

Basic Book Builder

A Pandoc template for building books, documents and articles



Basic Book Builder

A Pandoc template for building books, documents and articles

Author:	John Haverlack
Version:	1.1.0
Date:	2026-02-04
Affiliation:	Alaska Center for Energy and Power
Institution:	University of Alaska Fairbanks
ISBN:	UNSPECIFIED
DOI:	UNSPECIFIED
Maturity:	BETA

Copyright © 2026 Alaska Center for Energy and Power

Licensing

Open Source Edition (PDF and HTML)

Licensed under the Creative Commons Attribution-NoDerivatives 4.0 International License.

- License: [CC BY-ND 4.0](#)

Contents

1	Introduction	1
2	Getting Started	2
2.1	Cloning the Basic Book Builder	2
2.2	Setting Up Build Environment	2
	Glossary	3
	Index	5
	Bibliography	7

CONTENTS

Chapter 1

Introduction

This is a basic book (or article / document) builder template based on a Pandoc([Pandoc - Index, n.d.](#)) build process in conjunction with a number of other tools to generate PDF, HTML, LaTeX, Markdown, ODT, DOCX, and Epub book output formats from a single set Markdown source content , which can optionally be edited as an Obsidian vault.

This **basic book builder**([Jehaverlack/Basic-Book-Builder, n.d.](#)) template has been curated by John Haverlack.([John Haverlack | ACEP, n.d.](#))

Chapter 2

Getting Started

2.1 Cloning the Basic Book Builder

[!cli] Cloning the repository

```
git clone https://github.com/jehaverlack/basic-book-builder.git
```

[!cli] Navigate to the repo directory

```
cd basic-book-builder
```

2.2 Setting Up Build Environment

Debian Based Linux
This script only support Debian based linux system (Debian, Ubunutu, Zorin, etc) This script has not been widely tested across platforms

[!cli] Setup Build Environment

```
./scripts/setup-linux-deb.sh
```

For more information on setting up the build environment for your system see Appendix A.

Glossary

Term	Description
AST (Abstract Syntax Tree)	Pandoc’s internal structured representation of a document. Lua filters operate on the AST before rendering to a target format.
Bibliography	A .bib file (e.g., Zotero export) used by Pandoc with citeproc to generate formatted citations and reference lists.
Callout	A styled block (e.g., [!warning]) transformed by Lua filters into format-specific output such as LaTeX environments or HTML <div> elements.
Defaults File (YAML)	A Pandoc configuration file defining output format, filters, metadata, and rendering options (e.g., pdf.yaml, html.yaml).
DOCX	Microsoft Word document format generated by Pandoc; styling is controlled via a reference.docx file.
Filter (Lua)	A script that modifies Pandoc’s AST before rendering. Used in this workflow for callouts and other structural transformations.
Frontmatter	Format-specific content inserted before the main body (e.g., frontmatter.tex, frontmatter.html, frontmatter-docx.md).
HTML	Web output format generated by Pandoc, typically styled via CSS and supporting interactive features.
LaTeX	Typesetting system used for high-quality PDF generation via XeLaTeX in this workflow.
Lua Filter	A lightweight scripting extension used by Pandoc to customize document transformations programmatically.
Makefile	Automation script orchestrating the build pipeline for PDF, HTML, DOCX, ODT, and Markdown outputs.
Markdown	Plain-text markup language serving as the source format for all outputs in the workflow.

CHAPTER 2. GETTING STARTED

Term	Description
Metadata	Key-value pairs (e.g., <code>metadata.yaml</code>) defining title, author, license, version, and other document variables.
ODT	OpenDocument Text format used by LibreOffice; similar to DOCX but open-standard.
Pandoc	Universal document converter used to transform Markdown into PDF, HTML, DOCX, ODT, EPUB, and more.
PDF	Portable Document Format output produced via Pandoc + XeLaTeX.
Reference Document	A DOCX or ODT file defining styles (fonts, headings, spacing) used when generating Word/LibreOffice outputs.
Resource Path	Directories Pandoc searches for images, diagrams, and other assets during rendering.
Template	A format-specific layout file (e.g., LaTeX template) used to control document structure beyond styling.
TOC (Table of Contents)	Automatically generated navigation structure controlled by <code>toc</code> and <code>toc-depth</code> options.
XeLaTeX	LaTeX engine used to generate PDFs with modern font support (via <code>fontspec</code>).
Zotero	Reference manager used to generate <code>.bib</code> files for citation processing with Pandoc.

Index

Pandoc, [1](#)

Basic Book Builder: A Pandoc template for building books, documents and articles5

Bibliography

Bibliography

Jehaverlack/Basic-Book-Builder: A Pandoc Workflow for Building PDF, HTML, EPUB, and LaTeX Book Format. n.d. <https://github.com/jehaverlack/basic-book-builder>.

John Haverlack | ACEP. n.d. <https://www.uaf.edu/acep/about/our-team/john-haverlack.php>.

Pandoc - Index. n.d. <https://pandoc.org/>.

Jehaverlack/Basic-Book-Builder: A Pandoc Workflow for Building PDF, HTML, EPUB, and LaTeX Book Format. n.d. <https://github.com/jehaverlack/basic-book-builder>.

John Haverlack | ACEP. n.d. <https://www.uaf.edu/acep/about/our-team/john-haverlack.php>.

Pandoc - Index. n.d. <https://pandoc.org/>.

Bibliography