

CROWBOOK USER GUIDE

Élisabeth Henry



Chapter 1

Crowbook

Crowbook's aim is to allow you to write a book in Markdown without worrying about formatting or typography, and let the program generate HTML, PDF and EPUB output for you. Its focus is novels and fiction, and the default settings should (hopefully) generate readable books with correct typography without requiring you to worry about it.

1.1 Example

To see what Crowbook's output looks like, you can read the Crowbook guide rendered in HTML, PDF or EPUB. You can also play with the online demo version.

1.2 Installing

There are two ways to install Crowbook: either using precompiled binaries, or compiling it using cargo.

Binaries

See the releases page to download a precompiled binary for your architecture (currently: Linux, Windows and MacOSX). Just extract the archive and run crowbook (or crowbook.exe on Windows). You might also want to copy the binary somewhere in your PATH for later usage.

If you are on Debian GNU/Linux or Ubuntu (on a PC architecture), you can also download .deb packages on the releases page.

Using Cargo

Cargo is the Rust's package manager. You can install it here. Once it is done:

```
$ cargo install crowbook
```

will¹ automatically download the latest crowbook release on crates.io, compile it, and install it on your system.

Some dependencies also require building C libraries; you might thus also need to install a C compiler and make/cmake build tools. You can also try to build a version of Crowbook without optional features: cargo install crowbook --no-default-features --features __"2 clap_" will disable syntactic highlighting and proofreading, requiring <u>less</u>⁴ dependencies.

1.3 Dependencies

While there should be, strictly speaking, no real dependencies to be able to run Crowbook (it is published as a statically compiled binary), some features require additional commands to work correctly:

- EPUB rendering requires the zip command to be present on your system;
- PDF rendering requires a working installation of LaTeX (preferably xelatex).

 $^{^{1}\}mathrm{This}$ sentence does not start with an uppercase letter

²Use a smart opening quote here: """

³Use a smart closing quote here: """.

⁴Did you mean "fewer"? The noun dependencies is countable.

1.4 Quick tour

The simplest command is:

```
$ crowbook <BOOK>
```

⁵where ⁶ BOOK is a configuration file. Crowbook will parse this file and generate HTML, EPUB, and/or PDF output formats, according to the settings in the configuration file.

To create a new book, assuming you have a list of Markdown files, you can generate a template configuration file with the --create argument:

```
$ crowbook my.book --create chapter_*.md
```

This will generate a default my.book file, which you'll need to complete. This configuration file contains some metadata, options, and lists the Markdown files.

For short books containing only a single Markdown file, it is possible to embed some metadata at the beginning of the file and use the <code>--single</code> or <code>-s</code> option to run <code>crowbook</code> directly on this Markdown file and avoid creating a separate book configuration file:

```
$ crowbook -s text.md
```

For more information, see the chapters on the arguments supported by crowbook and on the configuration file.

1.5 Current features

Output formats

Crowbook supports HTML, PDF and EPUB (either version 2 or 3) as output formats. See the Crowbook User Guide rendered in HTML, EPUB and PDF.

Input format

Crowbook uses pulldown-cmark and thus should support most of CommonMark Markdown. Inline HTML, however, is not implemented, and probably won't be, as the goal is to have books that can also be generated in PDF (and maybe ODT).

Typographic "7cleaning"8

Maybe the most specific <u>"</u>⁹feature<u>"</u>¹⁰ of Crowbook is that it does its best to <u>"</u>¹¹clean<u>"</u>¹² the input text before rendering it. By default, it removes superfluous spaces and tries to use curly quotes. If the book's language is set to french, it also tries to respect french typography by replacing spaces with non-breaking ones when it is appropriate (e.g. before '?', '!', ';' or ':').

Please open an issue describing typographic rules if you want them to be implemented for other languages.

Links handling

Crowbook tries to correctly translate local links in the input Markdown files: e.g. if you have a link to a Markdown file that is part of your book, it will be transformed into a link inside the document.

Inline YAML blocks

Crowbook supports inline YAML blocks:

```
author: Me
```

⁶This sentence does not start with an uppercase letter

⁷Use a smart opening quote here: ""."

⁸Use a smart closing quote here: """.

⁹Use a smart opening quote here: "".

 $^{^{10}}$ Use a smart closing quote here: """.

¹¹Use a smart opening quote here: "".

¹²Use a smart closing quote here: """.

```
title: My title
```

This is mostly useful when Crowbook is run with the --single argument (receiving a single Markdown file instead of a book configuration file), for short texts that only contain one "13 chapter" 14.

Proofreading

Crowbook can also generate "15 proofreading" 16 copies in HTML or PDF, highlighting grammar errors and repetitions. For more information, see the proofreading chapter of the guide.

Interactive fiction

Crowbook has experimental support for writing interactive fiction (only for HTML). For more information, read the interactive fiction chapter.

Customization

While the default settings will hopefully generate something that should look "17 good enough" it is possible to customize the output, essentially by providing different templates.

Bugs

See the github's issue tracker.

1.6 Contributors

- Stéphane Mourey <s+crowbook AT stephanemourey DOT fr>
- Falco Hirschenberger

1.7 Acknowledgements

Besides the Rust compiler and standard library, Crowbook uses the following libraries: pulldown-cmark, yaml-rust, mustache, clap, chrono, uuid, mime_guess, crossbeam, walkdir, rustc-serialize, caribon, hyper, url, lazy_static, regex, term, numerals, syntect.

It can also embed Highlight.js in HTML output to enable syntax highlighting for code blocks.

It also uses configuration files from rust-everywhere to use Travis and Appveyor to generate binaries for various platforms on each release.

While Crowbook directly doesn't use them, there was also inspiration from Pandoc and mdBook.

Also, the W3C HTML validator and the IDPF EPUB validator prove very useful during development and testing.

1.8 ChangeLog

See ChangeLog.

1.9 Contributing

See how you can contribute to Crowbook.

If you find this project useful, you can also support its author by making a Paypal donation.

 $^{^{13}}$ Use a smart opening quote here: """.

¹⁴Use a smart closing quote here: """.

¹⁵Use a smart opening quote here: "".

 $^{^{16}\}mathrm{Use}$ a smart closing quote here: """.

¹⁷Use a smart opening quote here: """.

¹⁸Use a smart closing quote here: """.

1.10 Library

While the main purpose of Crowbook is to be run as a standalone program, the code is written as a library, so if you want to build on it you can use it as such. You can look at the generated documentation on docs.rs.

Note that, in order to facilitate code reuse, some features have been split to separate libraries:

- ¹⁹epub-builder makes it easier to generate EPUB files.
- crowbook-text-processing contains all the "20 typographic" functions (smart quotes, handling of non-breaking spaces in french, ...).
- crowbook-intl is used for the internationalization (translation) process.

1.11 License

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 $^{^{19}\}mathrm{This}$ sentence does not start with an upper case letter

²⁰Use a smart opening quote here: """.

²¹Use a smart closing quote here: """.

²²This notation is nonstandard, use this symbol instead: "©"

 $^{^{23}\}mathrm{Add}$ a space between sentences

 $^{^{24}\}mathrm{Add}$ a space between sentences

 $^{^{25}\}mathrm{Add}$ a space between sentences

²⁶Use a smart opening quote here: """.

Chapter 2

Arguments

Crowbook can take a number of arguments, generally in the form:

```
crowbook [OPTIONS] [BOOK]
```

The most important argument is obviously the book configuration file. It is mandatory in most cases: if you don't pass it, Crowbook will simply display an error. In a normal use case this is the only argument you'll need to pass, as most options will be set in this configuration file.

It is, however, possible to pass more arguments to crowbook:

2.1 --create

```
Usage: crowbook [BOOK] --create file_1.md file_2.md ...
(or crowbook [BOOK] -c file_1.md file_2.md ...)
```

Creates a new book from a list of Markdown files. It will generate a book configuration file with all file names specified as chapters. It either prints the result to stdout (if BOOK is not specified) or generate the file BOOK (or abort if it already exists).

```
crowbook foo.book --create chapter_1.md chapter_2.md chapter_3.md
```

will thus generate a file foo.book containing:

```
author: Your name
title: Your title
lang: en
## Output formats
# Uncomment and fill to generate files
# output.html: some_file.html
# output.epub: some_file.epub
# output.pdf: some_file.pdf
# Or uncomment the following to generate PDF, HTML and EPUB files based on this file's name
# output: [pdf, epub, html]
# Uncomment and fill to set cover image (for EPUB)
# cover: some cover.png
## List of chapters
+ chapter_1.md
+ chapter_2.md
+ chapter_3.md
```

²while

 $^{^{1}\}mathrm{This}$ sentence does not start with an uppercase letter

²This sentence does not start with an uppercase letter

```
crowbook --create chapter_1.md chapter_2.md chapter_3.md
```

will³ print the same result, but to stdout (without creating a file).

2.2 --single

```
Usage: crowbook --single <FILE>
  (or crowbook -s <FILE>)
```

This argument allows you to give **crowbook** a single Markdown file. This file can contain an inline YAML block to set some book options. Inline YAML blocks must start and end with a line containing only --- (three dashes). E.g.

```
author: Joan Doe
title: A short story
output: [html, epub, pdf]
---
Content of the story in Markdown.
```

If this YAML block is not at the beginning of a file, it must also be preceded by a blank line.

This allows to not have to write a .book configuration file for a short story or an article. crowbook -s foo. md is rougly equivalent to having a book configuration file containing:

```
! foo.md
```

That is, the chapter heading (if any) won't be displayed in the output documents (though they still appear in the TOC).

Note that by default, using --single or -s sets the default LaTeX class of the book to article instead of book.

2.3 --set

Usage: crowbook <BOOK> --set [KEY] [VALUE]...

This argument takes a list of ⁵KEY VALUE pairs and allows setting or overriding a book configuration option. All valid options in the configuration files are valid as keys. For more information, see the configuration file.

```
$ crowbook foo.book --set tex.paper.size a4paper
```

will⁶ override the paper size for PDF generation.

2.4 --list-options

Usage: crowbook --list-options

(or crowbook -1)

Displays all the valid options that can be used, whether in a book configuration file, with --set, or in an inline YAML block.

2.5 --print-template

Usage: crowbook --print-template <TEMPLATE>

Prints the built-in template to stdout. Useful if you want to customize the appearance of your document. E.g., if you want to modify the CSS used for HTML rendering:

```
$ crowbook --print-template html.css > my_style.css
# edit my_style.css in your favourite editor
```

 $^{^3{\}rm This}$ sentence does not start with an upper case letter

⁴This sentence does not start with an uppercase letter

⁵Possible typo: you repeated a whitespace

⁶This sentence does not start with an uppercase letter

```
$ crowbook my.book --set html.css my_style.css
# or add "html.css: my_style.css" in my.book
```

2.6 --stats

Usage: crowbook --stats <BOOK>
 (or crowbook -S <BOOK>)
 Display some statistics (word and character counts) about the book.

2.7 --proofread

```
Usage: crowbook --proofread <BOOK>
  (or crowbook -p <BOOK>)
   Equivalent to --set proofread true. Enable proofreading. See Proofreading.
```

2.8 --verbose

 ${\bf Usage:}\ {\tt crowbook}\ {\tt <BOOK>}\ {\tt --verbose}$

If this flag is set, Crowbook will print more warnings it detects while parsing and rendering.

2.9 --to

```
Usage: crowbook <BOOK> --to [FORMAT]
  (or crowbook <BOOK> -t [FORMAT])
```

Generate only the specified format. FORMAT must be either epub, pdf, html, html.dir, odt or tex.

If an output file for the format is not specified in the book configuration file, crowbook will fail to render PDF, ODT and EPUB, whereas it will print HTML and TeX files on stdout. It is, however, possible to specify a file with the --output option.

Examples

```
crowbook --to html foo.book
```

will⁷ generate some HTML, and prints it either to the file specified by output.html in foo.book, or to stdout if it is not specified.

```
crowbook --to pdf --output foo.pdf foo.book
```

will⁸ generate a foo.pdf file.

2.10 --output

```
Usage: crowbook <BOOK> --to <FORMAT> --output <FILE> (or crowbook -t <FORMAT> -o <FILE> <BOOK>)
Specifies an output file. Only valid when --to is used.
```

2.11 --lang

```
Usage: crowbook --lang <LANG>
  (or crowbook -L <LANG>)
```

Set the runtime language used by Crowbook. Currently, only a french translation is available. By default, Crowbook uses the LANG environment variable to determine which language to use, but this option allows to override it (e.g. for operating systems that don't use such an option, such as Windows).

Example

```
$ crowbook --lang fr --help
will<sup>9</sup> display Crowbook's help message in french.
```

⁷This sentence does not start with an uppercase letter

⁸This sentence does not start with an uppercase letter

⁹This sentence does not start with an uppercase letter

Note that this argument has nothing to do with the lang option that you can set in the book configuration file, which specifies the language of the book. This argument specifies the language of the text messages that Crowbook will display while running, but has no effect on the generated documents.

Chapter 3

The configuration file

If you want to use Crowbook for your book, this configuration file is all you'll have to add, beside the Markdown files containing the text of your book.

The format is not very complicated. This is an example of it:

```
# metadata
author: Joan Doe
title: Some book
lang: en

output: [html, pdf, epub]

# list of chapters
- preface.md
+ chapter_1.md
+ chapter_2.md
+ chapter_3.md
+ chapter_4.md
- epilogue.md
```

Basically, it is divided in two parts:

- <u>a</u>¹ list of options, under the form key: value, following YAML syntax.
- a list of Markdown files.

Lines starting with the # characters are comments and are discarded.

3.1 Configuration in an inline YAML block

Sometimes, you only have one Markdown file and might not want to have a separate configuration file. In this case, you can specify options at the beginning of your Markdown file, using an inline YAML block, separated by two lines containing only ---:

```
author: Joan Doe
title: Some (short) book
lang: en

output: [html, pdf, epub]
---
# Some (short) book

The book content, formatted in Markdown.
```

This method only allows to set up options: you can't include a list of chapters in this way, since the only "2chapter" that will be included is this Markdown file itself.

¹This sentence does not start with an uppercase letter

²Use a smart opening quote here: """.

³Use a smart closing quote here: """.

You can then use

```
crowbook -s some_book.md
```

to⁴ generate output formats from this Markdown file.

By default⁵ (unless input.yaml_blocks is set to true), Crowboook will only read those inline blocks when it is runned with crowbook --single (or crowbook -s).

3.2 The list of files

There are various options to include a Markdown file.

- + file_name.md includes a numbered chapter.
- - file_name.md includes an unnumbered chapter.
- ! <u>file_name</u>⁶ .md includes a chapter whose title won't be displayed (except in the table of contents); this is useful for e.g. including a copyright at the beginning or the book, or for short stories where there is only one chapter.
- 42. file_name⁷.md specifies the number for a chapter.
- @ includes a part instead of a chapter.

So a typical usage might look like this:

```
! copyright.md
- preface.md
0. chapter_0.md # We want to start at chapter 0 instead of 1
# Next chapters can be numbered automatically
+ chapter_1.md
+ chapter_2.md
...
```

There are two important things to note:

- 1. you^8 must *not* use quotes around the file names.
- 2. the paths of these files are relative to the directory where your configuration file is. This means you can run crowbook books/my_trilogy/first_book/config.book without being in the book's directory.

<u>Also</u>⁹ <u>note</u>¹⁰ that you don't have to specify a title. This is because the title of the chapter is inferred from the Markdown document. To go back to our previous example:

```
+ chapter_1.md
```

does¹¹ not specify a chapter title, because it will read it directly in chapter_1.md, e.g.:

```
# The day I was born #
```

Ideally, you should have one and only one level-one header (i.e. chapter title) in each Markdown file. If you have more than one, it might mess with the table of contents in some cases (e.g. for EPUB).

Parts

Parts are included using the @ character, followed by the same characters than for chapters:

⁴This sentence does not start with an uppercase letter

⁵Did you mean: "By default,"?

⁶This sentence does not start with an uppercase letter

⁷This sentence does not start with an uppercase letter

 $^{^8{\}rm This}$ sentence does not start with an upper case letter

⁹Did you forget a comma after a conjunctive/linking adverb?

 $^{^{10}\}mathrm{Consider}$ using third-person verb forms for singular and mass nouns: "notes".

¹¹This sentence does not start with an uppercase letter

```
@+ numbered_part.md
+ chapter_01.md
+ chapter_02.md
@- unnumbered_part.md
+ chapter_03.md
+ chapter_04.md
@42. part_with_number_42.md
+ chapter_05.md
```

However, you usually don't really want to have a content directly below the part, only chapters (though it can be useful to add an introduction before the first chapter of this part), so there is also a more straighforward way to use parts, using only the @ character followed by the (markdown-formatted) title of this part:

```
@ Beginning
+ chapter_01.md
+ chapter_02.md
@ Middle
+ chapter_03.md
+ chapter_04.md
@ Appendix
- notes.md
```

With this shortcut, parts are always numbered.

Subchapters

If you write your book to be rendered by Crowbook, it is better to have one Markdown file per chapter. It is, however, possible to work with divisions at lower levels. In order to properly include these files, you can use the following syntax:

```
-- section.md
--- subsection.md
---- subsubsection.md
```

Note that there isn't different syntax for numbered or unnumbered sections/subsections: you can only change the numbering scheme at the chapter level.

When including those files, Crowbook will include them in the table of content as part of the previous chapter (or section for subsections, and so on). It will also adjust the header levels of the Markdown files, so, in the previous example, a level-1 header in section.md will be displayed as a level-2 header in the book, and a level-1 header in subsection.md as a level-3 header.

This can cause issues as only six levels of headers are supported; hence, if you include a level-5 header in subsubsection.md, it will cause an error.

3.3 Crowbook options

The first part of the configuration file is dedicated to pass options to Crowbook. This is YAML syntax, so each line should be of the form key: value. Note that in most cases you don't have to put string in quotes, e.g.:

```
title: My title
```

It is however possible (and sometimes necessary) to escape some characters using quotes around strings:

```
title: "My: title!"
```

It is possible to use multiline strings with >- and then indenting the lines that are part of the string:

```
title: >-
A
long
title
author: Joan Doe
```

will set title to "13 A long title" See block literals in YAML for more information on the various way to insert multiline strings (which mostly change the way newlines will or won't be inserted).

A final note on the syntax: all options must be set *before* the first chapter inclusion (that is, a line beginning with '+', '-', 'x.' (where x is a number) or '!').

Metadata

Metadata are data about the book. Except for cover, which points to an image file, all its fields are strings. The main metadata are:

- author
- title
- subtitle
- lang, the language of the book. The unicode language code should be used, e.g. en_GB or en, fr_FR, or fr...
- cover, a path to an image file for the cover of the book (not displayed in all output formats).

There are also additional metadata:

- subject
- description
- license
- version
- date

You can define your own metadata by starting an option name with metadata.foo.

All metadata <u>are 15</u> accessible from templates, see Templates.

The import special option

The special import option allows you to include the options of another book configuration file. E.g., assuming that you want some common options to be applied to both foo.book and bar.book, you can create a common.book file:

```
author: Joan Doe
lang: en
license: "Copyright (C) Joan Doe. All rights reserved."

html.header: "[Joan Doe's website](http://joan-doe.com)"
tex.template: my_template.tex
```

You can then include this file in foo.book:

```
import: common.book
title: Foo

+ foo_01.md
+ foo_02.md
```

Or include it in bar.book, but override some of its features:

```
import: common.book
title: Bar
license: CC-BY-SA # Override the license from common.book
+ bar_01.md
```

 $^{^{12}\}mathrm{This}$ sentence does not start with an upper case letter

¹³Use a smart opening quote here: """.

¹⁴Use a smart closing quote here: """.

 $^{^{15}\}mbox{Possible}$ agreement error - use third-person verb forms for singular and mass nouns: "is".

Output options

These options specify which files to generate.

Note that all file paths are relative to the directory where the configuration file is, not to the one where you run crowbook. So if 16 you set

```
output.epub: foo.epub

and 17 run

$ crowbook some/dir/config.book
```

foo¹⁸.epub will be generated in some/dir, not in your current directory.

Crowbook will try to generate each of the output.xxx files that are specified. That means that you'll have to set at least one of those if you want a call to

```
$ crowbook my.book
```

 $\underline{\text{to}}^{19}$ generate anything. (It's still possible to generate a specific format, and only this one, by using the --to and --output argument on the command line).

Note that some formats depend on some commands being installed on your system. Most notably, Crowbook depends on LaTeX (xelatex by default, though you can specify another command to use with tex.command) to generate a PDF file, so PDF rendering won't work if it is not installed on your system. Crowbook also uses the zip command to generate the EPUB and ODT files.

Current output options are:

- output²⁰.html: renders a standalone HTML file.
- output.html.dir: renders a²¹ HTML directory with one page by chapter.
- output.epub: renders an EPUB file.
- output.tex: renders a LaTeX file.
- output.pdf: renders a PDF file (using tex.command).

(There are other output options for generating proofreading files, see Proofreading, and interactive fiction, see Interactive fiction.)

The output option

Setting output file names manually can be a bit tedious, and is not always necessary. You can also specify a list of output formats with the output option:

```
output: [pdf, epub, html]
```

This is similar to the alternative syntax for YAML list:

```
output:
- pdf
- epub
```

This option will set default output path for PDF, EPUB and HTML according to the book configuration file name. So, if your book is my_book.book (or my_book.md), it will generate my_book.pdf, my_book.html and my_book.epub.

You can also infer the output file name by specifying "22 auto" to e.g. output.html. The previous example is thus equivalent to

¹⁶ "So if" at the beginning of a sentence requires a 2nd clause. Maybe a comma, question or exclamation mark is missing, or the sentence is incomplete and should be joined with the following sentence.

¹⁷This sentence does not start with an uppercase letter

¹⁸This sentence does not start with an uppercase letter

¹⁹This sentence does not start with an uppercase letter

 $^{^{20}}$ This sentence does not start with an uppercase letter

 $^{^{21}}$ Use "an" instead of 'a' if the following word starts with a vowel sound, e.g. 'an article', 'an hour'

 $^{^{22}\}mathrm{Use}$ a smart opening quote here: """.

²³Use a smart closing quote here: """.

```
output.pdf: \underline{auto}
\underline{output}.epub: \underline{auto}
\underline{output}.html: \underline{auto}
```

$\mathtt{output}^{24}.\mathtt{base_path}$

Additionally, the output.base_path option allows you to set where the output files will be written (relatively to the book configuration file). E.g.,

```
output.base_path: docs/book
output.epub: book.epub
```

will²⁵ render the EPUB file in docs/book/book.epub.

Input options

Crowbook does its best to improve the typography of your text. Default settings should be good enough for most usages, but you can enable/disable specific options:

- <u>input</u>²⁶.clean (default: true): if set to false, will disable all typographic <u>"27</u>cleaning<u>"28</u>. The algorithm is dependent on the language, though currently there is only a variant implemented for fr (french), dealing with the specific non-breaking spaces rules for this language.
- input.clean.smart_quotes (default: true): if set to false, disable the "29 smart quote" feature, that (tries to) replace straight quotes with curly ones. As it is an all heuristics and can't be perfect, you might want to disable it in some circumstances.
- input.clean.ligature_dashes (default: false): if set to true, will convert -- to en dash (-) and --- to em dash (-). This can be useful if you want to use these characters but can't access them easily on your keymap; however, as it can also cause problems if you do want to have two successive dashes, it is disabled by default.
- input.clean.ligature_guillemets (default: false) is a similar feature for french 'guillemets', replacing << and >> to « and ».

Generic options for rendering

These options allow to configure the rendering; they are used (or at least should be) for all formats.

- rendering³².highlight (default: syntect): specify if and how to perform syntax highlighting for code blocks. Valid values are:
 - syntect: uses the syntect library to perform syntax highlighting. This has the advantage of also enabling syntax highlighting for LaTeX/PDF and EPUB formats; however syntect support doesn't seem to work on Windows.
 - highlight.js: this_33 will use (and embed) highlight.js for HTML rendering, and will not perform any syntax highlighting for other output formats.
 - none: disable syntax highlighting. If your version of Crowbook (as is the case for Windows builds) isn't built with syntect support, it will default to none if you try to use it.
- rendering.highlight.theme: only used if rendering.highlight is set to syntect, selects the theme to use for syntax highlighting. Default is "34 Inspired GitHub" Valid theme names are "36 Inspired GitHub", valid theme names are "36 Inspired

```
<sup>24</sup>This sentence does not start with an uppercase letter
<sup>25</sup>This sentence does not start with an uppercase letter
<sup>26</sup>This sentence does not start with an uppercase letter
<sup>27</sup>Use a smart opening quote here: """.
<sup>28</sup>Use a smart closing quote here: """.
<sup>29</sup>Use a smart opening quote here: """.
<sup>30</sup>Use a smart closing quote here: """.
<sup>31</sup>Use "a" instead of 'an' if the following word doesn't start with a vowel sound, e.g. 'a sentence', 'a university'
<sup>32</sup>This sentence does not start with an uppercase letter
<sup>33</sup>Possible typo: you repeated a whitespace
<sup>34</sup>Use a smart opening quote here: """.
<sup>35</sup>Use a smart closing quote here: """.
<sup>36</sup>Use a smart opening quote here: """.
<sup>37</sup>Use a smart closing quote here: """.
```

```
 \begin{tabular}{l} "38 Solarized (dark)" & "49 Solarized (light)" & "41 Solarized (light)" & "42 Solarized (light)" & "44 Solarized (light)" & "45 Solarized (light)" & "46 Solarized (light)" & "47 Solarized (light)" & "48 Solarized (light)" &
```

- rendering.num_depth: an integer that represents the maximum level of numbering for your book. E.g., 1 will only number chapters, while 2 will number chapters, sections, but not anything below that. 6 is the maximum_50 level and turns numbering on for all headers. (Default is 1.) This also affects what levels will be displayed in the table of contents.
- rendering.chapter and rendering.part: the strings that will be used to design chapter and part. E.g., if you want your parts to show as "51Book III"52 instead of "53Part III"54, you can set rendering.part: Book.
- rendering.part.roman_numerals and rendering.chapter.roman_numerals: these two booleans allow you to specify if you want roman numerals for part or chapter numbers (default is true for part numbers, and false for chapter numbers).
- rendering.inline_toc: if set to true, Crowbook will include a table of contents at the beginning of the document.
- rendering.inline_toc.name: the name of this table of contents as it should be displayed in the document.
- rendering.initials: if set to true, Crowbook will use initials, or "55 lettrines" displaying the first letter of each chapter bigger than the others.
- rendering.part.reset_counter: set it to false if you don't want your chapter numbers to start again at 1 at each part.

HTML Options

These options allow you to customize the HTML rendering (used both by the default HTML standalone renderer and the HTML multifile renderer):

- <u>html</u>⁵⁷.icon: allows to set a favicon for the page.
- html.header and html.footer allow to set a custom (Markdown) string at the top and at the bottom of the HTML page. This is actually a template, so you can access metadata, such as {{{author}}}, {{{title}}}, or {{{version}}} in it. See the template chapter for more information on the fields you can use.
- html.css allows to set 58 up a custom CSS file. You can also redefine the colours in a file and set it using html.css.colours.
- html.css.add allows you to add some specific lines of CSS in your book configuration file, that will be appended after the default CSS template.
- html.highlight.theme is similar to rendering.highlight.theme but only sets the theme for HTML output.

Options for standalone HTML

There are a few options specific to the standalone HTML renderer (default, set with output.html):

• html⁵⁹.standalone.one chapter, if set to true, will only display one chapter at a time (using Javascript),

```
<sup>38</sup>Use a smart opening quote here: """.
<sup>39</sup>Use a smart closing quote here: """.
<sup>40</sup>Use a smart opening quote here: "".
<sup>41</sup>Use a smart closing quote here: """.
<sup>42</sup>Use a smart opening quote here: ""."
^{43}Use a smart closing quote here: """.
<sup>44</sup>Use a smart opening quote here: """.
<sup>45</sup>Use a smart closing quote here: """.
<sup>46</sup>Use a smart opening quote here: """.
<sup>47</sup>Use a smart closing quote here: """.
<sup>48</sup>Use a smart opening quote here: """.
<sup>49</sup>Use a smart closing quote here: """.
^{50}Possible typo: you repeated a whitespace
<sup>51</sup>Use a smart opening quote here: ""
^{52}Use a smart closing quote here: """.
<sup>53</sup>Use a smart opening quote here: """.
^{54}Use a smart closing quote here: """.
<sup>55</sup>Use a smart opening quote here: """.
<sup>56</sup>Use a smart closing quote here: """.
^{57}\mathrm{This} sentence does not start with an uppercase letter
<sup>58</sup>Did you mean "setting"? Or maybe you should add a pronoun? In active voice, 'allow' + 'to' takes an object, usually a pronoun.
^{59}This sentence does not start with an uppercase letter
```

making it look similarly to the multifile HTML.

• html.standalone.template allows you to change or modify the HTML template for standalone HTML.

Options for LaTeX/PDF rendering

These options allow you to customize the LaTeX renderer (and, thus, the generated PDF documents):

- tex⁶⁰.template specifies a different LaTeX template.
- tex.class changes the LaTeX class used.
- tex.paper.size and tex.font.size (default a5paper and 10pt) allows to modify the page and font size_61
- tex.margin.left, tex.margin.right, tex.margin.top and tex.margin.bottom specify the margin of the page.
- tex.links_as_footnotes can be set to false if you don't want links to also appear as footnotes (which means losing them if it is actually printed).
- tex.highlight.theme: similar to rendering.highlight.theme, but only sets the theme for LaTeX/PDF rendering.

Options for EPUB rendering

There are also options specific to the EPUB format:

- $epub^{62}$.version can be set to 2 or 3 (default 2).
- epub.css can be useful if you want to specify a customized stylesheet.
- epub.highlight.theme: similar to rendering.highlight.theme but only sets a theme for EPUB output.

Resources options

These options allow $\underline{\text{to embed}}^{63}$ additional files for some formats (currently, only EPUB). This can be useful for embedding fonts.

resources⁶⁴.files

A list of files or directories that should be added.

```
resources.files: [font1.otf, font2.otf]
```

It is also possible to specify a directory (or multiple directories). So if you have a fonts directories containing font1.otf and font2.otf,

```
resources.files: [fonts]
```

will⁶⁵ be equivalent to:

```
resources.files: [fonts/font1.otf, fonts/font2.otf]
```

⁶⁶default: not set

⁶⁰This sentence does not start with an uppercase letter

 $^{^{61}\}mathrm{Don't}$ put a space before the full stop

 $^{^{62}}$ This sentence does not start with an uppercase letter

⁶³Did you mean "embedding"? Or maybe you should add a pronoun? In active voice, 'allow' + 'to' takes an object, usually a pronoun.

⁶⁴This sentence does not start with an uppercase letter

 $^{^{65}}$ This sentence does not start with an uppercase letter

⁶⁶This sentence does not start with an uppercase letter

resources⁶⁷.out path

This option determine where (in which directory), in the resulting document, those files will be copied. The default is data, so by default the resources.files in the first example above will search font1.otf and font2.otf in the same directory than the .book file, and will copy them to data/font1.otf and data/font2.otf in the EPUB file. This is therefore this last path that you should use if you want to access those files e.g. in a custom CSS stylesheet.

Note that if you pass directories to resources.files, the whole directory would be copied. So assuming fonts/contains font1.otf and font2.otf

```
resources.files: [fonts] resources.path: data
```

will 68 copy these two files to data/fonts/font1.otf and data/fonts/font2.otf (and not data/font1.otf and data/font2.otf).

Similarly, the whole path of resources.files is copied, so

```
resources.files: [fonts/font1.otf, fonts/font2.otf]

will 69 yield the same result.

70 default: data
```

3.4 Full list of options

Here is the complete list of options. You can always look at it by running crowbook --list-options or crowbook -1.

Metadata

• author

```
type: metadata
default value: "<sup>71</sup>"
Author of the book
```

• title

```
type: metadata
default value: "<sup>72</sup>"
Title of the book
```

• lang

```
type: metadatadefault value: enLanguage of the book
```

subject

```
type: metadatadefault value: not set
```

- Subject of the book (used for EPUB metadata)

description

```
- type: metadata
```

- default value: not set

 $^{^{67}}$ This sentence does not start with an uppercase letter

⁶⁸This sentence does not start with an uppercase letter

 $^{^{69}}$ This sentence does not start with an uppercase letter

 $^{^{70}}$ This sentence does not start with an uppercase letter

 $^{^{71}}$ Use a smart opening quote here: """.

⁷²Use a smart opening quote here: """.

- Description of the book (used for EPUB metadata)

• cover

- **type**: path
- default value: not set
- Path to the cover of the book

Additional metadata

- subtitle
 - **type**: metadata
 - default value: not set
 - Subtitle of the book
- license
 - type: metadata
 - default value: not set
 - License of the book. This information will be displayed on PDF documents
- version
 - type: metadata
 - default value: not set
 - Version of the book
- date
 - **type**: metadata
 - default value: not set
 - Date the book was revised

Output options

- output
 - **type**: list of strings
 - default value: not set
 - Specify a list of output formats to render
- output.epub
 - **type**: path
 - default value: not set
 - Output file name for EPUB rendering
- output.html
 - **type**: path
 - default value: not set
 - Output file name for HTML rendering
- output.html.dir
 - **type**: path
 - default value: not set
 - Output directory name for HTML rendering
- output.tex
 - **type**: path

```
default value: not setOutput file name for LaTeX rendering
```

· output.pdf

- **type**: path

- default value: not set

- Output file name for PDF rendering

• output.odt

- **type**: path

- default value: not set

- Output file name for ODT rendering

• output.html.if

- type: path

- default value: not set

- Output file name for HTML (interactive fiction) rendering

• output.base_path

- **type**: path

– default value: "⁷³"

- Directory where those output files will we <u>written</u>⁷⁴

Rendering options

• rendering 75. highlight

- type: string

- default value: syntect

– If/how highligh code blocks. Possible values: "⁷⁶syntect" (default, performed at runtime), "⁷⁸highlight.js" (HTML-only, uses Javascript), "⁸⁰none" (HTML-only, uses Javascript)

• rendering.highlight.theme

- **type**: string

- default value: InspiredGitHub

- Theme for syntax highlighting (if rendering.highlight is set to 'syntect')

• rendering.initials

- type: boolean

- default value: false

- Use initials ('lettrines') for first letter of a chapter (experimental)

• rendering.inline_toc

- **type**: boolean

- default value: false

- Display a table of content in the document

• rendering.inline_toc.name

 $^{^{73}}$ Use a smart opening quote here: """.

⁷⁴Possible grammatical error. You used a past participle without using any required verb ('be' or 'have'). Did you mean "wrote"?

⁷⁵This sentence does not start with an uppercase letter

 $^{^{76}\}mathrm{Use}$ a smart opening quote here: """.

⁷⁷Use a smart closing quote here: """.

⁷⁸Use a smart opening quote here: """.

 $^{^{79}}$ Use a smart closing quote here: """.

⁸⁰Use a smart opening quote here: """.

⁸¹Use a smart closing quote here: """.

```
- type: string
      - default value: "^{82}{{{loc_toc}}}^{83}"^{84}
      - Name of the table of contents if it is displayed in document
 • rendering.num_depth
      - type: integer
      - default value: 1
      - The <sup>85</sup>maximum heading levels that should be numbered (0: no numbering, 1: only chapters, ..., 6: all)
 • rendering.chapter
      - type: string
      - default value: not set
      - How to call chapters
 • rendering.part
      - type: string
      - default value: not set
      - How to call parts (86 or 'books', 'episodes', ...
 • rendering.chapter.roman_numerals
      - type: boolean
      - default value: false
       - If set to true, display chapter number with roman numerals
 • rendering.part.roman_numerals
      - type: boolean
      - default value: true
      - If set to true, display part number with roman numerals
 • rendering.part.reset_counter
      - type: boolean
      - default value: true
      - If set to true, reset chapter number at each part
 • rendering.chapter.template
      - type: string
       - default value: "^{87}{{{number}}}. {{{chapter_title}}}"88

    Naming scheme of chapters, for TOC

 • rendering.part.template
      - type: string
      - default value: <u>"</u>89 {{{number}}}. {{{part_title}}}!<u>"</u>90
      - Naming scheme of parts, for TOC
<sup>82</sup>Use a smart opening quote here: """.
<sup>84</sup>Unpaired symbol: '"' seems to be missing
^{85} \mbox{Possible typo:} you repeated a white
space
<sup>86</sup>Unpaired symbol: ')' seems to be missing
<sup>87</sup>Use a smart opening quote here: "".
88 Use a smart closing quote here: """.
<sup>89</sup>Use a smart opening quote here: "".
```

⁹⁰Use a smart closing quote here: """.

Special option

- import
 - type: path
 - default value: not set
 - Import another book configuration file

HTML options

- html⁹¹.icon
 - type: path
 - default value: not set
 - Path to an icon to be used for the HTML files(s)
- html.highlight.theme
 - **type**: string
 - default value: not set
 - If set, set theme for syntax highlighting for HTML output (syntect only)
- html.header
 - type: string
 - default value: not set
 - Custom header to display at the beginning of html file(s)
- html.footer
 - type: string
 - default value: not set
 - Custom footer to display at the end of HTML file(s)
- html.css
 - **type**: template path
 - default value: not set
 - Path of a stylesheet for HTML rendering
- html.css.add
 - type: string
 - default value: not set
 - Some inline CSS added to the stylesheet template
- html.css.colours
 - **type**: template path
 - default value: not set
 - Path of a stylesheet for the colours for HTML
- html.js
 - **type**: template path
 - default value: not set
 - Path of a javascript file
- html.css.print
 - **type**: template path
 - default value: not set

 $^{^{91}\}mathrm{This}$ sentence does not start with an upper case letter

- Path of a media print stylesheet for HTML rendering
- html.highlight.js
 - **type**: template path
 - default value: not set
 - Set another highlight.js version than the bundled one
- html.highlight.css
 - **type**: template path
 - default value: not set
 - Set another highlight.js CSS theme than the default one
- html.side_notes
 - type: boolean
 - default value: false
 - Display footnotes as side notes in HTML/Epub (experimental)
- html.escape_nb_spaces
 - type: boolean
 - default value: true
 - Replace unicode non breaking spaces with HTML entities and CSS
- html.chapter.template
 - **type**: string

 - Inline template for HTML chapter formatting
- html.part.template
 - **type**: string
 - $-\ default\ value: \ _"^{94}\class = 'part'>\{\{\{header\}\}\}\ \{\{\{number\}\}\}</h2> <h1\ id = 'link-\{\{\{link\}\}\}'\ class = 'part'>\{\{\{title\}\}\}</h1>_"^{95}$
 - Inline template for HTML part formatting

Standalone HTML options

- html 96. standalone.template
 - **type**: template path
 - default value: not set
 - Path of an HTML template for standalone HTML
- html.standalone.one_chapter
 - **type**: boolean
 - default value: false
 - Display only one chapter at a time (with a button to display all)
- html.standalone.js
 - **type**: template path
 - default value: not set
 - Path of a javascript file

⁹²Use a smart opening quote here: ""."

⁹³Use a smart closing quote here: """.

⁹⁴Use a smart opening quote here: "".
⁹⁵Use a smart closing quote here: "".

⁹⁶This sentence does not start with an uppercase letter

Multifile HTML options

- html⁹⁷.dir.template
 - type: template path
 - default value: not set
 - Path of a⁹⁸ HTML template for multifile HTML

Interactive fiction HTML options

- html⁹⁹.if.js
 - **type**: template path
 - default value: not set
 - Path of a javascript file
- html.if.new_turn
 - **type**: string
 - default value: not set
 - Javascript code that will be run at the beginning of each segment
- html.if.end_turn
 - type: string
 - default value: not set
 - Javascript code that will be run at the end of each segment
- html.if.new_game
 - **type**: template path
 - default value: not set
 - Javascript code that will be run at the beginning of a 'game'

EPUB options

- epub¹⁰⁰.version
 - **type**: integer
 - default value: 2
 - EPUB version to generate (2 or 3)
- epub.highlight.theme
 - type: string
 - default value: not set
 - If set, set theme for syntax highlighting for EPUB output (syntect only)
- epub.css
 - **type**: template path
 - default value: not set
 - Path of a stylesheet for EPUB
- epub.css.add
 - type: string
 - default value: not set
 - Inline CSS added to the EPUB stylesheet template

 $^{^{97}}$ This sentence does not start with an uppercase letter

⁹⁸Use "an" instead of 'a' if the following word starts with a vowel sound, e.g. 'an article', 'an hour'

⁹⁹This sentence does not start with an uppercase letter

 $^{^{100}}$ This sentence does not start with an uppercase letter

- epub.chapter.xhtml
 - **type**: template path
 - default value: not set
 - Path of \underline{an}^{101} xhtml template for each chapter
- epub.toc.extras
 - type: boolean
 - default value: true
 - Add 'Title' and (if set) 'Cover' in the EPUB table of contents
- epub.escape_nb_spaces
 - type: boolean
 - default value: true
 - Replace unicode non breaking spaces with HTML entities and CSS

LaTeX options

- tex 102 . highlight. theme
 - type: string
 - default value: not set
 - If set, set theme for syntax highlighting for LaTeX/PDF output (syntect only)
- tex.links_as_footnotes
 - type: boolean
 - default value: true
 - Add foontotes to URL of links so they are readable when printed
- tex.command
 - **type**: string
 - default value: xelatex
 - LaTeX command to use for generating PDF
- tex.template
 - **type**: template path
 - default value: not set
 - Path of a LaTeX template file
- tex.template.add
 - **type**: string
 - default value: not set
 - Inline code added in the LaTeX template
- tex.class
 - type: string
 - default value: book
 - LaTeX class to use
- tex.paper.size
 - **type**: string
 - default value: a5paper

 $^{^{101} \}rm{Use}$ "a" instead of 'an' if the following word doesn't start with a vowel sound, e.g. 'a sentence', 'a university' $^{102} \rm{This}$ sentence does not start with an uppercase letter

- Specifies the size of the page.

• tex.margin.left

- type: string

- default value: not set

- Specifies left margin (note that with book class left and right margins are reversed for odd pages, thus the default value is 1.5cm for book class and 2cm else)

• tex.margin.right

- **type**: string

- default value: not set

- Specifies right margin(note that with book class left and right margins are reversed for odd pages, thus the default value is 2.5cm for book class and 2cm else)

• tex.margin.top

- type: string

- default value: "1032cm" 104

- Specifies top margin

• tex.margin.bottom

- **type**: string

- default value: "1051.5cm" 106

- Specifies left margin

• tex.title

- **type**: boolean

- default value: true

- If true, generate a title with \maketitle

• tex.font.size

- **type**: integer

- default value: not set

- Specify latex font size (in pt, 10 (default), 11, or 12 are accepted)

• tex.hyperref

- **type**: boolean

- default value: true

- If disabled, don't try to find references inside the document

• tex.stdpage

- **type**: boolean

- default value: false

- If set to true, use 'stdpage' package to format a manuscript according to standards

 $^{^{103}\}mathrm{Use}$ a smart opening quote here: """.

¹⁰⁴Use a smart closing quote here: """.

¹⁰⁵Use a smart opening quote here: """.

¹⁰⁶Use a smart closing quote here: """.

Resources option

- resources 107.files
 - **type**: list of strings
 - default value: not set
 - Whitespace-separated list of files to embed in e.g. EPUB file; useful for including e.g. fonts
- resources.out_path
 - **type**: path
 - default value: data
 - Paths where additional resources should be copied in the EPUB file or HTML directory
- resources.base_path
 - **type**: path
 - default value: not set
 - Path where to find resources (in the source tree). By default, links and images are relative to the Markdown file. If this is set, it will be to this path.
- resources.base_path.links
 - **type**: path
 - default value: not set
 - Set base path but only for links. Useless if resources base path is set
- resources.base_path.images
 - **type**: path
 - default value: .
 - Set $\frac{108}{108}$ base path but only for images. Useless if resources.base_path is set
- resources.base_path.files
 - **type**: path
 - default value: .
 - Set¹⁰⁹ base path but only for additional files. Useless if resources.base path is set.
- resources.base_path.templates
 - **type**: path
 - default value: .
 - Set¹¹⁰ base path but only for templates files. Useless if resources base path is set

Input options

- input 111 .clean
 - type: boolean
 - default value: true
 - Toggle typographic cleaning of input markdown according to lang
- input.clean.smart_quotes
 - **type**: boolean
 - default value: true
 - If enabled, tries to replace vertical quotations marks to curly ones

 $^{^{107}}$ This sentence does not start with an uppercase letter

 $^{^{108}}$ Add a space between sentences

¹⁰⁹Add a space between sentences

 $^{^{110}\}mathrm{Add}$ a space between sentences

¹¹¹This sentence does not start with an uppercase letter

```
• input.clean.ligature.dashes
        - type: boolean
        - default value: false
       - If enabled, replaces '--' to en dash ('--') and '---' to em dash ('---')
   • input.clean.ligature.guillemets
       - type: boolean
       - default value: false
       - If enabled, replaces '«' and '»' to french "112 guillemets"113 ('«' and '»')
   • input.yaml_blocks
       - type: boolean
        - default value: false
        - Enable inline YAML blocks to override options set in config file
Crowbook options
   • crowbook<sup>114</sup>.html_as_text
       - type: boolean
        - default value: true
       - Consider HTML blocks as text. This avoids having <foo> being considered as HTML and thus ignored.
   • crowbook.markdown.superscript
       - type: boolean
        - default value: false
        - If enabled, allow support for superscript and subscript using respectively foo<sup>up</sup> 115 and bar<sub>down</sub> syntax.
   • crowbook.temp_dir
       - type: path
        – default value: "116
       - Path where to create a temporary directory (default: uses result from Rust's std::env::temp_dir())
   • crowbook.zip.command
       - type: string
       - default value: zip
       - Command to use<sup>117</sup> to zip files (for EPUB/ODT)
Output options (for proofreading)
   • output 118 .proofread.html
       - type: path
        - default value: not set
        - Output file name for HTML rendering with proofread features
   • output.proofread.html.dir
        - type: path
        - default value: not set
<sup>112</sup>Use a smart opening quote here: """.
```

¹¹⁸This sentence does not start with an uppercase letter

¹¹²Use a smart opening quote here: """.
113Use a smart closing quote here: """.
114This sentence does not start with an uppercase letter
115Possible typo: you repeated a whitespace
116Use a smart opening quote here: """.
117Did you mean "used"?

- Output directory name for HTML rendering with proofread features
- output.proofread.pdf
 - **type**: path
 - default value: not set
 - Output file name for PDF rendering with proofread features

Proofreading options (only for output.proofread.* targets)

- proofread
 - type: boolean
 - default value: false
 - If set to false, will disactivate proofreading even if one of output.proofread.x is present
- proofread.languagetool
 - type: boolean
 - default value: false
 - If true, try to use language tool server to grammar check the book
- proofread.languagetool.port
 - **type**: integer
 - default value: 8081
 - Port to connect to language tool-server
- proofread.grammalecte
 - type: boolean
 - default value: false
 - If true, try to use grammalecte server to grammar check the book
- proofread.grammalecte.port
 - **type**: integer
 - default value: 8080
 - Port to connect to grammalecte server
- proofread.repetitions
 - type: boolean
 - default value: false
 - If set to true, use Caribon to detect repetitions
- proofread.repetitions.max_distance
 - **type**: integer
 - default value: 25
 - Max distance between two occurences so it is considered a repetition
- proofread.repetitions.fuzzy
 - type: boolean
 - default value: true
 - Enable fuzzy string matching
- proofread.repetitions.fuzzy.threshold
 - type: float
 - default value: 0.2
 - Max threshold of differences to consider two strings a repetition

• proofread.repetitions.ignore_proper

- **type**: boolean

- default value: true

- Ignore proper nouns for repetitions

• proofread.repetitions.threshold

- **type**: float

- default value: 2.0

- Threshold to detect a repetition

Note that these options have a type, which in most case should be pretty straightforward (a boolean can be true or false, an integer must be composed by a number, a string is, well, any string (note that you might need to use quotes if it includes some characters that may lead the YAML parser to read it as an array, an integer or a list), and a list of strings is a list containing only strings, see YAML syntax). The path type might puzzle you a bit, but it's equivalent to a string, except Crowbook will consider it relatively to the book file. The template path type is just the path of a template. Metadata are 119 just strings.

 $[\]overline{^{119}\text{Consider using third-person verb forms for singular and mass nouns: "is".$

Chapter 4

Markdown format

Crowbook uses pulldown-cmark, which is an implementation of CommonMark, so for more information on Markdown syntax, you can refer to this website.

However, pulldown-cmark also implements a handful of unofficial extensions, and Crowbook also adds its own variants, so there are a few syntax elements that are not covered by the CommonMark reference.

4.1 Tables

Tables can be included in your Markdown file. E.g.:

Author	Book	
Anne Rice	Interview With the Vampire	
Terry Pratchett	Hogfather	
George Martin	A Dance with Dragons	

will¹ render as

Author	Book
Anne Rice	Interview With the Vampire
Terry Pratchett	Hogfather
George Martin	A Dance with Dragons

Crowbook doesn't currently support specifying column alignment.

4.2 Footnotes

Footnotes can be specified the following way:

```
Footnotes can be useful[^1] and make you look clever.

[^1]: But you shouldn't use them too much.
```

Will be rendered as:

Footnotes can be useful² and make you look clever.

You can use multiple paragraphs in a footnote definition. This can sometimes be useful, but it can also be tricky, as if you only let an empty line before the next paragraph, it will also be included in the footnote. And probably the next one and the following one too:

```
This is a footnote usage[^1].

[^1]: This is obviously part of the footnote definition.

This is less obviously ALSO part of the footnote definition.
```

¹This sentence does not start with an uppercase letter

 $^{^2\}mathrm{But}$ you shouldn't use them too much.

```
This is NOT part of the foonote.
```

Due to its own quirks, Crowbook will duplicate footnotes if you reference them multiple times:

```
This footnote is unique[^2] but referenced twice[^2].

[^2]: Or is it?
```

This footnote is unique³ but referenced twice⁴.

4.3 Superscript and subscript

Crowbook 0.12.0 added experimental support for superscript and subscript, using respectively foo^up^ and bar~down~syntax, which will render as __^5foo^up__6 and __^7bar_down__8 ; this feature is quite a hack above the Markdown parsing library, and as such might cause issue if you mix it with other Markdown syntax elements (or, in the previous example, for smart quote detection). This is why you'll need to enable it with crowbook.mardown.superscript.

4.4 "Standalone" images

This is not per se a new syntactic element, but Crowbook distinguish two $\underline{\text{kind}}^{11}$ of images, according to their position in the document:

- standalone¹² images, which are the only elements of a paragraph;
- inline images, which are placed in a container containing other elements.

Standalone images will typically be resized to fill the width of the page, while inline images are not resized.

This image is on its own paragraph, and thus considered "13standalone" and resized to fit width:

```
<sup>3</sup>Or is it?

<sup>4</sup>Or is it?

<sup>5</sup>Use a smart opening quote here: """.

<sup>6</sup>Use a smart closing quote here: """.

<sup>7</sup>Use a smart opening quote here: """.

<sup>8</sup>Use a smart closing quote here: """.

<sup>9</sup>Use a smart opening quote here: """.

<sup>10</sup>Use a smart closing quote here: """.

<sup>11</sup>Possible agreement error. The noun 'kind' seems to be countable, so consider using: "kinds".

<sup>12</sup>This sentence does not start with an uppercase letter

<sup>13</sup>Use a smart opening quote here: """.

<sup>14</sup>Use a smart closing quote here: """.
```



While this one **②** is embedded in a paragraph and its size is unchanged.

4.5 Interactive fiction

Crowbook also adds some syntax for interactive fiction, to make embedding Javascript code easier. It is only enabled for the interactive fiction renderer. For more information, see the chapter on this matter.

Chapter 5

Templates

Crowbook allows the user to specify a number of templates.¹

Each of this template can be overriden by a custom one, by setting e.g.:

```
html.css: my_template.css
```

in² the book configuration file. The templates that you are most susceptible to modify are the following:

- html³.css: stylesheet for HTML output;
- epub.css: stylesheet for EPUB output;
- tex.template: template of a LaTeX file.

5.1 Create and edit template

Except for inline templates, which are set directly in the book configuration file:

```
# Template that modify how a chapter title is displayed
rendering.chapter.template: "{{{loc_chapter}}} {{{number}}}: {{{chapter_title}}}"

# CSS code added to default CSS templates (but don't override it)
html.css.add: "h1 { background-color: red; }"
epub.css.add: "h1 { background-color: gray; }"

# LaTeX code added to default LaTeX template (but doesn't override it)
template.tex.add: "\usepackage{libertineotf}"
```

most⁴ templates must be in a separate file:

```
tex.template: my_template.tex
```

--print-template

The easiest way to create a new template is to start with the default one. In order to do so, you can use the --print-template argument:

```
$ crowbook --print-template tex.template > my_template.tex
```

In order to get the chapter.xhtml template for EPUB3, you'll also have to use --set epub.version 3:

```
$ crowbook --print-template epub.chapter.xhtml --set epub.version 3 > my_epub3_template.xhtml
```

¹Some of them, though, are not "real" templates, they are just files that are inserted, but can't contain mustache tags. This will probably evolve in future versions.

 $^{^2}$ This sentence does not start with an uppercase letter

 $^{^3}$ This sentence does not start with an uppercase letter

⁴This sentence does not start with an uppercase letter

Mustache syntax

Crowbook uses rust-mustache as its templating engine, which allows to use Mustache syntax in the templates. It mainly boils down to using {{foo}}}⁶ to insert the value of variable foo in the document:

```
<h1 class = "title" >{{{title}}}<h1>
<h2 class = "author">{{{author}}}</h2>
```

Mustache also provides the possibility of checking whether a variable is set:

```
{{#foo}}
Foo exists
{{/foo}}
{{^foo}}
Foo does not exist
{{^foo}}
```

Crowbook uses this and sets some variables to true to allow templates to conditionally include some portions. E.g., in html.css:

```
{#lang_fr}}
/* Make list displays '-' instead of bullets */
ul li {
    list-style-type: '-';
    padding-left: .5em;
}
{{/lang_fr}}
```

In this case, Crowbook sets a variable whose name is equal to lang_foo to true, allowing to have different styles for some elements according to the language.

For more information about Mustache syntax, see the Mustache manual.

Syntax in LaTeX

Since LaTeX already uses a lot of curly brackets, the default template sets an altenative syntax to access variables, with $<<\&foo>>^7$:

```
\title{<<&title>>}
\author{<<&author>>}
<<#has_date>>\date{<<&date>>}</has_date>
```

html⁸.js

The javascript file used by both the standalone HTML renderer and the multiple files HTML renderer.

This is not currently an actual template, just a plain javascript file which cannot contain mustache tags.

html⁹.css

The main CSS file used by both the standalone HTML renderer and the multiple files HTML renderer.

<u>html</u>¹⁰.css.colours

A CSS file containing only colour settings. Used by html.css.

This is not currently an actual template, just a plain CSS file which cannot contain mustache tags.

- 1. escaping is already done by Crowbook before setting variable content;
- 2. escaping HTML in a LaTeX document won't probably look good.

5.2 List of templates

⁵Did you mean "using"? Or maybe you should add a pronoun? In active voice, 'allow' + 'to' takes an object, usually a pronoun.

⁶Mustache also provides the {{foo}} variant, which HTML-escapes the content of the variable. You should not use this, as Crowbook already renders and correctly escapes the variables it sets for use in templates.

⁷<<foo>> might also work, but the ampersand is required to prevent mustache HTML-escaping the value. This is not good because:

⁸This sentence does not start with an uppercase letter

⁹This sentence does not start with an uppercase letter

 $^{^{10}}$ This sentence does not start with an uppercase letter

html¹¹.css.print

An additional CSS file used by both the standalone HTML renderer and the multiple files HTML renderer. Its purpose is to provide CSS instructions for printing (i.e., when the user clicks the print button in her browser).

This is not currently an actual template, just a plain CSS file which cannot contain mustache tags.

html¹².highlight.js

A javascript file used by both HTML renderers to highlight codes in code blocks. It should be a variant of highlight.js.

This is not an actual template, just a plain javascript file.

html¹³.highlight.css

A CSS file used by both HTML renderers to set the theme of highlight.js. It should, though, be an¹⁴ highlight.js theme.

This is not an actual template, just a plain CSS file.

<u>html</u>¹⁵.standalone.js

A javascript file used only by the standalone HTML renderer. Its main purpose is to handle the displaying of a single chapter at a time when one chapter is set to true.

html¹⁶.standalone.template

The main HTML template for standalone HTML renderer.

html¹⁷.dir.template

The main HTML template for multiple files HTML renderer.

tex¹⁸.template

The main (and currently only) template used by the LaTeX renderer.

epub¹⁹.chapter.xhtml

This template is the main template used by the Epub renderer. It contains the XHTML template that will be used for each chapter.

epub²⁰.css

This template is used by the Epub renderer and contains the style sheet.

Inline templates

Crowbook also has some inline templates, that are set in the book configuration file:

• tex²¹.template.add, html.css.add and epub.css.add allow to specify some LaTeX or CSS code directly in the book configuration file. This code will be added respectively to tex.template, html.css or epub.css template. For CSS templates, this code is inserted at the end of the template (allowing to redefine²² rules that are set by the template); for the LaTeX template, the code is inserted at the end of the preambule, just before the \begin{document} tag, allowing to redefine²³ commands.

```
<sup>11</sup>This sentence does not start with an uppercase letter
<sup>12</sup>This sentence does not start with an uppercase letter
^{13}This sentence does not start with an uppercase letter
```

¹⁴Use "a" instead of 'an' if the following word doesn't start with a vowel sound, e.g. 'a sentence', 'a university'

 $^{^{15}\}mathrm{This}$ sentence does not start with an upper case letter

 $^{^{16}}$ This sentence does not start with an uppercase letter

¹⁷This sentence does not start with an uppercase letter

 $^{^{18}\}mathrm{This}$ sentence does not start with an upper case letter

¹⁹This sentence does not start with an uppercase letter $^{20}\mathrm{This}$ sentence does not start with an upper case letter

 $^{^{21}\}mathrm{This}$ sentence does not start with an upper case letter

²²Did you mean "redefining"? Or maybe you should add a pronoun? In active voice, 'allow' + 'to' takes an object, usually a pronoun.

²³Did you mean "redefining"? Or maybe you should add a pronoun? In active voice, 'allow' + 'to' takes an object, usually a pronoun.

- rendering.inline_toc.name sets the name of the inline table of content, if it is displayed. By default, is is 24 set to {{{loc toc}}}, that is, a localised version of "25 Table of Contents" 26.
- rendering.chapter.template sets the naming scheme for chapters, while rendering.part.template does the same for part. These are used only for text-only output, such as in the TOC. https://examplate.new.org/html. These are used only for text-only output, such as in the TOC. https://examplate.new.org/html. These options should probably only be used if you know what you're doing, as they can break the document. If you only need to change the name of chapters or parts, use rendering.part and rendering.chapter instead.

5.3 List of accessible variables

Metadata

For every template, Crowbook exports <u>all of the ²⁸</u> metadata:

- ²⁹author;
- title;
- subtitle:
- lang;
- subject;
- · description;
- license;
- version;
- date;
- any option metadata.foo defined in the book configuration file will also be exported as metadata_foo.

These metadata³⁰ can contain Markdown, which will be rendered. E.g., setting date: "3120th of **september**" will render september in bold, using tag for HTML or \textbf for LaTeX. If you need to use these data in places that don't support formatted text (e.g. in meta tags), you can use the raw content by accessing xxx_raw instead (e.g., author_raw, title_raw, ...). (Note that the content of the raw metadata is not HTML-escaped, so in this case you might want to use {{xxx_raw}} instead of {{{xxx_raw}}}.)

For each metadata foo that is set, Crowbook also inserts a has_foo bool set to true. This allows to use 33 Mustache's section for some logic, e.g.:

```
{{{title}}} {{#has_version}}, version {{{version}}}{{/has_version}}
```

will³⁴ avoid rendering "35, version" when version is not set.

```
<sup>24</sup>Possible typo: you repeated a word
<sup>25</sup>Use a smart opening quote here: """.
<sup>26</sup>Use a smart closing quote here: """.
<sup>27</sup>This sentence does not start with an uppercase letter
<sup>28</sup>Consider using "all the".
<sup>29</sup>This sentence does not start with an uppercase letter
<sup>30</sup>Did you mean "this metadata" or ""?
<sup>31</sup>Use a smart opening quote here: """.
<sup>32</sup>Use a smart closing quote here: """.
<sup>33</sup>Did you mean "using"? Or maybe you should add a pronoun? In active voice, 'allow' + 'to' takes an object, usually a pronoun.
<sup>34</sup>This sentence does not start with an uppercase letter
<sup>35</sup>Use a smart opening quote here: """.
<sup>36</sup>Use a smart closing quote here: """.
```

Localisation strings

For all templates, Crowbook also exports some localisation strings ${\tt loc_foo}$. They currently include:

Localisation key	Value in english	
loc_toc	Table of contents	
loc_cover	Cover	
loc_title	Title	
loc_chapter	Chapter	
loc_part	Part	
loc_notes	Notes	
loc_display_all	Display all chapters	
loc_display_one	Display one chapter	

Template-dependent values

Crowbook also exports some additional fields for some templates, see below.

Mustache tag	Value	Available in
content	A rendered version of the book or	html.standalone.template,
	chapter's content	html.dir.template, tex.
	A 1 1	template, epub.chapter.xhtml
toc	A rendered version of the table of	html.standalone.template,
	contents	html.dir.template
has_toc	Set to true if the table of contents	html.standalone.template
	is not empty	
colours	The content of html.css.colours	html.css
footer	The content of html.footer	html.standalone.template,
		html.dir.template
header	The content of html.header	html.standalone.template,
_		html.dirtemplate
script	The javascript file for this HTML	html.standalone.template,
_	document	html.dir.template
style	The CSS file for this	html.standalone.template
	HTML document, that is, a	
	rendered version of html.css	
A variable whose name corresponds	true	html.css, epub.css
to lang in book options (e.g.		
lang_en if lang is set to "en",		
lang_fr if it is set to "fr",)		
chapter_title	The title of current chapter	html.dir.template, epub.
		chapter.xhtml, rendering.
		chapter.template
chapter_title_raw	The title of current chapter (raw	html.dir.template, epub.
	text without HTML formatting)	chapter.xhtml, rendering.
		chapter.template
json_data	Contains structured data with	html.standalone.template,
	book's metadata in JSON-LD for-	html.dir.template
	mat	
highlight_code	True if html.highlight_code is	html.standalone.template,
	true	html.dir.template
highlight_css	The content of html.highlight.	html.standalone.template
	CSS	
highlight_js	The base64-encoded content of	html.standalone.tempate
	html.highlight.js	
common_script	The content of html.js	html.single.js
one_chapter	True if html.standalone.one	html.standalone.template,
	chapter is true, else not present	html.standalone.js
book.svg	The base64-encoded image of the	html.standalone.js, html.
	button to display all chapters	standalone.template
pages.svg	The base64-encoded image of the	html.standalone.js, html.
	button to display one chapter at a	standalone.template
	time	
favicon	The rel = "icon" > tag	html.standalone.template,
	if html.icon is set	html.dir.template
menu_svg	The base64-encoded image of the	html.standalone.template
	hamburger menu image	14
prev_chapter	Title and a link of previous chapter	html.dir.template
next_chapter	Title and a link of nexts chapter	html.dir.template
class	The content of tex.class	tex.template
book	True if tex.class is book, not set	tex.template
tor long	else The babel equivalent of lang	tow townlate
tex_lang	The babel equivalent of lang	tex.template
tex_title	Set to true to run \maketitle	tex.template
tex_size	The font size to pass to the LaTeX	tex.template
han han sine	class	++
has_tex_size	Set to true if tex_size is set The marging of the document	tex.template
<pre>margin_left, margin_right, mar-</pre>	The margins of the document	tex.template
gin_top, margin_bottom	Two if mondanian initial.	tow townlots
initials	True if rendering.initials is	tex.template
-44:4:-m-13-	true, not set else	
additional_code	Set to the content of tex.	tex.template, html.css, epub.
	template.add, html.css.add or	css

Chapter 6

Proofreading with Crowbook

Crowbook includes some proofreading features, that can be enabled if you set one of the

- output¹.proofread.html
- output.proofread.html_dir
- output.proofread.pdf

output² files (or include proofread.pdf in the list of formats to render to output). This allows you to generate different files for publishing and proofreading (you probably don't want to publish a version that highlights your grammar errors or your repetitions).

Current proofreading features are:

- repetition³ detection;
- grammar check.

6.1 Enabling proofreading

Since proofreading can take quite a lot of time, particularly for a long book, it is disabled by default. You'll have to run

```
$ crowbook --proofread my.book

or

$ crowbook -p my.book
```

 $\underline{\text{to}}^5$ generate proofreading copies. Alternatively, if you want it to be activated each time you run **crowbook** on this book (which is *not* recommanded for long books, particularly if you want to perform a grammar check), you can set

```
proofread: true
```

<u>in</u>⁶ the book configuration file.

6.2 Repetition detection

Repetition detection is enabled with:

```
proofread.repetitions: true
```

It uses Caribon library to detect the repetition in your text. Since the notion of a repetition is relatively arbitrary, it is possible to adapt the settings. Default are:

 $^{^1\}mathrm{This}$ sentence does not start with an uppercase letter

²This sentence does not start with an uppercase letter

³This sentence does not start with an uppercase letter

⁴This sentence does not start with an uppercase letter

 $^{^5{}m This}$ sentence does not start with an uppercase letter

⁶This sentence does not start with an uppercase letter

```
# The maximum distance between two identical words to
# consider them a repetition
proofread.repetitions.max_distance: 25
# The minimal number of occurences to consider it a repetition
proofread.repetitions.threshold: 2.0
# Ignore proper nouns (words starting by a capital,
# not at a beginning of a sentence)
proofread.repetitions.ignore_proper: true

# Activate fuzzy string matching
proofread.repetitions.fuzzy: true
# The maximal ratio of difference to consider
# that two words are identical
# (E.g., with 0.2, "Rust" and "Lust" won't be
# considered as the same word, but they will be with 0.5)
proofread.repetitions.fuzzy.threshold: 0.2
```

For more information, see Caribon's documentation.

Currently, repetitions are not displayed in PDF proofreading output.

6.3 Grammar checking

With Languagetool

Crowbook can use LanguageTool to detect grammar errors in your text. It is, however, a bit more complex to activate.

First, you'll have to activate this feature in your book configuration file:

```
# Activate language tool support
proofread.languagetool: true
# (Optional) Sets the port number to connect to (default below)
proofread.languagetool.port: 8081
```

You'll then have to download the stand-alone version of LanguageTool. It includes a server mode, which you'll have to launch:

```
$ java -cp languagetool-server.jar org.languagetool.server.HTTPServer --port 8081
```

You can also use the LanguageTool GUI (languagetool.jar) and start the server from the menu "7Text Checking -> Options". This also allows you to configure LanguageTool more precisely by activating or deactivating rules. You can then run Crowbook, and it will highlight grammar errors in HTML or PDF proofreading output files.

Note: running a grammar check on a long book (like a novel) can take up to a few minutes.

With Grammalecte

Grammalecte is a grammar checker specialized for the french language. If the language of your book is french, you can use it in a similar fashion 9 to language tool:

```
# Activate grammalecte support
proofread.grammalecte: true
# (Optional) Sets the port number to connect to (default below)
proofread.grammalecte.port: 8080
```

You'll also need to run the Grammalecte server. First download the CLI and server version, then:

```
$ python3 server.py
```

You can then run Crowbook with --proofread to check the grammar of your book. It is possible to run both LanguageTool and Grammalecte on the same book (though might take a while for a long book...).

 $^{^7\}mathrm{Use}$ a smart opening quote here: """.

⁸Use a smart closing quote here: """.

⁹Consider replacing "in a similar fashion" with adverb for "similar"; eg, "in a hasty manner" with "hastily".

Chapter 7

Interactive fiction

Version 0.12.0 added experimental support for writing interactive fiction.

Since this support is experimental, it means it can change at anytime, and there is no guarentee that the interactive fiction you write for the current version of Crowbook will work with the next release, even if it isn't a major release.

7.1 Basics

If you want to have a non-linear story, you can simply use Markdown links just as you would for any other link:

```
* [Open the treasure chest](open_chest.md)
* [It might be trapped, stay away from it](stay_away.md)
```

All Crowbook renderers should render this correctly, allowing the reader to "1 choose her adventure". Note, however, that you still need to include all these Markdown files in you book configuration files.

7.2 The interactive fiction renderer

While the above allows you to generate correct EPUB and PDF files, it will still display all the content if the reader chooses to read your book linearly. While this may not be a problem, you might want to only display the part of the book that the reader is actually exploring.

In order to do so, you can use the interactive fiction html renderer:

```
output.html.if: my book.html
```

This output is similar to the standalone HTML output, except the option to display only a chapter at a time is always true, and there is no way to display the table of contents.

7.3 Using Javascript in your interactive fiction

While the above allows the reader to choose his own path, its interactivity is quite limited. With the interactive fiction renderer, it is possible to include Javascript code in your Markdown files, using a code block element:

```
You open the chest, and you find a shiny sword. Yay!
user_has_sword = true;
```

This Javascript code can return a string value, which will be displayed inside the document according to the reader's previous choices:

```
You encounter a goblin, armed with a knife!

if (user_has_sword) {
    return "You kill him with your sword, congratulations!";
} else {
    return "You don't have any weapon, you die :(";
```

¹Use a smart opening quote here: """.

²Use a smart closing quote here: """.

}

Note that only the interactive fiction renderer supports this way of embedding Javascript code. If you try to render a document containing such code blocks to EPUB, PDF, or the "normal" HTML renderer, they will be displayed as regular code blocks.

7.4 Embedding Makdown in your Javascript code embedded in your Markdown

If you want to include Markdown formatting in the Javascript code (to display a passage or another without having to write HTML code), you can use the @\"\frac{0}{2}\ldots\"\cdots\"\frac{0}{2}\suppresses\"\cdots\"\

```
@"You face a troll!"@
if (user_has_sword) {
    @"* [Attack him with your sword](fight_troll.md)"@
} else {
    @"* [Better run away](run_away.md)"@
}
```

Note that in this case you don't need to return a value, this is done behind your back. Similarly, $Q_{\underline{\ }}^{\underline{\ }}\ldots\underline{\ }_{\underline{\ }}^{\underline{\ }}$ blocks don't require semicolons.

If you need to access the value of a Javascript variable inside this Markdown code, you can use the {{...}} syntax:

```
var name = prompt("Enter your name", "world");
@"Hello, {{name}}"@
```

7.5 Conditional blocks

Sometimes, you want some text (or Javascript code) to only be displayed (or run) when the reader reads this passage the first time, or alternatively when she goes back to it. While it is trivial to add some code to check that, it is a common enough pattern to justify its own variant: you'll just have to insert a named code block with the number:

```
@"Only displayed at first passage"@

...

@"Only displayed at second passage"@

...

2
@"Only displayed at second passage"@

...

2
@"Displayed at passage 3, 4 and so on.
```

7.6 Interactive fiction options

As other renderers, there are options specific to the interactive fiction.

<u>html</u>¹⁰.if.new_game allows you to specify the path to a Javascript_¹¹that will be run at the beginning of the game. Since this code is not embedded in a function and is at the root (and the beginning) of the document, it is a good place to declare all the functions and the global variables you might need for your interactive fiction mechanics. e.g.:

```
<sup>3</sup>Use a smart opening quote here: """.

<sup>4</sup>Use a smart closing quote here: """.

<sup>5</sup>Use a smart closing quote here: """.

<sup>6</sup>Use a smart closing quote here: """.

<sup>7</sup>Use a smart closing quote here: """.

<sup>8</sup>Use a smart closing quote here: """.

<sup>9</sup>Consider using "or".

<sup>10</sup>This sentence does not start with an uppercase letter

<sup>11</sup>Possible typo: you repeated a whitespace
```

```
html.if.new_game: some_file.js
```

<u>html</u>¹².if.new__turn and html.if.end__turn allow you to specify some Javascript code that will be executed at the beginning and the end of each segment. Unlike html.if.new_game, the (usually shorter) code is specified inline, and can return a string value that will be displayed at the beginning and the end of each segment. This is exactly like including code blocks at the beginning or the end of each of your Markdown file. E.g.:

```
html.if.new_turn: "nb_turns += 1;"
html.end_turn: "return 'Turn: ' + nb_turns;"
```

<u>html</u>¹³.if.script allows you to specify the name of a Javascript file to override the default script.

 $^{^{12}}$ This sentence does not start with an uppercase letter

 $^{^{13}\}mathrm{This}$ sentence does not start with an upper case letter

Chapter 8

Tips and tricks

8.1 Using Crowbook with Emacs' markdown mode

If you use Emacs as a text editor, there is a nice Markdown mode to edit Markdown files.

It is possible to use Crowbook for HTML previewing in this mode, which requires only minimal configuration and tweaking:

```
(custom-set-variables
'(markdown-command "crowbook - -qs --to html --output -"))
```

You can then use markdown-preview (or $\underline{C-c}$ $\underline{C-c}$ \underline{C}) to run Crowbook on this file and preview it in your browser, or run markdown-live-preview-mode to see a live preview (updated each time you save your file) in Emacs' integrated browser.

Some explanations if it looks a bit cryptic to you

We set markdown-command to crowbook, the reason for this is a bit obvious. The arguments we give to crowbook might be a bit less obvious:

- the fist argument, -, is actually the book file: it tells crowbook to read it from standard input.
- -qs or --quiet --single tells Crowbook that is <u>a</u>³ a standalone markdown file, and not a book configuration file, and to be a bit quiet on error/info messages;
- --to html specifies that HTML must be generated;
- --output tells Crowbook to display the result on the stdout, even if you set output.html to some_file.

8.2 Embedding fonts in an EPUB file

In order to embed fonts in an EPUB file, you'll first have to edit the stylesheet, which you can first obtain with:

```
$ crowbook --print-template epub.css > my_epub_stylesheet.css
```

You'll need to use the **@font-face** attribute:

```
@font-face {
  font-family: MyFont;
  src: url(data/my_font.ttf);
}
```

Then you can add my_font.ttf to the files that need to be added to the EPUB zip file:

```
title: My Book
author: Me
cover: cover.png
```

¹Possible typo: you repeated a word

²This sentence does not start with an uppercase letter

 $^{^4}$ Possible typo: you repeated a word

```
output.epub: book.epub
resources.files: [my_font.ttf]
```

(Note that you'll have to repeat the process for the different font-weight and font-style variants of your font if you want it to display correctly when there is some text in **bold**, *italics*, or *both*.)

Chapter 9

Contributing

Crowbook is a free software, and you can contribute to it. There are some things that can be accessible even if you don't know anything about programming.

9.1 Internationalization

Crowbook aims to support multiple languages. However, unfortunately, currently only english, french, and (in a more limited way) spanish are currently supported. If you want to have better support for the language you write in, there are easy things you can do:

- Provide a translation for the few strings that Crowbook insert into the rendered documents. This is really easy, as there are currently less than a dozen of them, and you just need to create a new variant of the lang/en.yaml file.
- Open¹ an issue about the typographic rules in your language, if Crowbook doesn't cover them.
- <u>Provide</u>² a translation for the Crowbook program. It requires creating a variant of the .po file, which is a bit more work because (at this time) it's around 1,500 lines (and less a priority than the first item of this list, as this translation only affects ³the the⁴ command-line interface and not the rendered documents).

¹Add a space between sentences

²Add a space between sentences

⁴Possible typo: you repeated a word

ChangeLog

⁵unreleased

- Bugfixes:
 - EPUB: escape quotes in content.opf.
 - $\underline{\text{LaTeX}}^6/\text{PDF}$: allow hyphenations in typewriter font.
- User⁷ interface:
 - Debug/warning/info levels should be displayed in a more coherent manner
- Library interface:
 - Removed Book::set_verbosity method (uses a logger library instead).

$0.13.0\ (2017-07-14)$

- Breaking changes:
 - The template.tex template was quite modified. Crowbook now uses custom command for most mark-down elements, defined in the template. This allow an⁸ user to redefine the way the book is rendered without having to modify Crowbook itself. Unfortunately, as tex templates for previous Crowbook versions won't work anymore.
 - the resources.files option is now a YAML list of strings, instead of a comma-seprated string.
- Add⁹ support for grammalecte grammar checker.
- crowbook command takes a new argument, -S or --stats which displays stats on the book (currently, words and characters count).
- Interactive¹⁰ fiction:
 - Added conditional blocks.
- Options¹¹:
 - output.xxx options can now take the "12 auto" value, which will infer the output file name based on the book file name.
 - output is a new option that can specify a series of format to render, with default output file name.
 - proofread.grammalecte and proofread.grammalecte.port allow respectively to enable grammar checking with Grammalecte and (optionnally) to specify the port to connect.
 - tex.margin.left, tex.margin.right, tex.margin.bottom and tex.margin.top are new options that allow to specify¹⁴ margins for LaTeX/PDF outputs.
 - tex.paper_size was renamed tex.paper_size.

 $^{^5{}m This}$ sentence does not start with an uppercase letter

⁶Add a space between sentences

⁷Add a space between sentences

⁸Use "a" instead of 'an' if the following word doesn't start with a vowel sound, e.g. 'a sentence', 'a university'

 $^{^9\}mathrm{Add}$ a space between sentences

¹⁰Add a space between sentences

¹¹Add a space between sentences

¹²Use a smart opening quote here: """.

¹³Use a smart closing quote here: """.

¹⁴Did you mean "specifying"? Or maybe you should add a pronoun? In active voice, 'allow' + 'to' takes an object, usually a pronoun.

• HTML:

Add JSON-LD structured data to the book's HTML files.

• Bugfixes¹⁵:

- LaTeX: fix rendering of part/chapter (part previously displayed as chapter and its first chapter as part)
- EPUB:
 - * Fix .rule so it is centered despite KOBO CSS injection.
- $-\frac{\text{Fix}^{16}}{\text{resources/images inclusion}}$ when they are symlinks to the actual file.

0.12.0 (2017-06-05)

This release includes a few new features, such as the possiblity to include Markdown files as section/subsections and not only as chapter, experimental support for superscript and subscript, and yet more experimental support for writing interactive fiction.

- Book configuration file:
 - It is now possible to include subchapters using the -- command (with one dash per sublevel: --- foo. md will include foo.md as a subsection).

• Markdown¹⁷:

Added support for superscript and subscript features, using respectively foo^up^ or bar~down~ syntax.

• New 18 options:

- rendering.chapter: change what is displayed in place of "19 chapter"20.
- rendering.part: change what is displayed in place of "21 part"22.
- html.chapter.template and html.part.template allow to tune a little how the chapters and parts are displayed in HTML.
- tex.hyperref, if set to false, will disable hyperrefs for local links. Can be useful for some files.
- crowbook.html as text, if set to false, will not treat HTML as text but ignore it.
- subtitle, as its name suggest, set the subtitle of a book.
- crowbook.markdown.superscript can enable or disable superscript/subscript "23 extension" 24.

• Rendering²⁵:

- Change the way chapters are displayed by default.
- PDF output now has a better-looking (hopefully) title page.
- <u>Internal</u>²⁶ links are a bit more flexible, e.g. if you link to Readme.html it will now try to link to the chapter corresponding to Readme.md.

• Bugfixes 27 :

- LaTeX:
 - * Fix bug in syntax highlighting.
 - * Fix²⁸ label placements (and thus navigation inside PDF document).
- EPUB:

¹⁵ Add a space between sentences
16 Add a space between sentences
17 Add a space between sentences
18 Add a space between sentences
19 Use a smart opening quote here: """.
20 Use a smart closing quote here: """.
21 Use a smart opening quote here: """.
22 Use a smart closing quote here: """.
23 Use a smart opening quote here: """.
24 Use a smart closing quote here: """.
25 Add a space between sentences
26 Add a space between sentences
27 Add a space between sentences
28 Add a space between sentences

- * Add unnamed but numbered chapters to the TOC.
- * Fix²⁹ HTML escaping issue for chapter titles.
- * 30 Fix 31 the way parts were handled in the TOC.
- Book³² configuration file:
 - * Fix issue when setting custom number for parts.
- $\underline{\text{Crowbook}}^{33}$ now requires rustc >= 1.17.0

0.11.4 (2017-03-21)

- An image can now be considered standalone even if it is inside a link.
- Bugfixes³⁴:
 - HTML/EPUB: use raw (not HTML rendered) metadata in the places where HTML code is not appropriate. Templates can use this metadata with the foo_raw value.
 - HTML/EPUB: fix double-escaping/rendering issues in titles.
 - EPUB:
 - * Escape title and author before feeding them to epub-builder.
 - * <u>Fix</u>³⁵ content.opf issue by not rendering first chapter's title (marked as beginning of document) in <guide>.
- Rendering³⁶:
 - HTML/EPUB: standalone images are now displayed centered.

0.11.3 (2017-03-19)

- When crowbook parses the book's contents, it now detects which features are used. This is useful in various ways:
 - The ODT renderer only displays a global warning showing the lists of used features that are not implemented, instead of a warning each time such a feature is encountered.
 - The 37 LaTeX and HTML/EPUB renderers only initialize syntect (which can take some time) if code blocks are used in the document.
 - The 38 LaTeX renderer only requires LaTeX packages that are actually used in the document.
- <u>Command-line</u>³⁹ interface:
 - Warnings are now displayed by default.
 - The⁴⁰ (undocumented) --debug argument has been removed.
 - $-\frac{\text{The}^{41}}{\text{"48}}$ status of some messages have been modified ("\frac{"42}{2}\warning"\frac{"43}{4}\text{ to "\frac{"44}{4}}\debug"\frac{"45}{4}\text{ or "\frac{"46}{4}}\error\frac{"47}{4}\text{ to "\frac{"48}{4}}\warning"\frac{"49}{4}\).
- Deprecated⁵⁰ option:
 - crowbook.verbose has been deprecated, at it should be set by the CLI.

```
^{29}\mathrm{Add} a space between sentences
^{31}\mathrm{Add} a space between sentences
<sup>32</sup>Add a space between sentences
<sup>33</sup>Add a space between sentences
^{34}\mathrm{Add} a space between sentences
<sup>35</sup>Add a space between sentences
^{36}\mathrm{Add} a space between sentences
^{37}\mathrm{Add} a space between sentences
^{38}\mathrm{Add} a space between sentences
<sup>39</sup>Add a space between sentences
^{40}\mathrm{Add} a space between sentences
^{41}\mathrm{Add} a space between sentences
<sup>42</sup>Use a smart opening quote here: ""."
<sup>43</sup>Use a smart closing quote here: """.
<sup>44</sup>Use a smart opening quote here: ""."
<sup>45</sup>Use a smart closing quote here: """.
<sup>46</sup>Use a smart opening quote here: """.
<sup>47</sup>Use a smart closing quote here: """.
<sup>48</sup>Use a smart opening quote here: """.
<sup>49</sup>Use a smart closing quote here: """.
<sup>50</sup>Add a space between sentences
```

0.11.2 (2017-03-05)

• General:

- When there is an error setting an option from the book configuration file (e.g. because it is an invalid key), print an error but do not abort, only ignore this specific option.

• New 51 options:

- tex.stdpage: if set to true, will use the stdpage package to render the book according to standards for submitting manuscripts.
- rendering.highlight.theme allows to specifies ⁵² a theme for syntax highlighting (only used if rendering.highlight is set to "53 syntect" 54).
- html.highlight.theme, epub.highlight.theme and tex.highlight.theme allow to specify a theme for HTML/EPUB/LaTeX renderers (only used with syntect).

• Deprecated⁵⁵ option:

- proofread.nb_spaces.

• Rendering⁵⁶:

- [syntect] (https://crates.io/crates/syntect) is now the default for rendering.highlight. Concretely, this means that by default syntax highlighting is now done when crowbook is run instead of using [highlight.js] (https://highlightjs.org/).
- EPUB:
 - * Now sets the "57 cover-image" property and meta so readers should display cover correctly.
 - * Narrow⁵⁹ non-breaking spaces should display more correctly on KOBO ereaders (hoping this won't break the way they are displayed everywhere else).

• Proofreading⁶⁰:

Repetition detection is now a bit less of an⁶¹ hack, and should cause less⁶² problems when used in conjunction with grammar checking. It now also works on PDF output (so the way it is highlighted could be improved).

• Bugfixes⁶³:

- Fix mimetype of EPUB files (make sure it is always "64" stored" and not "66" deflated" by the zip command).
- Avoid 68 initializing syntect (at the cost of performances) if it is not used.
- <u>Avoid</u>⁶⁹ creating an empty file if some book renderer fails (e.g. EPUB or ODT because zip command is not present).

```
^{51}\mathrm{Add} a space between sentences
<sup>52</sup>The verb after "to" should be in the base form: "specify".
<sup>53</sup>Use a smart opening quote here: """
<sup>54</sup>Use a smart closing quote here: """.
^{55}\mathrm{Add} a space between sentences
<sup>56</sup>Add a space between sentences
<sup>57</sup>Use a smart opening quote here: "".
<sup>58</sup>Use a smart closing quote here: """.
^{59}\mathrm{Add} a space between sentences
<sup>60</sup>Add a space between sentences
<sup>61</sup>Use "a" instead of 'an' if the following word doesn't start with a vowel sound, e.g. 'a sentence', 'a university'
<sup>62</sup>Did you mean "fewer"? The noun problems is countable.
^{63}\mathrm{Add} a space between sentences
<sup>64</sup>Use a smart opening quote here: "".
<sup>65</sup>Use a smart closing quote here: """.
<sup>66</sup>Use a smart opening quote here: "".
<sup>67</sup>Use a smart closing quote here: """.
^{68}\mathrm{Add} a space between sentences
<sup>69</sup>Add a space between sentences
```

0.11.1 (2017-01-05)

- Rendering:
 - Avoid page break before or after a separating rule.
 - Add⁷⁰ support for syntext for syntax highlighting. This is activated by setting rendering.highlight to syntext (see below).
 - EPUB:
 - * Set back HTML escape of narrow non-breaking spaces to true by default (it caused problems on some readers, but cause much more serious one if false).
 - * Add⁷¹ more information to guide/nav landmarks.
 - $LaTeX^{72}/PDF$:
 - * Improve the way code blocks are displayed, using the mdframed package.
 - * Try⁷³ to reduce the issues of too long lines when using code and code blocks, by inserting \allowbreak{} directive after some characters (., /, _, ...).
 - * Block⁷⁴ quotes are now displayed in italics.
 - * <u>Tables</u>⁷⁵ now use tabularx, which allows <u>to break</u>⁷⁶ too long lines (it still doesn't break pages, though).
- New⁷⁷ options:
 - rendering.highlight can be set to none, highlight.js (by default, enables syntax highlighting via Javascript, but only on HTML document) or syntect (doesn't necessitate javascript, and can work in EPUB or LaTeX, but more experimental at this point).
- Deprecated 78 options:
 - html.highlight_code (use rendering.highlight instead).
- Bugfixes⁷⁹:
 - HTML (standalone): fix the template that contained invalid HTML code.

0.11.0 (2016-12-31)

Substantial changes in this release, the more important one being support for parts!

- Breaking changes: the API has undergone some breaking changes, hoping they will be the last ones for a while. API should now be more simple and consistent (?). This version contains also substantial options renaming (see below).
- <u>Crowbook</u>⁸⁰ now supports parts (above the <u>"</u>⁸¹chapter <u>"</u>⁸² level), using the '@' character in the book configuration file.
- <u>Command-line</u>⁸³ interface:

⁸⁵Add a space between sentences

- Behaviour of --to should now be consistent for all output formats.
- If 84 --output is set to -, prints to stdout.
- Conversely 85 , if <BOOK> is set to -, reads from stdin.

⁷⁰ Add a space between sentences
71 Add a space between sentences
72 Add a space between sentences
73 Add a space between sentences
74 Add a space between sentences
75 Add a space between sentences
76 Did you mean "breaking"? Or maybe you should add a pronoun? In active voice, 'allow' + 'to' takes an object, usually a pronoun.
77 Add a space between sentences
78 Add a space between sentences
79 Add a space between sentences
79 Add a space between sentences
80 Add a space between sentences
81 Use a smart opening quote here: """.
82 Use a smart closing quote here: """.
83 Add a space between sentences
84 Add a space between sentences

 Path⁸⁶ specified by --output is now interpreted relatively to current directory (and not depending on where <BOOK> is or its options).

• Rendering⁸⁷:

- Chapters with no titles now have an empty title added (so it can at least display e.g. "88 Chapter X"89).
- EPUB:
 - * The toc.ncx file now displays links to "90title" and (if set) "92cover" (can be deactivated, see below).
 - * The 94 toc.ncx file now displays toc levels below chapter.
 - * The⁹⁵ table of contents is now displayed inline if rendering.inline_toc is set to true.

• New 96 options:

- epub.toc.extras, set to true by default, will add links to the title and the cover (if it is set) in the table of contents.
- epub.escape_nb_spaces, similar to html.escape_nb_spaces and set to false by default since at least Kobo reader don't seem to be able to understand the CSS to escape those nb spaces...
- rendering.chapter.roman_numerals, if set to true, will display chapter numbers using roman numerals.
- rendering.part.roman_numerals, if set to true (it is by default) will display part numbers using roman numerals.
- rendering.part.template specifies the numbering scheme of parts.
- rendering.part.reset_counter, if set to true (it is by default), resets chapter number to zero after a part.

• Renamed⁹⁷ options:

- import_config renamed to import.
- rendering.chapter_template renamed to rendering.chapter.template.
- html_single.html renamed to html.standalone.template.
- html_single.js renamed to html.standalone.js.
- html_single.one_chapter renamed to html.standalone.one_chapter.
- output.html dir renamed to output.html.dir.
- output.proofread.html_dir renamed to output.proofread.html.dir.
- html_dir.index.html and html.dir.chapter.html have been merged and both renamed to html. dir.template.
- tex.font_size renamed to tex.font.size.

• Bugfixes⁹⁸:

- EPUB:
 - * Fix duplicate HTML escaping (resulting in e.g. "99\&"100 instead of "101\&"102).
- HTML directory:

```
<sup>86</sup>Add a space between sentences
 <sup>87</sup>Add a space between sentences
 <sup>88</sup>Use a smart opening quote here: """.
 <sup>89</sup>Use a smart closing quote here: """.
 <sup>90</sup>Use a smart opening quote here: """.
 <sup>91</sup>Use a smart closing quote here: """.
 <sup>92</sup>Use a smart opening quote here: "".
 <sup>93</sup>Use a smart closing quote here: """.
 ^{94}\mathrm{Add} a space between sentences
 ^{95}\mathrm{Add} a space between sentences
 <sup>96</sup>Add a space between sentences
 ^{97}\mathrm{Add} a space between sentences
 <sup>98</sup>Add a space between sentences
 <sup>99</sup>Use a smart opening quote here: "".
<sup>100</sup>Use a smart closing quote here: """.
<sup>101</sup>Use a smart opening quote here: ""."
^{102}Use a smart closing quote here: """.
```

- * Fix panic when trying to generate html directory in $"^{103}...^{104}/xxx"^{105}$ (#23).
- * $\underline{\text{Fix}}^{106}$ ""107 previous chapter" links that were not displayed when "109 html.header" was set.
- HTML:
 - * Fix the way initial letter is displayed if rendering.initials is true.
- Internationalization 111:
 - Strings in generated Crowbook documents (such as "112 Table of contents" 113, "114 Title" 115, "116 Cover" 117 and such) are now translated in spanish.

0.10.4 (2016-12-16)

- New options:
 - tex.font_size specifies an optional font size (in pt) passed to the LaTeX class (must be 10, 11 or 12).
 - tex.title can be set to false to avoid rendering the title with \maketitle.
 - tex.paper_size specifies the paper size for PDF output.
 - tex.template.add, html.css.add and epub.css.addallow to specify inline LaTex or CSS code in the book configuration file that will be added respectively to tex.template.add, html.css.add and epub. css.add.
 - html.icon allows to specify the path of an icon for HTML documents.
- Command-line interface:
 - Paths that are displayed should now be normalized, e.g. "119 foo/bar.pdf"120 instead of "121 baz/... 122/foo/bar.pdf"123.
- Rendering¹²⁴:
 - HTML:
 - * The default CSS style has been slightly modified.

0.10.3 (2016-11-19)

- Building:
 - Crowbook now requires rustc \geq 1.13.0 to build.
 - Pre-built 125 binaries now all include the proofreading feature.
 - Linux¹²⁶ binaries are now linked against musl library so they should really work on any Linux platform.
- Bugfixes 127 :
 - Fixed escaping of author and title fields.
 - Fixed 128 text cleaning in ODT rendering that causes corrupt files to be generated.

```
<sup>103</sup>Use a smart opening quote here: """.
^{104}Two consecutive dots
<sup>105</sup>Use a smart closing quote here: """.
^{106}\mathrm{Add} a space between sentences
<sup>107</sup>Use a smart opening quote here: "".
<sup>108</sup>Use a smart closing quote here: """.
<sup>109</sup>Use a smart opening quote here: """.
<sup>110</sup>Use a smart closing quote here: """.
^{111}\mathrm{Add} a space between sentences
<sup>112</sup>Use a smart opening quote here: """.
<sup>113</sup>Use a smart closing quote here: """.
<sup>114</sup>Use a smart opening quote here: """.
<sup>115</sup>Use a smart closing quote here: """.
<sup>116</sup>Use a smart opening quote here: """.
<sup>117</sup>Use a smart closing quote here: """.
^{118}\mathrm{Add} a space between sentences
<sup>119</sup>Use a smart opening quote here: """.
<sup>120</sup>Use a smart closing quote here: """.
<sup>121</sup>Use a smart opening quote here: ""."
<sup>122</sup>Two consecutive dots
^{123}Use a smart closing quote here: """.
<sup>124</sup>Add a space between sentences
<sup>125</sup>Add a space between sentences
<sup>126</sup>Add a space between sentences
^{127}\mathrm{Add} a space between sentences
<sup>128</sup>Add a space between sentences
```

• CommandLine¹²⁹ Interface:

- Crowbook displays clearer error messages when unable to launch latex or zip commands.
- Crowbook¹³⁰ uses term library in order to display colours correctly on e.g. Windows.
- The $\frac{131}{131}$ new argument -- lang (or -L) allows to set the runtime language used by Crowbook, overriding LANG environment variable.
- --list-options no longer uses colours as it caused problems depending on the terminal or when piping to less.

0.10.2 (2016-10-21)

Only minor changes in this version:

• Options:

- author and title's default values are both set to the empty string, instead of Anonymous and Untitled.
- input.autoclean has been renamed input.clean.
- input.smart quotes has been renamed input.clean.smart quotes.
- new option: input.clean.ligature.dashes will (if set to true) replace -- to en dash (-) and --- to em dash (-).
- new option: input.clean.ligature.guillemets will (if set to true) replace << and >> to french guillemets (« and »).

• Rendering¹³²:

 HTML: if html_single.one_chapter and rendering.inline_toc are both set to true, only render the TOC if currently displayed chapter is the first.

0.10.1 (2016-10-18)

Fixed a bug in fr.po translation that prevented building from fresh install.

0.10.0 (2016-10-18)

This release contains some breaking changes (mostly for the API, which has been split in separate libraries). It alse features some internationalization support, and the program should now be translated if your LANG environment variable is set to french.

• Breaking changes:

- Templates:
 - * Conditional inclusion depending on lang must now be done using lang_LANG (e.g. lang_fr, lang_en, and so on). This might impact custom epub.css and html.css templates.
- API:
 - * The escape module has been moved to a separate crate, crowbook_text_processing. The cleaner module is no longer public, but the features it provided are also available in crowbook_text_processing.
- New 133 options:
 - html.css.colours allows to provide a CSS file that only redefine the colour scheme. Such a file can be built from crowbook --print-template html.css.colours.
 - input.smart_quotes: if set to true, tries to replace 134 and 135136 by curly quotes.

¹²⁹ Add a space between sentences
130 Add a space between sentences
131 Add a space between sentences
132 Add a space between sentences
133 Add a space between sentences
134 Unpaired symbol: "' seems to be missing
135 Unpaired symbol: '"' seems to be missing
136 Use a smart opening quote here: """.

- Command¹³⁷ line interface:
 - Crowbook is now (imperfectly) localized in french, and can be translated to other languages.
 - Added¹³⁸ the --quiet (or -q) argument, that makes crowbook run without displaying any messages (except some error messages at this point).
- Rendering 139:
 - HTML:
 - * The table of contents menu is no longer displayed in the HTML single renderer if it doesn't contain at least two elements.
 - * The 140 default colour theme has been modified a little.
- Bugfixes¹⁴¹:
 - Fix the escaping of non-breaking spaces in EPUB, as and its friends aren't valid entities in XHTML, apparently.

$0.9.1 \ (2016-09-29)$

This release mainly introduces generation of proofreading copies, allowing, if they are set (and crowbook was compiled with the proofread feature) to generate proofreading copies, using tools to check grammar and detect repetitions. These features are currently experimental.

- New options:
 - html.escape_nb_spaces, if set to true (by default), will replace unicode non breaking spaces with HTML entites and CSS so it can display correctly even if reader's don't have a browser/font supporting these unicode symbols.
 - Output 143 files for proofread documents: output.proofread.html, output.proofread.html_dir and output.proofread.pdf.
 - Proofread 144 options proofread.repetitions and proofread.nb_spaces have been added.
 - * proofread.nb_spaces, if set to true, highlights non-breaking spaces so it is easier to check the correct typography of a book. Note that it requires that html.escape_nb_spaces be set to true (default) to work.
 - * proofread.reppetitions, if set to true, uses Caribon to highlight repetitions in a document. It also uses the settings proofread.repetitions.fuzzy, proofread.repetitions.max_distance, proofread.repetitions.threshold, proofread.repetitions.fuzzy.threshold, proofread.repetitions.ignore_proper. Note that this feature is not built by default, you'll have to build crowbook with cargo build --release --features "145" repetitions." 146".
- $\underline{\text{New}}^{147}$ default settings for options:
 - tex.command is now xelatex by default.
- Rendering 148:
 - LaTeX:
 - * Add support for xelatex in the default template.
 - Improved¹⁴⁹ french cleaner (see an article (in french) that talks about what it does).

```
137 Add a space between sentences
138 Add a space between sentences
139 Add a space between sentences
140 Add a space between sentences
141 Add a space between sentences
142 Consider using the plural form here: "readers".
143 Add a space between sentences
144 Add a space between sentences
145 Use a smart opening quote here: """.
146 Use a smart closing quote here: """.
147 Add a space between sentences
148 Add a space between sentences
149 Add a space between sentences
```

- Crowbook¹⁵⁰ user guide: documentation has been updated to correctly reflect 0.9.x options.
- API:
 - clap dependency is now optional, people who want to use Crowbook as a library should include it with crowbook = \(\frac{151}{151}\)version = \(\frac{1152}{152}\)0.9\(\frac{1153}{153}\), default-features = false\(\frac{1}{154}\). (clap is still required to build a working binary).

0.9.0 (2016-09-23)

The main objective of this release is to clean public interfaces, in order to limit breaking changes in the future. *Ideally*, all pre-1.0 releases should thus be 0.9.x. Concretely, this meant three things:

- reducing ¹⁵⁵ the surface of Crowbook's library API;
- cleaning options names
- cleaning the names exported in templates and document them, in order not to break user-defined templates in future (non-breaking) releases. More detailed changes for this release:
- Renamed 157 options. Using the old name will print a deprecation warning but will still work for a while.

```
- temp_dir -> crowbook.temp_dir
```

- zip.command -> crowbook.zip.command
- verbose -> crowbook.verbose
- html.print_css -> html.css.print
- html.display_chapter -> html_single.one_chapter
- html.script -> html_single.js
- numbering -> rendering.num_depth
- numbering_template -> rendering.chapter_template
- display_toc -> rendering.inline_toc
- toc_name -> rendering.inline_toc.name
- enable_yaml_blocks -> input.yaml_blocks
- use_initials -> rendering.initials
- autoclean -> input.autoclean
- html_dir.css -> html.css (not really renamed, html_dir.css isactually removed as there is no point in having different CSS for standalone and multifile HTML rendering, is it?)
- New 158 options:
 - More metadata: license, version and date. These metadata¹⁵⁹ are not treated by the renderers, but they are exported to the templates: {{metadata}}} allows to access the content. If they are present, a has_metadata is also set to true, allowing to do¹⁶⁰ something like {{{title}}} {{#has_version}}version {{{version}}} {{has_version}}.
 - Yet¹⁶¹ more metadata: it is possible to add custom metadata by prefixing it with metadata.. They will then be accessible in the templates, with dots (") replaced¹⁶² by underscores ('_'). E.g., with metadata.foo: bar you can access it in your templates with {{metadata_foo}}}.

```
^{150}\mathrm{Add} a space between sentences
```

¹⁵¹Don't put a space after the opening parenthesis

 $^{^{152}}$ Use a smart opening quote here: """

¹⁵³Use a smart closing quote here: """.

 $^{^{154}\}mathrm{Don't}$ put a space before the closing parenthesis

¹⁵⁵This sentence does not start with an uppercase letter

 $^{^{156}\}mathrm{This}$ sentence does not start with an upper case letter

 $^{^{157}\}mathrm{Add}$ a space between sentences

¹⁵⁸Add a space between sentences

¹⁵⁹Did you mean "this metadata" or ""?

¹⁶⁰Did you mean "doing"? Or maybe you should add a pronoun? In active voice, 'allow' + 'to' takes an object, usually a pronoun.

¹⁶¹Add a space between sentences

 $^{^{162}}$ This sentence does not start with an uppercase letter

- output.base_path specifies a directory where the output files (163 set by output.FORMAT will be written.
- resources.base_path.templates specifies where templates can be found.

• Rendering ¹⁶⁴:

- Metadata can now contain Markdown and will be rendered by the renderers. This might not be a good idea for common fields (e.g. "165 title" 166), though. Use with caution.
- rendering.inline_toc.name can use {{{loc_toc}}} to specify a localized name.
- HTML:
 - * html.top and hstml.footer are now considered as templates, so you can use some {{metadata}}} in it.
 - * Improved¹⁶⁷ the way footnotes are displayed.
 - * <u>In</u> 168 standalone HTML, footnotes are rendered at the end of the document instead of at the end of the chapter, unless html_single.one_chapter is true.

- LaTeX¹⁶⁹:

- * If tex.class is set to article, chapters will be displayed as \sections since article class doesn't handle chapters.
- * Except¹⁷⁰ if tex.class is set to book, margins are now symmetrical.
- * LaTex¹⁷¹ template now uses version and date.

• Bugfixes 172 :

- import_config only import options from another book file that are not equal to the default ones and
 that haven't already been set by the caller. E.g., author: foo then import_config: bar.book won't
 erase the author previously set.
- import_config now correctly translates the imported book's paths.
- <u>Crowbook</u>¹⁷³ program:
 - Still working to improve error messages.
 - crowbook --list-options uses colours. This might hurt your eyes.
 - Display¹⁷⁴ an error message when mustache can't compile a template, instead of panicking.
- Internal ¹⁷⁵/API:
 - Added static methods to Logger to allows displaying messages more easily/prettily.
 - Reduce¹⁷⁶ pubic¹⁷⁷ API's surface so less¹⁷⁸ changes will need to be considered breaking in the future.

0.8.0(2016-09-19)

This release adds support for syntax highlighting in code blocks, customized top and footer blocks for HTML rendering, and the special <code>import_config</code> option that allows to import options from another book file. It also provides (hopefully) better error messages.

• New options:

```
163 Unpaired symbol: ')' seems to be missing
164 Add a space between sentences
165 Use a smart opening quote here: """.
166 Use a smart closing quote here: """.
167 Add a space between sentences
168 Add a space between sentences
169 Add a space between sentences
170 Add a space between sentences
171 Add a space between sentences
172 Add a space between sentences
173 Add a space between sentences
174 Add a space between sentences
175 Add a space between sentences
176 Add a space between sentences
177 Did you mean "public"?
178 Did you mean "forwer"? The neuro chappes is source.
```

 $^{^{178}\}mathrm{Did}$ you mean "fewer"? The noun changes is countable.

¹⁷⁹Did you mean "importing"? Or maybe you should add a pronoun? In active voice, 'allow' + 'to' takes an object, usually a pronoun.

- import_configis not really an option, but allows to import another configuration file, useful if you share
 a same set of options between multiple books.
- use_initials (set to false by default) makes Crowbook use initials ("180 lettrines" 181) at start of each chapter. Support is still experimental.
- html.highlight_code (set to true by default) allows syntax highlighting for code blocks, using highlight.js.
- html.higlight.css and html.highlight.js can be used to provide other themes (default is default.css) and an 182 highlight.js build that support other languages.
- html.footer allows to specify¹⁸³ custom footer. If not set, html.crowbook_link allows to disable¹⁸⁴ "185Generated by Crowbook" message.
- html.top allows to specify a custom header that will be displayed at the top of HTML file(s).

• Deprecated 187 options:

- side_notes has been renamed html.side_notes.

• <u>Crowbook</u>¹⁸⁸ program:

- All output formats are now rendered concurrently.
- Better¹⁸⁹ error messages. Crowbook now tries to give more information when displaying an error, with the file name where a problem was found, and, in some cases, the line. It also tries to detect errors (such as files not found) sooner.
- <u>Some</u> ¹⁹⁰ " ¹⁹¹ warning" ¹⁹² messages have also been " ¹⁹³ moved" ¹⁹⁴ to error messages, to make sure they are displayed even when crowbook isn't runned with --verbose.

• Rendering¹⁹⁵:

- Hidden chapter now produce empty \chapter*{} and <h1> in LaTeX and HTML. This allow to delimit a chapter break even if nothing is displayed.

• Bugfixes 196 :

- Navigation menu of standalone HTML didn't include a call to javascript when html.display_chapter was set to true, meaning it didn't display the chapter correctly.
- Implementations¹⁹⁷ of Image and StandaloneImage were reversed in LaTeX.
- ¹⁹⁸StandaloneImage urls were not adjusted (meanning that running crowbook from another directory failed).
- Image¹⁹⁹ paths are now found correctly in HtmlDir rendering even if crowbook is called from another directory (same fix as 0.6's for Epub and LaTeX, which was forgotten for HtmlDir).

• Internal²⁰⁰/API:

²⁰⁰Add a space between sentences

- In order to have better error messages, there was a need to refactor the Error type, and make more methods return Result<X> instead of X. The API is, therefore, quite modified.

```
<sup>180</sup>Use a smart opening quote here: """.
<sup>181</sup>Use a smart closing quote here: """.
<sup>182</sup>Use "a" instead of 'an' if the following word doesn't start with a vowel sound, e.g. 'a sentence', 'a university'
183 Did you mean "specifying"? Or maybe you should add a pronoun? In active voice, 'allow' + 'to' takes an object, usually a pronoun.
<sup>184</sup>Did you mean "disabling"? Or maybe you should add a pronoun? In active voice, 'allow' + 'to' takes an object, usually a pronoun.
<sup>185</sup>Use a smart opening quote here: "".
<sup>186</sup>Use a smart closing quote here: """.
<sup>187</sup>Add a space between sentences
^{188}\mathrm{Add} a space between sentences
<sup>189</sup>Add a space between sentences
^{190}\mathrm{Add} a space between sentences
<sup>191</sup>Use a smart opening quote here: ""."
<sup>192</sup>Use a smart closing quote here: """.
<sup>193</sup>Use a smart opening quote here: "".
<sup>194</sup>Use a smart closing quote here: """.
^{195}\mathrm{Add} a space between sentences
<sup>196</sup>Add a space between sentences
^{197}\mathrm{Add} a space between sentences
^{198}\mathrm{Add} a space between sentences
^{199}\mathrm{Add} a space between sentences
```

- Added²⁰¹ a Renderer trait used by the various renderers.
- Removed²⁰² some methods from public API.

0.7.0 (2016-09-11)

This releases renders images differently when they are on a standalone paragraph or inside a paragraph.

- Internal/API:
 - Token has a new variant, StandaloneImage. This is used to distinguish an image that is alone in a paragraph of an image that is inlined alongside text.
 - <u>Parser²⁰³</u>.parse method now distingues between Image and StandaloneImage. Currently, an image is considered "204 standalone" if it is the sole element of a paragraph, even if it is among a link.
 - ²⁰⁶Token has a new is_image method.
- Rendering²⁰⁷:
 - Standalone images are now rendered differently than in line images (80% of width VS original size) in $\rm HTML/EPUB$ and $\rm LaTeX.$

0.6.0 (2016-09-09)

- Deprecated options:
 - nb_char: since it was only used for french cleaner and for typography reasons <u>it's</u>²⁰⁸ better to use different non breaking spaces according to context, this option was not really useful anymore.
- Rendering²⁰⁹:
 - Images are now displayed at 80% width of the page.
- Bugfixes 210 :
 - Image paths are now found correctly in LaTeX and EPUB rendering even if crowbook is called from another directory.
 - <u>Fixed</u>²¹¹ a bug in French cleaner when a string to clean ended by a non-breaking space (space was doubled with a breaking one).
 - $LaTeX^{212}/PDF$:
 - * <u>"213</u> Autocleaning<u>"214</u> is now also activated (for french at least) for LaTeX rendering, since it doesn't correctly insert non-breaking spaces for e.g. '«' or '»'.
 - * Fixed 215 escaping of -- to -{}- to avoid tex ligatures.
 - HTML/EPUB:
 - * html.display_chapter now defaults to false (e.g., by default the HTML displays the entirety of a book).
 - * Fixed²¹⁶ rendering of lists when lang is set to fr.
 - * $\underline{\text{Links}}^{217}$ are now HTML-escaped, fixing errors in XHTML (for EPUB rendering) when links contained '&' character.

```
^{201}\mathrm{Add} a space between sentences
<sup>202</sup>Add a space between sentences
<sup>203</sup>Add a space between sentences
<sup>204</sup>Use a smart opening quote here: "".
<sup>205</sup>Use a smart closing quote here: """.
^{206}Add a space between sentences
<sup>207</sup>Add a space between sentences
<sup>208</sup>Did you mean "its" (possessive pronoun) instead of 'it's' (short form of 'it is')?
<sup>209</sup>Add a space between sentences
<sup>210</sup>Add a space between sentences
^{211}\mathrm{Add} a space between sentences
<sup>212</sup>Add a space between sentences
<sup>213</sup>Use a smart closing quote here: """.
<sup>214</sup>Use a smart closing quote here:
^{215}\mathrm{Add} a space between sentences
^{216}\mathrm{Add} a space between sentences
^{217}\mathrm{Add} a space between sentences
```

0.5.1 (2016-04-14)

Mostly rendering fixes:

- Epub:
 - Fix a validation problem when book contained hidden chapters.
- French²¹⁸ cleaner:
 - Use semi-cadratine space instead of cadratine space for dialogs.
 - <u>Use</u>²¹⁹ non-narrow non-breaking spapce instead of narrow one for ':', '«' and '»' (following https://fr.wikipedia.org/ins%C3%A9cable#En_France).
- HTML:
 - Add viewport meta tags.
 - Standalone²²⁰ HTML:
 - * Don't display the button to display chapter and the previous/next chapter link if html.display_chapter is set to false.
 - * $\underline{\text{Fix}}^{221}$ chapter displaying when some chapters are not numbered.
 - <u>Multi-files</u>²²² HTML:
 - * Fix previous/next chapter display to make it consistent with standalone HTML.

0.5.0 (2016-04-02)

- Crowbook now requires Rustc 1.7.0.
- It²²³ is now possible to render HTML in multiple files:
 - output.html_dir will activate this renderer, and specify in which directory to render these files;
 - html dir.css allows to override the CSS for this rendering;
 - html dir.index.html allows to specify a template for the index.html page;
 - html_dir.chapter.html allows to specify a template for the chapters pages.
- $\underline{\text{New}}^{224}$ book options:
 - tex.short: if set to true, the LaTeX renderer will use article instead of book as document class, and will use the default \maketitle command for article. This option is by default set to false, except when Crowbook is called with --single.
 - enable_yaml_blocks: parsing YAML blocks is no longer activated by default, except when using --single. This is because you might want to have e.g. multiple short stories using YAML blocks to set their titles and so on, and a separate .book file to render a book as a collection of short stories. In this case, you wouldn't want the displayed title or the output.pdf/html/epub files be redefined by the short stories .²²⁵md files.
 - html.print_css: allows to specify a stylesheet for media print
 - html.display_chapter: displays one chapter at a time in standalone HTML
 - html.script: allows to specify a custom javascript file for standalone HTML
 - html dir.script: same thing for multipage HTML

²¹⁸Add a space between sentences

²¹⁹Add a space between sentences

²²⁰Add a space between sentences

²²¹Add a space between sentences

²²²Add a space between sentences

²²³Add a space between sentences

 $^{^{224}\}mathrm{Add}$ a space between sentences

 $^{^{225}}$ Don't put a space before the full stop

- resources.base_path: by default, Crowbook resolves local links in markdown files relatively to the markdown file. This option allows to resolve them relatively to a base path. This option comes with two variants, resources.base_path.images and resources.base_path.links, which only activate it for respectively images tags and links tags. These two options are ignored when base_path is set. There is also resources.base_path.files which specify where additional files (see below) should be read, but this is one is set to_.²²⁶ (i.e.,_²²⁷the directory where the .book file is) by default.
- resources.files: indicate a (whitespace-separated) list of files that should be embedded. Currently only used with the EPUB renderer.
- resources.out_path: indicate where resources.files should be copied in the final document. Default to data, meaning that files will be placed in a data directory in the EPUB.

• Rendering²²⁸:

- Templates can now use localized strings according to the lang option
- Standalone HTML now includes locale files using base64.
- Standalone²²⁹ HTML displays one chapter at a time, thouht it can be changed via a button in the menu.
- HTML/EPUB: default CSS now uses the lang value do determine how to display lists (currently the only difference is it uses "230_"231" when lang is set to "232fr"233" and standard bullets for other languages).

• Bugfixes²³⁴:

- Fixed a bug of filename "235 resolution" when Crowbook was called with --single (e.g., crowbook s tests/test.md would previously try to load 'tests/tests/test.md).
- Epub²³⁷ renderer now uses the mime_guess library to guess the mime type based on extension, which should fix the mime type guessed for a wide range of extensions (e.g., svg).

• Internal²³⁸/API:

- The Book::new, new_from_file, and new_from_markdown_file take an additional ²³⁹options parameter. To create a book with default options, set it to &[].

0.4.0 (2016-03-01)

- Crowbook now internally uses a true YAML parser, yaml_rust, for its options. Since the "240 old" Crowbooks's config format was similar, but had some subtle differences, this is somewhat of a breaking change:
 - strings should now be escaped with "242" in some cases (e.g. if it contains special characters). On the other hand, it *allows* to optionally escape a string with these quotes, which wasn't possible until then and might be useful in some cases.
 - multiline strings now follow the YAML format, instead of the previous <u>"243</u>YAML-ish<u>"244</u> format. This can impact the way newlines are added at the end of a multiline string. See e.g. this link for the various ways to include multiline strings in Yaml.

```
^{226}\mathrm{Don't} put a space before the full stop
^{227} \mbox{Possible} typo: you repeated a white
space
^{228}\mathrm{Add} a space between sentences
^{229}\mathrm{Add} a space between sentences
<sup>230</sup>Use a smart opening quote here: """.
<sup>231</sup>Use a smart closing quote here: """.
<sup>232</sup>Use a smart opening quote here: """.
<sup>233</sup>Use a smart closing quote here:
^{234}\mathrm{Add} a space between sentences
<sup>235</sup>Use a smart opening quote here: """.
<sup>236</sup>Use a smart closing quote here: """.
^{237}\mathrm{Add} a space between sentences
^{238}\mathrm{Add} a space between sentences
<sup>239</sup>Possible typo: apostrophe is missing. Did you mean "options'" or "option's"?
^{240}\mathrm{Use} a smart opening quote here: ""
<sup>241</sup>Use a smart closing quote here: """.
<sup>242</sup>Use a smart opening quote here: """.
<sup>243</sup>Use a smart opening quote here: "".
<sup>244</sup>Use a smart closing quote here: """.
```

- <u>Crowbook</u>²⁴⁵ now parses YAML blocks (delimited by two lines with "246---"247) in Markdown files, ignoring keys that it doesn't recognize. This allows crowbook to be compatible(-ish) with Markdown that contains YAML blocks for Jekyll or Pandoc.
- New 248 option --single allows to give 249 Crowbook a single Markdown file (which can contain options within an inline YAML block) instead of a book configuration file. This is useful for e.g. short stories.
- Enhanced²⁵⁰ the way debugging/warning/info messages are handled and displayed:
 - Added a --debug option to the binary.
 - Internal²⁵¹: added a Logger struct.
 - Different²⁵² levels of information (debug/warning/info/error) get different colours.
- Bugfixes²⁵³:
 - Crowbook no longer crashes when called with the --to argument if it can't create a file.

0.3.0 (2016-02-27)

- Crowbook now tries to convert local links. That is, if you link to a Markdown file that is used in the book. (e.g. README.md), it *should* link to an appropriate inner reference inside the book.
- <u>Latex</u>²⁵⁴ renderer now supports (local) images.
- Epub 255 renderer now embed (local) images in the EPUB file.
- $\underline{\text{Some}}^{256}$ changes to the HTML/Epub stylesheets.
- Internal²⁵⁷ (or usage as a library):
 - Crowbook no longer changes current directory, which worked in the binary but could cause problem if library was used in multithreaded environment (e.g. in cargo test).
 - More²⁵⁸ modules and methods are now private.
 - Improved²⁵⁹ documentation.
 - Added²⁶⁰ more unit tests.
- Bugfixes²⁶¹:
 - Epub renderer now correctly renders unnumbered chapter without a number in its toc.ncx file

0.2.2 (2016-02-25)

- Bugfixes:
 - French cleaner now correctly replaces space after (in e.g. dialogs) with "262 em space" 263.

```
^{245}\mathrm{Add} a space between sentences
<sup>246</sup>Use a smart opening quote here:
<sup>247</sup>Use a smart closing quote here: """.
<sup>248</sup>Add a space between sentences
<sup>249</sup>Did you mean "giving"? Or maybe you should add a pronoun? In active voice, 'allow' + 'to' takes an object, usually a pronoun.
<sup>250</sup>Add a space between sentences
^{251}\mathrm{Add} a space between sentences
<sup>252</sup>Add a space between sentences
^{253}\mathrm{Add} a space between sentences
^{254}\mathrm{Add} a space between sentences
<sup>255</sup>Add a space between sentences
^{256}\mathrm{Add} a space between sentences
^{257}\mathrm{Add} a space between sentences
^{258}\mathrm{Add} a space between sentences
<sup>259</sup>Add a space between sentences
^{260}\mathrm{Add} a space between sentences
^{261}\mathrm{Add} a space between sentences
<sup>262</sup>Use a smart opening quote here: """.
<sup>263</sup>Use a smart closing quote here: """.
```

0.2.1 (2016-02-25)

- Bugfixes:
 - HTML/Epub rendering no longer incorrectly increment chapter count for unnumbered chapters.
 - <u>Latex</u>²⁶⁴: makes what is possible to avoid orverflowing the page.
- Minor²⁶⁵ changes:
 - Latex: improvement of the default way URLs are displayed.

0.2.0 (2016-02-25)

- Command line arguments:
 - New argument --print-template now allows to print a built-in template to stdout.
 - New²⁶⁶ argument --list-options prints out all valid options in a config file (or in set), their type and default value.
 - New²⁶⁷ argument --set allows to define²⁶⁸ or override whatever option set in a book configuration.
 - --create can now be used without specifying a BOOK, printing its result on stdout.
- Configuration²⁶⁹ file:
 - Added support for multiline strings in .book files, with either '|' (preserving line returns) or '>' (transforming line returns in spaces)
 - New option display_toc allows to display the table of contents (whose name, at least for HTML, is specified by toc_name) in HTML and PDF documents.
 - Option²⁷⁰ numbering now takes an int instead of a boolean, allowing to specify the maximum level to number (e.g. 1: chapters only, 2: chapters and sectino, ..., 6: everything).
- Rendering²⁷¹:
 - Added support for numbering all headers, not just level-1 (e.g., having a subsection numbered 2.3.1).
 - <u>Tables²⁷²</u> and Footnotes are now implemented for HTML/Epub and LaTeX output.
- Internal²⁷³:
 - Refactored Book to use an HashMap of BookOptions instead of having like 42 fields.

0.1.0 (2016-02-21)

• initial²⁷⁴ release

 $^{^{264}\}mathrm{Add}$ a space between sentences

 $^{^{265}\}mathrm{Add}$ a space between sentences

 $^{^{266}\}mathrm{Add}$ a space between sentences

²⁶⁷Add a space between sentences

²⁶⁸Did you mean "defining"? Or maybe you should add a pronoun? In active voice, 'allow' + 'to' takes an object, usually a pronoun.

²⁶⁹Add a space between sentences

²⁷⁰Add a space between sentences

 $^{^{271}}$ Add a space between sentences

 $^{^{272}\}mathrm{Add}$ a space between sentences $^{273}\mathrm{Add}$ a space between sentences

 $^{^{274}}$ This sentence does not start with an uppercase letter

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Version 2.1, February 1999

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 $^{^{275}\}mathrm{This}$ notation is nonstandard, use this symbol instead: "©"

 $^{^{276}\}mathrm{Possible}$ typo: you repeated a white space

 $^{^{277}}$ Possible typo: you repeated a whitespace

²⁷⁸Consider using "Public".

²⁷⁹Consider using "Public".

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<u>"299</u>Source code<u>"300</u> for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

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(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

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If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

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However, linking a "303 work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "305 work that uses the library" The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

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If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or \underline{less}^{309} in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "311 work that uses the Library."312 with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

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- a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)
- b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.
- c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more

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308 Use a smart closing quote here: """.
309 Did you mean "fewer"? The noun lines is countable.
310 Consider shortening this phrase to just "whether". It is correct though if you mean 'regardless of whether'.
311 Use a smart opening quote here: """.
312 Use a smart closing quote here: """.

than the cost of performing this distribution.

- d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.
- e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

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³¹⁴Use a smart closing quote here: """.

 $^{^{315}\}mathrm{Add}$ a space between sentences

 $^{^{316}\}mathrm{Add}$ a space between sentences

³¹⁷Consider using "to"

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 $^{^{318}\}mathrm{Add}$ a space between sentences

³¹⁹Use a smart opening quote here: "".

³²⁰Use a smart closing quote here: """.

³²¹Use a smart opening quote here: "".

³²²Use a smart closing quote here: """.

To apply these terms, attach the following notices to the library. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "323 copyright" line and a pointer to where the full notice is found.

<one line to give the library's name and a brief idea of what it does.>

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Also add information on how to contact you by electronic and paper mail.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "325 copyright disclaimer_"326 for the library, if necessary. Here is a sample; alter the names:

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<signature of Ty Coon>, 1 April 1990 Ty Coon, President of Vice That's all there is to it!

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³²⁴Use a smart closing quote here: """.

³²⁵Use a smart opening quote here: """.

 $^{^{326}\}mathrm{Use}$ a smart closing quote here: """. $^{327}\mathrm{Unpaired}$ symbol: "' seems to be missing