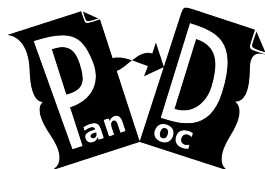

PDF Generation with Pandoc and GitHub Actions

How to generate good looking PDFs from Markdown files using Pandoc and how to automate the process with GitHub Actions

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1 Introduction

This document explores how to generate a PDF from a Markdown file using Pandoc.

1.1 Requirements

Here are the requirements for each level of complexity described in the next section:

1.1.1 Level 1

- Pandoc¹
- LaTeX²

1.1.2 Level 2

- Pandoc
- LaTeX
- LaTeX packages:

```
sudo tlmgr install adjustbox footnotebackref pagecolor csquotes  
mdframed zref needspace sourcesanspro sourcecodepro titling  
selnolig lualatex-math
```

(for Mac users)

1.1.3 Level 3

None! Everything is done in a container in the cloud.

1.2 Contributors

This is a small project I did in my free time to help generate good-looking documentation for my school projects. Feel free to make pull requests!

¹<https://pandoc.org/>

²<https://www.latex-project.org/get/>

2 Usage

There are three levels of complexity:

2.1 Simple PDF Generation

To generate a basic PDF without special formatting, use:

```
pandoc <file.md> -o <file.pdf>
```

2.2 Enhanced PDF with Template

To generate a PDF that uses the [eisvogel.tex](#) template from the [pandoc-latex-template](#)³ repository, use:

```
pandoc -s -o <file.pdf> -f markdown_strict+backtick_code_blocks+
  pipe_tables+auto_identifiers+yaml_metadata_block+implicit_figures+
  table_captions+footnotes+smart+escaped_line_breaks+header_attributes --
  data-dir=pandoc --template eisvogel.tex --toc --listings --columns=50
  --number-sections --dpi=300 --pdf-engine=xelatex -M date="$(date +%Y-%m
  -%d)" md/HEADER.YAML md/*.md
```

Ensure your directory structure is as follows:

```
.
+-- assets
|   +-- (...)
|   +-- your-assets.png
+-- md
|   +-- (...)
|   +-- your-files.md
|   +-- HEADER.YAML
+-- pandoc
    +-- templates
        +-- eisvogel.tex
```

2.3 Automated PDF Generation with GitHub Actions

Artifacts generated by the workflow are available in the Actions tab⁴ of this repository and are also pushed to the root of the [docs](#) folder.

For more details, check the GitHub workflow file.


³<https://github.com/Wandmalfarbe/pandoc-latex-template>

⁴<https://github.com/Nishogi/pdf-from-markdown/actions>

3 Sources

Markdown Syntax

<https://www.markdownguide.org/basic-syntax/>



Markdown Cheatsheet

A lightweight markup language with plain text formatting syntax.

Headers

This is Heading 1 - <h1>
 ## This is Heading 2 - <h2>
 ### This is Heading 3 - <h3>
 #### This is Heading 4 - <h4>
 ##### This is Heading 5 - <h5>
 ##### This is Heading 6 - <h6>

Emphasis

*This text have an italic font style_
 This text have an italic font style
 This text have an bold font style
 __This text have an bold font style__
 *italics **bold and italics** italics*
 bold _bold and italic_ bold
 ~Strikethrough this text~

Horizontal Rules

Three or more:
 *** (asterisks)
 ___ (underscores)
 --- (hyphens)

Blockquotes

> This indicates that the enclosed text is an
 > extended quotation and is rendered visually by
 > indentation. (HTML <blockquote> Element)

Lists

Unordered List
 * Main Item 1
 * Main Item 2
 * Subitem 2a
 * Subitem 2b
 Unordered Lists Can Be:
 * Asterisks
 - Minus
 + Plus
 Ordered List
 1. Main Item 1
 2. Main Item 2
 3. Main Item 3
 3.1 Subitem 3a
 3.2 Subitem 3b

Task List

- [x] completed item
 - [] incomplete item

Emoji

Emojis on GitHub: www.emoji-cheat-sheet.com
 :+1: :sparkles: :camel: :tada:
 :rocket: :metal: :octocat:

Backslash Escapes

*literal asterisks\
 \ backslash
 ` backtick
 * asterisk
 _ underscore
 {} curly braces
 [] square brackets
 () parentheses
 # hashmark
 + plus sign
 - minus sign (hyphen)
 . dot
 ! exclamation mark

Code Blocks

```
```java
public class MyClass {
}
...
Inline `code`.
```

## Images

![Logo](/images/logo.png)  
 ![Logo](/images/logo.png "Image Title")  
 ![Logo](https://www.images.com/logo.png)  
 ![Logo](https://www.images.com/logo.png "Title")  
 ![Logo][image\_logo]  
 [image\_logo]: https://www.images.com/logo.png

## Links


<https://www.code2bits.com>  
 [Code2Bits](https://www.code2bits.com)  
 [Code2Bits](https://www.code2bits.com "Title")  
 [Code2Bits][URL of Code2Bits]  
 [Code2Bits][1]  
 My homepage is at the following [link].  
 [URL of Code2Bits]: <http://www.code2bits.com>  
 [1]: <https://www.code2bits.com>  
 [link]: <https://www.code2bits.com>

## Tables

Header 1	Header 2	Header 3
Content	Content	Content
Content	Content	Content

Version 0.2

<https://www.code2bits.com>



**Figure 1:** Markdown Cheatsheet

#### CI with Pandoc

<https://gitlab.com/pandoc/pandoc-ci-example>

#### Templating with Pandoc

<https://github.com/alexeygumirov/pandoc-for-pdf-how-to>

#### GitHub Actions

<https://docs.github.com/en/actions>