

Crowbook

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Chapter 1

Crowbook

Render a book written in markdown to HTML, Epub or PDF.

Crowbook's purpose is to allow you to automatically generate multiple outputs formats from a book written in Markdown. Its main focus is novels, and the default settings should (hopefully) generate readable books with correct typography.

1.1 Example

To see what Crowbook's output looks like, you can read (a not-necessarily up-to-date version of) the Crowbook guide (containing this README.md file and additional documentation) rendered in HTML, PDF or EPUB.

1.2 Installing

Packages

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

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.

Building

You'll need to have the Rust compiler on your machine first; you can download and install it here. Once it is down:

\$ cargo install crowbook

will automatically download the latest crowbook release on crates.io and install it.

1.3 Usage

The simplest command is:

\$ crowbook <BOOK>

where BOOK is a configuration file. Crowbook will parse this file and generate a book in HTML, Epub, LaTeX, and/or PDF, 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 --create my.book 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 more information see the configuration file.

It is also possible to give additional parameters to crowbook; we have already seen --create, but if you want the full list, see the arguments.

1.4 Current features

Output formats

Crowbook should correctly support HTML and EPUB (either version 2 or 3) as output formats: rendered files should pass respectively the W3C validator and the IDPF EPUB validator for a wide range of (correctly Markdown formatted) input files. See the example book rendered in HTML and EPUB on github.io.

LaTeX/PDF output is a bit more tricky: it should work reasonably well for novels (the primary target of Crowbook), but pdflatex might occasionally choke on some "weird" unicode character. See the example book rendered in PDF on github.io.

ODT output is currently experimental at best. It might work with very basic formatting but still needs a *lot* of work. You can still see the example book rendered in ODT on github.io to have an idea of the current status for this output format.

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 eventually ODT).

Maybe the most specific "feature" of Crowbook is that (by default, it can be deactivated) it tries to "clean" the input files. By default this doesn't do much (except removing superfluous spaces), but if the book's language is set to french it tries to respect french typography, replacing spaces with non-breaking ones when it is appropriate (e.g. in french you are supposed to put a non-breaking space before '?', '!', ';' or ':'). This feature is relatively limited at the moment, but I might try to add more options and support for more 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 title: My title

This is mostly useful when Crowbook is runned with the --single argument (receiving a single Markdown file instead of a book configuration file). E.g., the following Markdown file:

author: John Doe
title: A book

output.html: book.html

_ _ _

This is a very tiny book!

can be processed with crowbook --single foo.md or crowbook -s foo.md to produce the book.html file. This is useful for short texts that typically only contain one "chapter".

Bugs

See the github's issue tracker.

1.5 Contributors

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1.6 Acknowledgements

Besides the Rust compiler and standard library, Crowbook uses the following libraries:

- pulldown-cmark
- yaml-rust
- mustache
- clap
- chrono
- uuid
- mime guess
- walkdir
- rust c-serialize

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 proved very useful during development.

1.7 ChangeLog

See ChangeLog.

1.8 Library

While the main purpose of Crowbook is to be runned as a command line, 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.

1.9 License

Crowbook is free software: you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License (LGPL), version 2.1 or (at your option) any ulterior version. See LICENSE for more information.

Chapter 2

Arguments

Crowbook can takes a list of arguments:

Render a markdown book in Epub, PDF or HTML.

USAGE:

crowbook [FLAGS] [OPTIONS] [--] [BOOK]

FLAGS:

-h, --help Prints help information
-l, --list-options Lists all possible option
-s, --single Use a single Markdown file
instead of a book configuration file
-V, --version Prints version information

-v, --verbose Print warnings in

parsing/rendering

OPTIONS:

-c, --create <FILES>... Creates a new book with existing markdown files
-o, --output <FILE> Specifies output

-o, --output <FILE> Specifies output file

--print-template <TEMPLATE> default value of a template

--set <KEY_VALUES> Sets a list of book

Displays the

options

-t, --to <FORMAT> Generate specific

forma [values: epub, pdf, html, tex, odt]

ARGS:

 $<\!$ BOOK> File containing the book configuration, or a Markdown file when called with --single

Note that Crowbook generates output files relatively to the directory where <BOOK> is:

\$ crowbook foo/bar.book --to pdf --output baz.pdf

will thus generate baz.pdf in directory foo and not in current directory.

The most important option obviously <BOOK>, i.e. the file configuration book. It is mandatory for most options: if you don't pass it, crowbook will simply display this help message. In a normal use case this is the only argument you'll need to pass, and crowbook will generate the book in all formats specified in the configuration file.

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

2.1 --create

 $Usage: crowbook [BOOK] --create file_1.md file_2.md \dots$

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).

Examples

crowbook foo.book --create README.md ChangeLog.md
LICENSE.md

will generate a file foo.book containing:

author: Your name title: Your title

lang: en

Uncomment and fill to generate files

output.html: some_file.html
output.epub: some_file.epub
output.pdf: some_file.pdf

```
# Uncomment and fill to set cover image (for Epub)
# cover: some_cover.png
# List of chapters
+ README.md
+ ChangeLog.md
+ LICENSE.md
   while
crowbook --create README.md ChangeLog.md LICENSE.md
   will prints the same result, but to stdout (without creating a file).
   When crowbook is runned with --create, it can also uses the
keys/values set by --set (see below):
$ crowbook foo.book --create file1.md file2.md --set
author "Pierre Dupont" title "Mon œuvre" lang fr
   will generate a foo.book file containing
author: Pierre Dupont
title: Mon œuvre
lang: fr
# List of chapters
+ file1.md
+ file2.md
```

2.2 --single

usage: crowbook --single <FILE>
 (or crowbook -s <FILE>)

This options allows to pass 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 with --- (three dashes). E.g.

author: Joan Doe

title: A short story

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 --single foo.md is roughly 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 sets the tex.short option to true, using the LaTeX class of article instead of book.

2.3 --set

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

This options takes a list KEY VALUE pairs and allows to set or override a book configuration option. All valid options in the configuration files are valid as keys. For more information, see the configuration file.

Examples

\$ crowbook foo.book --set html.css style.css

will override the CSS for HTML generation (the html.css key) to style.css.

\$ crowbook foo.book --set author Foo --title Bar

will override the book title to Bar and its author to Foo.

2.4 --list-options

usage: crowbook --list-options
 (or crowbook -1)

Displays all the valid options to use, whether in a book configuration file, with --set, or in an inline YAML block.

2.5 --print-template

usage: crowbook --print-template template

Prints to stdout the built-in template. 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
$ crowbook my.book --set html.css my_style.css
# or add "html.css: my_style.css" in my.book
```

Note that it is possible to use this option in conjonction with --set, though it is currently only useful for EPUB template:

```
$ crowbook --print-template epub.template --set
epub.version 2
# Returns the template for Epub 2 (currently it is the
default one)
$ crowbook --print-template epub.template --set
epub.version 3
# Returns the template for Epub 3
```

2.6 --verbose

usage: crowbook <BOOK> --verbose

If this flag is set, Crowbook will print the warnings it detect while parsing and rendering. These warnings are typically related to the inclusion of non-local images, linking to Markdown files that are not part of the book, and so on.

2.7 --to

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

Generate only the specified format. FORMAT must be either epub, pdf, html, 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

will 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

will generate a foo.pdf file,.

2.8 -- 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.

Note that Crowbook generates output files relatively to the directory where ${\tt BOOK}$ is:

\$ crowbook foo/bar.book --to pdf --output baz.pdf

will thus generate baz.pdf in directory foo and not in current directory.

Chapter 3

The configuration file

If you want to use Crowbook for your book, this configuration file is all you'll have to add (assuming you already have the book in Markdown files; if you don't, you'll also have to write a book first, but that's besides the scope of this document).

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

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

lang: en

output.html: some_book.html

```
# 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:

- a 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 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.
- ! file_name.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_name.md specifies the number for a chapter.

So a typical usage might look like this:

```
! copyright.md
- preface.md
# We want first chapter to be Chapter 0 because we are programmers!
0. chapter_0.md
# Next chapters can be numbered automatically
+ chapter_1.md
+ chapter_2.md
...
```

There are two important things to note:

- 1. you must not use quotes around the file names.
- the path 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.

Also note 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
```

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

The day I was born

. . .

You should have one and only one level-one header (i.e. chapter title) in each markdown file.

If you have more than one, Crowbook will print a warning and treat it as another chapter (numbered according to the scheme specified for including the file). It might however mess the table of contents in some cases (e.g. for Epub).

If you do *not* have a level-1 header in a markdown file:

- if it is a numbered chapter, Crowbook will infer a chapter name from the numbering scheme;
- if it is not numbered, chapter's title will default to the empty string and won't be displayed in the TOC.

3.2 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 to use 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 "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 '!').

Here is the complete list of options, with a short description. The usage of some of them is detailed later on.

Metadata

- author
 - **type**: string
 - default value: Anonymous
 - The author of the book
- title
 - type: string
 - default value: Untitled
 - The title of the book
- lang
 - type: string
 - default value: en
 - The language of the book
- subject
 - type: string
 - default value: not set
 - Subject of the book (used for EPUB metadata)
- description
 - **type**: string
 - default value: not set
 - Description of the book (used for EPUB metadata)
- cover

- **type**: path
- default value: not set
- File name of the cover of the book

Output options

- 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 set
 - Output 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

Resources option

- 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 base path but only for images. Useless if resources.base path is set.
- resources.base_path.files
 - type: path
 - default value: .
 - Set base path but only for additional files. Useless if resources.base_path is set.
- resources.out_path
 - **type**: path
 - default value: data
 - Paths where additional resources should be copied in the EPUB file or HTML directory
- resources.files
 - type: string
 - default value: not set
 - Whitespace-separated list of files to embed in e.g. EPUB file

Misc options

- enable_yaml_blocks
 - type: boolean
 - default value: false
 - Enable inline YAML blocks to override options set in config file
- zip.command
 - **type**: string
 - default value: zip
 - Command to use to zip files (for EPUB/ODT)
- numbering
 - type: integer
 - default value: 1
 - The maximum heading levels to number (0: no numbering,
 1: only chapters, ..., 6: all)
- display_toc
 - type: boolean
 - default value: false
 - If true, display a table of content in the document
- toc_name
 - type: string
 - default value: Table of contents
 - Name of the table of contents if toc is displayed in line
- autoclean
 - type: boolean
 - default value: true
 - Toggles cleaning of input markdown (not used for LaTeX)
- verbose
 - type: boolean

- default value: false
- If set to true, print warnings in Markdown processing
- side_notes
 - type: boolean
 - default value: false
 - Display footnotes as side notes in HTML/Epub
- temp_dir
 - type: path
 - default value: "
 - Path where to create a temporary directory (default: uses result from Rust's std::env::temp_dir())
- numbering_template
 - type: string
 - default value: "{{number}}. {{title}}"
 - Format of numbered titles
- nb_char
 - type: char
 - default value: '
 - The non-breaking character to use for autoclean when lang is set to fr

HTML options

- html.template
 - type: path
 - default value: not set
 - Path of an HTML template
- html.css
 - type: path
 - default value: not set

- Path of a stylesheet to use with HTML rendering
- html.print_css
 - type: path
 - * default value: not set
 - * Path of a stylesheet to use with media print in HTML rendering
- html.script
 - type: path
 - default value: not set
 - Path of a javascript file
- html.display_chapter
 - type: boolean
 - default value: true
 - Display one chapter at a time (with option to dislay all)

Multifile HTML options

- html_dir.script
 - **type**: path
 - default value: not set
 - Path of a javascript file
- html_dir.css
 - type: path
 - default value: not set
 - Path of a CSS template
- html dir.index.html
 - type: path
 - default value: not set
 - Path of index.html template
- html_dir.chapter.html
 - type: path
 - default value: not set
 - Path of a chapter.html template

EPUB options

- epub.version
 - **type**: integer
 - default value: 2
 - The EPUB version to generate
- epub.css
 - type: path
 - default value: not set
 - Path of a stylesheet to use with EPUB rendering
- epub.template
 - type: path
 - default value: not set
 - Path of an epub template for chapter

LaTeX options

- tex.short
 - type: boolean
 - default value: false
 - If set to true, use article class instead of book and a the default \maketitle command
- tex.links_as_footnotes
 - type: boolean
 - default value: true
 - If set to true, will add foontotes to URL of links in La-TeX/PDF output
- tex.command
 - type: string
 - default value: pdflatex
 - LaTeX flavour to use for generating PDF

- tex.template
 - type: path
 - default value: not set
 - Path of a LaTeX template file

Deprecated options

- base_path
 - type: DEPRECATED
 - default value: resources.base_path
 - Renamed
- base_path.links
 - type: DEPRECATED
 - default value: resources.base_path.links
 - Renamed
- base_path.images
 - type: DEPRECATED
 - default value: resources.base_path.images
 - Renamed

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 a number, a string is, well, any string). 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.

Output options

These options specify which files to generate. You must at least set one of this option, or Crowbook won't do anything.

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

```
output.epub = foo.epub
```

and runs

\$ crowbook some/dir/config.book

foo.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

to generate anything. (It's still possible to generate a specific format, and only this one, by using the --to argument on the command line).

Note that some formats depend on some commands being installed on your system. Most notably, Crowbook depends on LaTeX (pdflatex by default, though you can specify the 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:

- output.html: renders a standalone HTML file;
- output.html_dir: render a 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).

Resources options

These two options allow to embed additional files for some formats (currently, only EPUB). This can be useful for embedding fonts.

resources.files

A list of files or directories that should be added. It's a whitespace-separated list, so it can be, e.g.:

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

will be equivalent to:

resources.files fonts/font1.otf fonts/font2.otf

default: not set

resources.path

This option determine where (in which directory), in the resulting document, will those files 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 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 yield the same result.

default: data

Generic options for rendering

numbering

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 level and turns numbering on for all headers.

default: 1

numbering template

A string that will be used for chapter titles. You can use {{number}} and {{title}} in this string, e.g.:

numbering_template: "Chapter {{number}} {{title}}"

Note that:

- in this case, quoting is necessary because { and } have special meaning in YAML;
- this string won't be used for unnumbered chapters;
- this string isn't currently used by LaTeX, either.

autoclean

This option cleans a bit the input markdown. With the default implementation, it only removes consecutive spaces, which has not real impact (they are ignored anyway both by HTML viewers and by La-TeX).

However, if lang is set to fr, it also tries to add non-breaking spaces in front (or after) characters like '?', '!', ';' to respect french typography.

ChangeLog

0.7.0 (2016-09-11)

- 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.
 - Parser.parse method now distingues between Image and StandaloneImage. Currently, an image is considered "standalone" if it is the sole element of a paragraph, even if it is among a link.
 - Token has a new is_image method.

• Rendering:

 Standalone images are now rendered differently than inline images (80% of width VS original size) in HTML/EPUB and LaTeX.

0.6.0 (2016-09-09)

- Deprecated options:
 - nb_char: since it was only used for french cleaner and for typography reasons it's better to use different non breaking spaces according to context, this option was not really useful anymore.

• Rendering:

- Images are now displayed at 80% width of the page.

• Bugfixes:

- Image paths are now found correctly in LaTeX and EPUB rendering even if crowbook is called from another directory.
- Fixed a bug in French cleaner when a string to clean ended by a non-breaking space (space was doubled with a breaking one).

LaTeX/PDF:

- * "Autocleaning" 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 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).
- * Fixed rendering of lists when lang is set to fr.
- * Links are now HTML-escaped, fixing errors in XHTML (for EPUB rendering) when links contained '&' character.

$0.5.1 \ (2016-04-14)$

Mostly rendering fixes:

• Epub:

Fix a validation problem when book contained hidden chapters.

French cleaner:

- Use semi-cadratine space instead of cadratine space for dialogs.
- Use non-narrow non-breaking spapee instead of narrow one for ':', '«' and '»' (following https://fr.wikipedia.org/wiki/Espace_ins%C3%A9cable#En_France).

• HTML:

- Add viewport meta tags.
- Standalone HTML:

- * Don't display the button to display chapter and the previous/next chapter link if html.display_chapter is set to false.
- * Fix chapter displaying when some chapters are not numbered.

– Multi-files 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.
- It 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.

• New 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 .md 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
- resources.base_path: by default, Crowbook resolves local links in markdown files relatively to markdown file. This option allows to resolve them relatively to a base path. This option comes with variants, resources.base_path.images two resources.base_path.links, which only activate it for respectively images tags and links tags. options are ignored when base_path is set. There is also resources.base_path.files which specify additional files (see below) should be read, but this is one is set to . (i.e., the 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.

Rendering:

- Templates can now use localized strings according to the lang option
- Standalone HTML now includes locale files using base64.
- Standalone 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 "-" when lang is set to "fr" and standard bullets for other languages).

• Bugfixes:

- Fixed a bug of filename "resolution" when Crowbook was called with --single (e.g., crowbook -s tests/test.md would previously try to load 'tests/tests/test.md).

 Epub 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).

• Internal/API:

The Book::new, new_from_file, and new_from_markdown_file take an additional options 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 "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 "" 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 "YAML-ish" 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.
- Crowbook now parses YAML blocks (delimited by two lines with "---") 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 option --single allows to give 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.
- Enhanced the way debugging/warning/info messages are handled and displayed:
 - Added a --debug option to the binary.
 - Internal: added a Logger struct.

- Different levels of information (debug/warning/info/error) get different colours.

• Bugfixes:

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.
- Latex renderer now supports (local) images.
- Epub renderer now embed (local) images in the EPUB file.
- Some changes to the HTML/Epub stylesheets.
- Internal (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).
 - More modules and methods are now private.
 - Improved documentation.
 - Added more unit tests.

• Bugfixes:

 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 "em space".

$0.2.1 \ (2016-02-25)$

• Bugfixes:

- HTML/Epub rendering no longer incorrectly increment chapter count for unnumbered chapters.
- Latex: makes what is possible to avoid orverflowing the page.

• Minor 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.
- New argument --list-options prints out all valid options in a config file (or in set), their type and default value.
- New argument --set allows to define or override whatever option set in a book configuration.
- --create can now be used without specifying a BOOK, printing its result on stdout.

• Configuration 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.
- Option 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 section, ..., 6: everything).

• Rendering:

 Added support for numbering all headers, not just level-1 (e.g., having a subsection numbered 2.3.1). $-\,$ Tables and Footnotes are now implemented for HTML/Epub and LaTeX output.

• Internal:

 Refactored Book to use an HashMap of BookOptions instead of having like 42 fields.

0.1.0 (2016-02-21)

• initial release

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Version 2.1, February 1999

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