355 <*sty>
356 <*style>
357 \makeatletter
358 \addtolength\marginparwidth{-40pt}
359 \addtolength\marginparsep{4mm}
360 \addtolength\oddsidemargin{-20pt}
361 \addtolength\evensidemargin{-20pt}
362 \let\PrintDescribeMacro=\@gobble
363 \let\PrintDescribeEnv=\@gobble
364 % \def\Describe@Macro#1{\endgroup
365 %     %\marginnote{\PrintDescribeMacro{#1}}}%
366 %     \SpecialUsageIndex{#1}\@esphack\ignorespaces%
367 %     }
368 %\def\Describe@Env#1{\endgroup
369 %     %\marginnote{\PrintDescribeEnv{#1}}}%
370 %     \SpecialEnvIndex{#1}\@esphack\ignorespaces%
371 %     }
372 \makeatother
373 \AtBeginDocument{\normalmarginpar}
374 \setlength\MacrocodeTopsep{.5\baselineskip}
375 \setlength\MacroIndent{6mm}
376
377
378 \RequirePackage{luatexbase}
379 \RequirePackage[ngerman,english]{babel}
380 \RequirePackage{calc}
381

```

```

382 \RequirePackage[
383   paper      = a4paper, % - use A4 paper size
384   foot       = 2cm,
385   inner      = 3cm, % - total body: left margin (odd pages)
386   top        = 3cm, % - total body: top margin
387   outer      = 3cm, % - total body: right margin (odd pages)
388   bottom     = 3cm, % - total body: bottom margin
389   marginparwidth = 2cm, % - width for side note
390   marginparsep = .5cm, % - space between notes and body text (content)
391 % showframe,
392 ]{geometry}
393
394 \newlength\fullwidth
395 \setlength\fullwidth{\textwidth+\marginparwidth+\marginparsep}
396
397 \KOMAOptions{
398   numbers = noenddot,
399 }
400 \AtBeginDocument{
401   \KOMAOptions{
402 % headwidth = {\fullwidth},
403 % footwidth = {\fullwidth},
404   footheight = 20pt,
405   headheight = 29pt,
406   captions = tableheading,
407 } }
408
409
410
411 \title{\huberlintitle}
412 %\subtitle{\huberlinsubtitle}
413 \author{\huberlinauthor}
414 \date{\Version}
415
416
417 %---- Required Packages
418 \RequirePackage{ifluatex, luatex85}
419 \ifx\directlua\relax
420   \let\directlua\UnDeFiNeD
421 \fi
422 \ifluatex
423 \else
424 \GenericError{hu-berlin}%
425 {Please use 'LuaLaTeX' as Compiler.^^J I abort here.}
426 \fi

```

For fonts we load the package **fontspec** [6] which has almost no limits handling font-stuff.

```

427 \RequirePackage{fontspec}

428 \RequirePackage[mono=false]{libertine}
429 \RequirePackage{amssymb}
430
431 \defaultfontfeatures{%
432   Ligatures = TeX
433 }

```

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

```

434 \setmainfont[%
435   Ligatures = TeX
436   ,Numbers   = OldStyle]{TeX Gyre Pagella}

```

And we declare also the other fonts, too.

```

437 \setmonofont[%
438   Scale=1
439 ]{TeX Gyre Cursor}
440 \setsansfont[%
441   ,LetterSpace = .8
442 ]{TeX Gyre Adventor-Regular}
443 \linespread{1.05}

444
445
446
447 \RequirePackage{marginnote}
448 \renewcommand*{\marginfont}{%
449   \rule{0pt}{0.7\baselineskip}%
450   \footnotesize%
451   \color{hu-berlin-brown}}
452
453 \RequirePackage[
454   german = guillemets,
455   style   = german,
456 ]{csquotes}
457
458 \RequirePackage{enumitem}
459 \setlist{
460   nosep,
461   % itemindent=1em,
462   % labelindent=0.5\parindent,
463   leftmargin=*}
464 \newlist{tabitemize}{itemize}{2}% neue Listenumgebung
465 \setlist[tabitemize]{%
466   nosep,
467   leftmargin=*
468 }

```

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

```

469 \setlist[tabitemize,1]{label=\labelitemi}
470 \setlist[tabitemize,2]{label=\labelitemii}
471
472
473 \clubpenalty=10000 % prevent single lines at the beginning of a paragraph
474 \widowpenalty=10000 % prevent single lines at the end of a paragraph (Huren
475 \displaywidowpenalty=10000 %
476
477 \RequirePackage{pdfpages}
478 \RequirePackage{biblatex}
479 \addbibresource{\jobname-bibliography.bib}
480 \addbibresource{\jobname-ctan.bib}
481 \RequirePackage{ccicons} %creative commons
482 \RequirePackage{xparse}
483 \RequirePackage{ragged2e}
484 \RequirePackage{microtype}
485 \RequirePackage{xspace}
486 \RequirePackage{graphicx}
487 \graphicspath{{img/}}

488 \RequirePackage{etoolbox}
489 %https://tex.stackexchange.com/a/235881/98739
490 \AfterEndPreamble{%
491   \maketitle
492   \renewcommand\MacroFont{\ttfamily}
493   \renewcommand\AltMacroFont{\ttfamily\linespread{.8}}% slanted verbatim
494 }
495
496 % https://tex.stackexchange.com/a/401466/98739
497 \makeatletter
498 \renewcommand*\maketitle{%
499   % taken and shortened from /usr/share/texmf/tex/latex/koma-script/scrartcl
500   \begin{titlepage}
501     \newgeometry{left=3cm,right=3cm,top=1.5cm,bottom=2cm}
502     \global\@topnum=\z@
503     \setparsizes{\z@}{\z@}{\z@\@plus 1fil}\par@updaterelative
504     \null
505     {\large\@author\hfill \href{mailto:lukas@texografie.de}{lukas@texografie.de}
506     \vskip 10em%
507 {\begin{center}\color{hu-berlin-blue}
508 {\fontsize{50}{55}\selectfont\huberlinshort{} \par\vskip .5em%
509 \Large\sffamily\@title}\par
510 \vskip .5em
511 \end{center}}}%
512 {\ifx\@subtitle\@empty\else\usekomafont{subtitle}\@subtitle\par\fi}%
513 \null\vskip 5em%
514 \blockquote[195]{Hoare1973}{Documentation must be regarded as an integral p

```

```

515 A good programming language will encourage and assist the programmer to wr
516 self-documenting code,
517 and even perhaps to develop
518 and display a pleasant style
519 of writing.}
520 \null\vfill
521 {\usekomafont{subtitle}{\@date \hfill
522 \includegraphics[width=4cm]{img/texografie-logo.pdf}\\}}%
523 \par
524 \vskip 0em
525 \restoregeometry
526 \end{titlepage}
527 }%
528 \makeatother
529
530 \RequirePackage{xcolor}
531 \definecolor{hu-berlin-blue}{RGB}{0,65,137} % HEX 004189
532 \definecolor{hu-berlin-green}{RGB}{150,190,20} % HEX 93C11A % Topoi
533 \definecolor{hu-berlin-grey}{RGB}{169,169,169}
534 \definecolor{hu-berlin-brown}{RGB}{82,79,60}
535 \definecolor{hu-berlin-red}{RGB}{180,0,0}
536
537
538 \RequirePackage{dirtree}
539 \renewcommand*{DTstylecomment}{%
540 \color{hu-berlin-grey}%
541 \footnotesize%
542 \sffamily}
543 \renewcommand*{DTstyle}{%
544 \ttfamily%
545 \small%
546 }
547
548 \RequirePackage[
549 markcase = noupper,
550 footsepline = .5pt,
551 % headsepline = .5pt,
552 autooneside = false,% use left and right marks with a onesided document
553 automark,% set \leftmark and \rightmark automatically by *\section and \s
554 draft = false,
555 ]{scrlayer-scrpage}
556
557 \pagestyle{scrheadings}
558 \clearscrheadfoot
559 \rofoot*{\thepage}
560 \lofoot*{\textcolor{hu-berlin-blue}{\huberlintitle}\ \vrule\ \textcolor{hu-
berlin-brown}{\huberlinsubtitle}}

```

```

561 \rohead*{hu-berlin-bundle}
562 \lohead*{Version: \Version}

563 % https://tex.stackexchange.com/a/352925/98739
564 \newcommand*\partnumber{}
565 \DeclareNewLayer[
566   background,
567   textarea,
568   addwidth=\marginparsep+\marginparwidth,
569   mode=picture,
570   contents={%
571 \putC{\makebox[0pt][c]{\raisebox{-.5\height}{\scalebox{50}{\textcolor{black}
572   }
573 ]\partnumber}
574 \DeclareNewPageStyleByLayers{part}{partnumber}
575 \renewcommand\partpagestyle{part}
576 \renewcommand*\partformat{\gdef\partnumber{\thepart}}
577
578 % only a dirty workaround for the part title
579 \newcommand*\changedpartwidth[1]{%
580   \makebox[\linewidth][l]{%
581 \parbox{\dimexpr\textwidth+\marginparsep+\marginparwidth\relax}{\raggedpart
582   }%
583 }
584 % add \changedpartwidth as last command to the settings for font element part
585 \addtokomafont{part}{\Huge\changedpartwidth}
586
587
588
589 %-https://tex.stackexchange.com/a/339516/98739 | https://tex.stackexchange.com/a/339516/98739
590 % footnotes in the footer:
591 \deffootnote%
592   %[\normalparindent]%<width of mark>
593   {0.0cm}%<indent of footnote text>
594   {\normalparindent}%<paragraph indent in the footnote text>
595   {\makebox[\normalparindent][r]%
596   {\thefootnotemark\hspace*{3pt}}}%<definition of mark>
597 \newlength{\normalparindent}
598 \AtBeginDocument{\setlength{\normalparindent}{\parindent}}
599 \setfootnoterule{0pt}% Kein Fußnotenstrich
600 %\setfootnoterule[<height>]{<length>}
601

```

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

```

602 \renewcommand\sectionlinesformat[4]{%
603   \makebox[0pt][r]{#3}#4%
604 }

```

```

605 \RequirePackage{url}
606 % \urlstyle{same}
607
608 \setkomafont{title}{\sffamily\color{hu-berlin-blue}\flushleft\bfseries}
609 \setkomafont{disposition}{\color{hu-berlin-brown}\sffamily\bfseries\large}
610 \setkomafont{section}{\usekomafont{disposition}}
611 \setkomafont{subsection}{\usekomafont{disposition}}
612 \setkomafont{subsubsection}{\usekomafont{disposition}}
613 % \setkomafont{paragraph}{\bfseries}
614 % \setkomafont{subsubsection}{\sffamilybold}
615 \setkomafont{subtitle}{\large\color{hu-berlin-brown}\sffamily\flushleft}
616 \setkomafont{pageheadfoot}{\footnotesize\sffamily\color{hu-berlin-
  grey}}
617 \setkomafont{descriptionlabel}{\bfseries}
618 \setkomafont{footnotelabel}{\bfseries}
619 \addtokomafont{titlehead}{\flushright}
620 % \setkomafont{headsepline}{\color{hu-berlin-blue}}
621 % \setkomafont{marginnote}{\MakeUppercase\color{hu-berlin-brown}}
622 \addtokomafont{caption}{\scriptsize}
623 \setkomafont{captionlabel}{\bfseries\sffamily}
624 \setkomafont{subject}{\bfseries\sffamily}
625 \setcapindent{0pt}
626
627 \raggedbottom
628
629 \RequirePackage{listings}
630 \PassOptionsToPackage{final}{listings}
631 \RequirePackage[%
632   skins
633   , listings
634   , breakable
635   , xparse
636   , documentation
637 ]{tcolorbox}
638 \lstMakeShortInline[language=TeX,basicstyle=\ttfamily]|

```

Following we load **hyperxmp** [5] and **hyperref** [8] for PDF-meta data and interactive linked text.

```

639 \RequirePackage{hyperxmp}
640 \RequirePackage{hyperref}
641 \hypersetup{% setup the hyperref-package options
642   unicode      = true,
643   pdfauthor    = {hu-berlin}, % - author (PDF meta)
644   pdfauthorortitle = {},
645   pdfcopyright = {Copyright (c) \the\year . All rights reserved.},
646   pdfhighlight = /N,
647   pdfdisplaydoctitle = true,

```



```

648 pdflang      = {},%de en
649 pdfcaptionwriter = {Lukas C. Bossert},
650 pdfkeywords    = {hu-berlin},
651 pdfencoding    = auto,
652 pdfproducer    = {hu-berlin with LuaLaTeX},
653 bookmarksnumbered = true,
654 bookmarksopenlevel = 2,
655 bookmarksopen   = true,
656 bookmarksdepth  = 3,
657 colorlinks      = true,      %Colours links instead of ugly boxes
658 urlcolor        = hu-berlin-blue, %Colour for external hyperlinks
659 linkcolor       = black,      %Colour of internal links
660 citecolor       = black,      %Colour of citations
661 linktoc         = page,
662 pdfborder       = {0 0 0},
663 breaklinks      = true,      %allow line break inside links
664 final
665 }
666 \RequirePackage{bookmark}
667
668 \RequirePackage[
669   sort,
670   nameinlink,
671   compress,
672   ngerman, english
673 ]{cleveref}
674
675
676 %---- newcommands
677 \newcommand{\TeXografie}{Lukas C. Bossert
678   (www.texografie.de) }
679 \newcommand\huberlin{\huberlintitle\xspace}
680
681
682 \newcommand\huberlinFolder{%
683   \begingroup%
684   \normalfont%
685   \color{hu-berlin-blue}%
686   % \faFolderOpen% taken from fontawesome
687   \hspace{.3em}%
688   \endgroup}
689
690
691
692 \RedeclareSectionCommands[
693   tocraggedpagenumber,
694   toclinefill=\tocpageseparator,

```

```

695   tocindent=0em,
696   tocnumwidth=4em,
697   tocpagewidth=\tocpagewidth% <- added
698 %   tocpagewidthformat=\textsf,
699 ]{chapter, section, subsection, subsubsection, paragraph}
700
701 \newcommand\tocgobble[1]{}% <- added
702 \newcommand\tocpageseparator{\footnotesize\, \mbox{---}\, }
703 \newcommand\tocpagewidth[1]{\mbox{#1}}% <- added
704 \KOMAOptions{toc=indentunnumbered}
705
706 \RedeclareSectionCommand[
707 %   tocbefore=1.25em plus 1pt
708   ,tocentryformat=\large\scshape%
709   ,tocindent=0em
710   ,tocnumwidth=4em
711   ,tocpagewidth=\tocgobble% <- added
712 ]{part}
713 %\addtokomafont{partentry}{\scshape\sffamily\bfseries}
714
715 \RedeclareSectionCommand[%
716 %   ,before=1.15em plus 1pt%
717 ,tocentryformat=\textbf%
718 %   ,toclinefill={\TOCLineLeaderFill}%\TOCLineLeaderFill[\textbf{.}]
719 ]{chapter}
720
721
722
723
724 \newtcolorbox{example}[1][]{
725   breakable,
726   top=5pt,
727   bottom=5pt,
728   colback=hu-berlin-blue!10,
729   colframe=hu-berlin-blue,
730   left=5pt,
731   right=5pt,
732   sharp corners,
733   boxrule=0pt,
734   bottomrule=2pt,
735   toprule=2pt,
736   enhanced jigsaw,
737   lefttitle=0pt,
738   coltitle=white,
739   fonttitle=\bfseries,
740   fontupper=\small,%\ttfamily,
741   % colbacktitle=hu-berlin-blue!20

```

```

742 #1,
743 }
744
745 % Replace the squat-u symbol for spaces
746 % https://tex.stackexchange.com/a/488123/98739
747 \makeatletter
748 \def\lst@visiblespace{\lst@ttfamily{\char32}$\textcolor{hu-berlin-
  grey}{\cdot}$}
749 \makeatother
750
751
752 \lstset{%
753   basicstyle = \linespread{0.7}\ttfamily
754   ,breaklines = true
755   ,breakatwhitespace
756   ,alsoletter=\\{\}\*\[\]\-
757   ,showstringspaces=true
758 }
759
760 \lstdefinestyle{hu-berlinlistingstyledef}{%
761   tabsize      = 4,
762   breaklines    = true,
763   breakatwhitespace = true,
764   postbreak=\mbox{$\hookrightarrow$},
765   %keepspaces    = true,
766   escapeinside  = {(*@}{@*)},
767   moredelim     = {[is][\ttfamily\bfseries\color{hu-berlin-blue}]{|}{|}},
768   moredelim     = {[is][\ttfamily\bfseries\color{hu-berlin-blue}]{|1}{1|}},
769   moredelim     = {[is][\ttfamily\bfseries\color{hu-berlin-red}]{|2}{2|}},
770   aboveskip=0pt,
771   belowskip=0pt,
772   captionpos=b,
773   resetmargins=true,
774   sensitive=true,
775   upquote=true,
776   showspaces=true,
777   showtabs=true,
778   tab=\textcolor{hu-berlin-grey}{\rightarrowfill},
779   %numbers=left,
780   %numberstyle=\footnotesize\ttfamily\color{hu-berlin-grey},
781   comment       = [l]{\%},
782   commentstyle  = \footnotesize\color{hu-berlin-grey}\addfontfeature{LetterSp
783   % deletacomment = [l]{\%<}
784   % morecomment  = [l][\nullfont]{\%<},
785   % deletacomment = [is]{\%<}{>},
786 }
787

```

```

788 \lstdefinestyle{hu-berlinlistingstyle}{%
789   language   = {TeX},
790   style      = {hu-berlinlistingstyledef},
791 }
792
793
794
795
796
797
798 \tcbset{%
799 hu-berlinstyle/.style={%
800   enhanced,
801   before skip=2mm,
802   after skip=3mm,
803   boxrule=0.7pt,
804   left=2mm,
805   right=2mm,
806   top=2mm,
807   bottom=2mm,
808   sharp corners,
809   colback=white,
810   colbacklower=white,
811   % fonttitle=\sffamily\bfseries,
812   breakable,
813   %before skip=\baselineskip,
814   coltitle=white,
815   colbacktitle=hu-berlin-blue!50!black,
816   fonttitle=\bfseries\sffamily\footnotesize,
817   % before upper={\mynote{\thetcbcounter}},
818   title={\hfill{Example \thetcbcounter}},
819   },
820 codecomment/.style={%
821   listing outside comment,%
822   boxrule=0pt,
823   colback=white,
824   }
825 }
826
827 \newtcolorbox{warning}[1][]{
828   enhanced,
829   before skip=2mm,
830   after skip=3mm,
831   boxrule=0.7pt,
832   left=5mm,
833   right=2mm,
834   top=2mm,

```

```

835 bottom=2mm,
836 colback=white,
837 colframe=yellow!20!black,
838 sharp corners,
839 rounded corners=southeast,
840 arc is angular,
841 arc=3mm,
842 underlay={%
843 \path[fill=hu-berlin-grey!80!black] ([yshift=3mm]interior.south east)--
      ++(-0.4,-0.1)--++(0.1,-0.2);
844 \path[draw=hu-berlin-grey,shorten <=-0.05mm,shorten >=-0.05mm] ([yshift=3mm]
      ++(-0.4,-0.1)--++(0.1,-0.2);
845 \path[fill=red!50!black,draw=none] (interior.south west) rectangle node[white]
846 },
847 drop fuzzy shadow,
848 #1
849 }
850
851 \newtcblisting[%
852 auto counter,
853 crefname = {example}{examples},
854 Crefname = {Example}{Examples},
855 ]{codetext}[2][]{%
856 hu-berlinstyle,
857 % side text,
858 rounded corners=northeast,
859 arc=6mm,
860 listing style=hu-berlinlistingstyle,
861 label = #2,
862 #1,
863 }
864
865 \newtcblisting[%
866 use counter from=codetext,
867 crefname={code example}{code examples},
868 Crefname={Code example}{Code examples}%
869 ]{code}[2][]{%
870 hu-berlinstyle,
871 rounded corners=southeast,
872 arc=6mm,
873 listing only,
874 listing style=hu-berlinlistingstyle,
875 label = #2,
876 #1,
877 }
878
879

```

```

880 \DeclareTCBInputListing[%
881   use counter from=codetext,
882   crefname={code example}{code examples},
883   Crefname={Code example}{Code examples}%
884 ]{\huberlinlisting}{ O{} m }{%
885   hu-berlinstyle,
886   listing file={#2},
887   listing only,
888   listing style=hu-berlinlistingstyle,
889   #1,
890 }
891
892 \makeatletter
893 \newrobustcmd*{\fnurl}[1][\hyper@normalise\ltd@fnurl{#1}]
894 \def\ltd@fnurl#1#2{\footnote{#1\hyper@linkurl{Hurl{#2}}{#2}}}
895 \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.

```

896 \RequirePackage{newfile}
897 \newoutputstream{pkglist}

898 \NewDocumentCommand{\pkg}{om}{%
899   \IfNoValueTF{#1}
900   {\lowercase{\href{http://www.ctan.org/pkg/#2}}{\textbf{#2}}}
901   {\lowercase{\href{http://www.ctan.org/pkg/#1-#2}}{\textbf{#2}}}%
902   \space\cite{#2}%
903   \addtostream{pkglist}{#2}}

904 \newrobustcmd*{\lit}[1]{\textsf{#1}}
905 \newrobustcmd*{\Code}[1]{\texttt{#1}}
906 \newrobustcmd*{\tex}{\TeX}
907 \newrobustcmd*{\etex}{\mbox{e-TeX}}
908 \newrobustcmd*{\pdftex}{pdf\-\tex}
909 \newrobustcmd*{\xetex}{Xe\-\tex}
910 \newrobustcmd*{\luatex}{Lua\-\tex}
911 \newrobustcmd*{\latex}{\LaTeX}%{La\kern-0.07em TeX}
912 \newrobustcmd*{\pdflatex}{pdf\-\latex}
913 \newrobustcmd*{\xelatex}{Xe\-\latex}
914 \newrobustcmd*{\lualatex}{Lua\-\latex}
915 \newrobustcmd*{\miktex}{Mik\-\tex}
916 \newrobustcmd*{\texlive}{\tex~live}
917 \newrobustcmd*{\bibtex}{Bib\kern-0.07em TeX}
918 \newrobustcmd*{\lppl}{\latex{} Project Public License}
919 \newrobustcmd*{\pdf}{{PDF}}

```

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

```

920 \newrobustcmd*{\md}{\Markdown}
921 \newrobustcmd*{\utf}{\mbox{\UTF-8}}
922 % no \mbox here, we may have to break things
923 \newrobustcmd*{\bibfield}[1]{\Code{#1}}
924 \newrobustcmd*{\opt}[1]{\Code{#1}}
925 \newrobustcmd*{\bibmacro}[1]{\Code{#1}}
926 \newrobustcmd*{\bibtype}[1]{\Code{@#1}}
927 %\renewrobustcmd*{\cmd}[1]{\Code{\textbackslash #1}}
928 \renewrobustcmd\meta[1]{\normalfont\texttriangle\itshape#1\}{\texttriangle}
929
930 % directly taken from ltxdoc.dtx
931 \renewrobustcmd\marg[1]{%
932   {\ttfamily\textcolor{hu-berlin-red}{\{}}}%
933   \meta{#1}%
934   {\ttfamily\textcolor{hu-berlin-red}{\}}}%
935 }
936
937 \renewrobustcmd\oarg[1]{%
938   {\ttfamily\textcolor{hu-berlin-green}{[]}}%
939   \meta{#1}%
940   {\ttfamily\textcolor{hu-berlin-green}{[]}}}%
941 }
942
943 % adapted from listings.dtx (lstdoc.sty)
944 \renewrobustcmd\cmd[1]{%
945   \texttt{\color{hu-berlin-blue}\textbackslash string#1}\xspace%
946 }
947
948 \newrobustcmd\env[2][]{%
949   \texttt{%
950     \color{hu-berlin-blue}%
951     \textbackslash begin\{\string#2\}#1}%
952     \ldots
953     \texttt{%
954       \color{hu-berlin-blue}%
955       \textbackslash end\{\string#2\}}%
956     \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>}`.

```

957 \newcommand\param[1]{%
958   \begingroup%
959   \normalfont%
960   \ttfamily%
961   \bfseries%
962   \textless%
963   #1%

```

```

964 \ttfamily%
965 \bfseries%
966 \textgreater%
967 \endgroup}

968 \pdfstringdefDisableCommands{%
969 \def\lstinline#1{<#1>}
970 \def\tex{TeX}%
971 \def\etex{e-TeX}%
972 \def\xetex{XeTeX}%
973 \def\latex{LaTeX}%
974 \def\xelatex{XeLaTeX}%
975 \def\bibtex{BibTeX}%
976 \def\lppl{LaTeX Project Public License}%
977 \def\pdf{PDF}%
978 \def\utf{UTF-8}%
979 \def\{\}%
980 \def\texttt#1{<#1>}%
981 \def\marg#1{\{#1\}}%
982 \def\oarg#1{[#1]}%
983 \def\color#1#2{}%
984 \def\env#1{<#1>}
985 \def\cmd#1{#1}
986 }
987 % https://tex.stackexchange.com/a/24067/98739
988 \makeatletter
989 \patchcmd{\scr@startchapter}{\if@openright\cleardoublepage\else\clearpage\fi}{}{}{}
990 \makeatother
991 %
992 \RequirePackage[tightLists=false]{markdown}
993 \markdownSetup{rendererPrototypes={%
994 link = {\href{#3}{#1}}}%
995 }}
996 \</style>

997 \</sty>

```

References

- [1] David Carlisle and Hideo Umeke. *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 01/10/2021).
- [2] 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).
- [3] Markus Kohm. *The Scrlayer-scrpage package. Define and manage page styles*. Version 3.32. URL: <http://www.komascript.de/> (visited on 01/10/2021).

- [4] Markus Kohm. *The Scrlltr2 package. Koma-Script ‘letter’ class*. Version 3.30. Apr. 19, 2020. URL: <http://www.komascript.de/> (visited on 01/10/2021).
- [5] Scott Pakin. *The Hyperxmp package. Embed XMP metadata within a LaTeX document*. Version 5.9. Nov. 22, 2020. URL: <http://www.ctan.org/pkg/hyperxmp> (visited on 01/10/2021).
- [6] Will Robertson. *The Fontspec package. Advanced font selection in XeLaTeX and LuaLaTeX*. Version 2.7i. URL: <http://www.ctan.org/pkg/fontspec> (visited on 01/10/2021).
- [7] The LaTeX Team and David Carlisle. *The Graphicx package. Enhanced support for graphics*. Version 1.2b. Sept. 9, 2020. URL: <http://www.ctan.org/pkg/graphicx> (visited on 01/10/2021).
- [8] The LaTeX Team, Sebastian Rahtz, and Heiko Oberdiek. *The Hyperref package. Extensive support for hypertext in LaTeX*. Version 7.00e. May 15, 2020. URL: <https://github.com/latex3/hyperref> (visited on 01/10/2021).
- [9] Martin Vogel, Thomas Henlich, and Mojca Miklavac. *The Marvosym package. Martin Vogel’s Symbols (marvosym) font*. Version 2.2a. URL: <http://www.marvosym.de> (visited on 01/10/2021).



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

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

Betreff

Sehr geehrte Frau Musterfrau,

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

Datum:
10.1.2021
Wissenschaftlicher Mitarbeiter
Dr. Max Mustermann
Postanschrift:
Humboldt-Universität zu Berlin
Unter den Linden 6
D-10099 Berlin
Telefon +49 (30) 2093-1234
Telefax +49 (30) 2093-5678
maike.musterfrau@hu-berlin.de
max.mustermann@hu-berlin.de
www.hu-berlin.de
Sitz:
Mötenstraße 40/41
Zimmer X
D-10117 Berlin

Verkehrsverbindungen:
U Bahnhof Hausvogteiplatz (U2)
Eingang:
Hausvogteiplatz
Bank:
Deutsche Bank PGK AG
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:
10.1.2021

Wissenschaftlicher Mitarbeiter
Dr. Max Mustermann

Postanschrift:
Humboldt-Universität zu Berlin
Unter den Linden 6
D-10099 Berlin
Telefon +49 [30] 2093-1234
Telefax +49 [30] 2093-5678
mai.k.e.m.u.s.t.e.r.f.r.a.u@h.u-berlin.de
m.a.x.m.u.s.t.e.r.m.a.n.n@h.u-berlin.de
www.h.u-berlin.de

Sitz:
Möhlenstraße 40/41
Zimmer X
D-10117 Berlin

Verkehrsverbindungen:
U Bahnhof Hausvogteiplatz (U2)

📍 Eingang:
Hausvogteiplatz

Bank:
Deutsche Bank PGK AG
IBAN DE95 1007 0648 0512 6206 01
BIC DEUTDE33HAN

Documents and Documentations for \LaTeX at the Humboldt-Universität zu Berlin (unofficial) | For Authors and Developers

46