

Single-source publishing with Pandoc and Make

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I use Pandoc and Make to export my PhD dissertation in HTML and PDF from the same collection of text files. This diagram represents the process.

Each conversion process uses a set of common files (text, references and bibliographic style) and format-specific files (including a template).

Make is used to automate the process.

Credits

This was inspired by two great examples of Make being used to automate Pandoc conversions:

- Gabarit Abrüpt (single-source book publishing)

<https://gitlab.com/cestabrupt/gabarit-abrupt>

- Pandoc-SSG by Ivan Stojic (static site generation)

<https://github.com/ivanstojic/pandoc-ssg/>

File tree

```
root:
  index.md
  Makefile
  metadata.yml
  output:
    <output files go here>
  references.bib
  static:
    css:
      styles.css
    fonts:
      font.woff
  template.html
  template.tex
  text:
    chapters:
      chapter-1.md
      chapter-2.md
      chapter-3.md
      chapter-4.md
      chapter-5.md
    conclusion.md
    introduction.md
  style.csl
```

Makefile

```
.PHONY: all html pdf clean
CHAPTERS := $(sort $(shell find text/chapters -type f -iname '*.md'))
CHAPTERS_OUT := $(patsubst %.md, output/%.html, $(notdir $(CHAPTERS)))
all: html pdf
clean:
  rm -rf output/*
# Copy static files recursively :
# (Adapted from https://stackoverflow.com/questions/41993726/)
STATIC := $(shell find static -type f)
STATIC_OUT := $(patsubst static/%, output/%, $(STATIC))
$(foreach s,$(STATIC),$(foreach t,$(filter %$(notdir $s),$(STATIC_OUT)),$(eval $t: $s)))
$(STATIC_OUT):; $(if $(wildcard $(@D)),,mkdir -p $(@D) &&) cp $^ $@
# PDF
pdf: output/these.pdf
output/these.pdf: text/introduction.md $(CHAPTERS) text/conclusion.md
  pandoc $^ [options] -o output/these.pdf
# HTML
html: $(STATIC_OUT) output/index.html output/introduction.html output/conclusion.html $(CHAPTERS_OUT)
output/index.html: index.md
  pandoc $< [options] -o $@
output/introduction.html: text/introduction.md
  pandoc $< [options] -o $@
output/conclusion.html: text/conclusion.md
  pandoc $< [options] -o $@
output/%.html: text/chapters/%.md
  pandoc $< [options] -o $@
```

Key

