Yet Another Markdown Cheatsheet

Kolen Cheung

Contents

Contents

{:.no_toc}

- Will be replaced with the ToC, excluding the "Contents" header {:toc}

{{TOC}}

Introduction

Examples shows explicit examples for different syntaxes. Other Syntaxes show the syntaxes that can't be shown explicitly.

Organization

- Header levels (except possibly the last header level): features in groups
- Last header level or a list: different syntaxes
- TaskPaper-styled tags to indicate in what favor of Markdown such syntax is supported
    - `@markdown`: supported by original markdown, hence understood to be supported by all variants of markdown
    - `@ghpages`: GitHub-Favored Markdown, built by kramdown with GFM option. i.e. GitHub Pages' GitHub-Favored Markdown
    - `@mmd`: MultiMarkdown
    - `@pandoc`: pandoc-favored markdown
    - `@phpextra`: PHP Markdown Extra (inspired some syntax in pandoc and mmd and gfm, not exhaustively tested here)

Note:

- You might see `<!-- \begin{comment} -->`...`<!-- \end{comment} -->`. This is for mmd to tex to pdf use only. Ignore this.

Examples

Header

@markdown

See Emphasis and Other Syntaxes to see alternative Setext-style header styles @markdown

Header *Containing Styling* and a Link

@markdown

Header Containing Attributes

@pandoc @phpextra

Header Unnumbered

@pandoc

Header Unnumbered 2

@pandoc

Auto Cross Reference

- Link to Header @pandoc @ghpages @mmd
- Link to Header @pandoc @mmd
- Header @mmd @pandoc
- Header @mmd @pandoc

User defined reference [userdefinedreference]

- [userdefinedreference][] @mmd @pandoc(extension:mmd_header_identifiers)
- Link to "Header Containing Attributes" @pandoc
- another-link @pandoc

Deeper Levels of Headers

Header4

Header5

Header6

Backslash Escapes

testing @markdown

Emphasis

- *italic* or *italic* @markdown
- **bold** or **bold** @markdown
- ***bold italic*** or ***bold italic*** @markdown
- ~~strikethrough~~ @pandoc
- Small caps @pandoc @markdown(html)

CriticMarkup

Visually it looks like emphasis. Functionally it is much more, and called Critic Markup @mmd

- Deletions from the original text: This is {–is –}a test.
- Additions: This {++is ++}a test.
- Substitutions: This {~~isn't~>is~} a test.
- Highlighting: This is a {==test==}.
- Comments: This is a test{>>What is it a test of?<<}.

See more at CriticMarkup—MultiMarkdown Documentation.

Horizontal Rules

@markdown

---

3 or more hyphens or asterisks

Break

@markdown

No break like this

Soft break
like this

Hard break

like this

Superscript & Subscript

- x^2 @mmd
- d~o @mmd
- x^{a+b} @mmd @pandoc
- x$_{y,z}$ @mmd @pandoc
- P$_{a\ cat}$ @pandoc

Smarty Pants

@markdown(extension:smartypants) @pandoc(–smart) @ghpages

- "Example 1"
- 'Example 2'
- "Example 3"
- en–dash
- em—dash
- ellipsis. . .

Abbreviations (PHP Markdown Extra)

@mmd @phpextra @pandoc(extension:abbreviations)

HTML: HyperText Markup Language [W3C]: World Wide Web Consortium
*PANDOC: Pandoc will simply ignore this if the extension is used. A graceful fallback.

Testing abbreviations: HTML, W3C (mouseover it to see)

Lists

Ordered Lists

@markdown

1. test
2. test
3. test

Unordered Lists

@markdown

- test
- test

- test

Nested Lists

@markdown

- test
    - test
- test
    1. test
    2. test
        - test
            1. test
            2. test
    3. test
- test

Note about LaTeX output in mmd/pandoc:

- The Maximum nesting level of lists in LaTeX is 4. The quick hack is to mix itemize and enumerate alternatively to go beyond this.

Cutoff a List

@markdown

1. one
2. two
3. three

1. uno
2. dos
3. tres

- item one
- item two

```
{ my code block }
```

List Item in a Block

@markdown

- First paragraph.

  Continued.

- Second paragraph. With a code block, which must be indented eight spaces:

```
    { code }
```

Fancy Lists

@pandoc

1. one
2. two

9) Ninth
10) Tenth
11) Eleventh
    i. i
    ii. ii
    iii. iii

(2) Two
(3) Three

1. Four

- Five

Definition Lists

Method 1

@mmd @phpextra @pandoc @ghpages

Physics The Fundamental of Science
Describe the Nature
Make Prediction

Method 2

@ghpages @pandoc @mmd

Term 1 Definition 1

Term 2 with *inline markup* Definition 2

```
    { some code, part of Definition 2 }
```

Third paragraph of definition 2.

Numbered Example Lists

@pandoc

    (1) My first example will be numbered (1).
    (2) My second example will be numbered (2).

Explanation of examples.

    (3) My third example will be numbered (3).

    (4) This is a good example.

As (4) illustrates, . . .

Code

- `testing` @markdown
- `\[\ket{a}\]` @pandoc

Fenced Code Blocks

Method 1

@markdown

```
test
test
    test
    # test
```

Method 2

@markdown(partial:language-not-supported) @ghpages @pandoc @mmd

```
\nabla \times \mathbf{E} = - \frac{\partial \mathbf{B}}{\partial t}
```

Method 3

@pandoc

```
test
test
    test
    # test
```

```
100   test
101   test
102       test
103       # test
```

Block-quotes

@markdown

> **Test**
>
> test
>
> > test
> >
> > test
>
> - test
> - test

Block-quotes Quoting Codes

@markdown

    \newcommand...

Line Blocks

@ghpages(partial) @pandoc

The limerick packs laughs anatomical
In space that is quite economical.
   But the good ones I've seen
   So seldom are clean
And the clean ones so seldom are comical

200 Main St.
Berkeley, CA 94718

Tables

Method 1

@ghpages @pandoc @mmd

Table 1: Notice how pandoc can have optional caption like this

Right	Left	Default	Center
12	12	12	12
123	123	123	123
1	1	1	1

Method 2

@mmd

[Table Caption] | | Grouping || | Left align | Right align | Center align | |:————|————:|:————:| | This | This | This | | column | column | column | | will | will | will | | be | be | be | | left | right | center | | aligned | aligned | aligned | | And a big grouping is like this |||

Method 3

@pandoc

Table 2: Demonstration of simple table syntax.

Right	Left	Center	Default
12	12	12	12
123	123	123	123
1	1	1	1

Method 4

@pandoc

Table 3: Here's the caption. It, too, may span multiple lines.

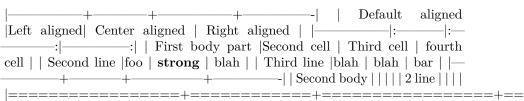| Centered Header	Default Aligned	Right Aligned	Left Aligned
First	row	12.0	Example of a row that spans multiple lines.
Second	row	5.0	Here's another one. Note the blank line between rows.

Method 5

@pandoc

Table 4: Sample grid table.

Fruit	Price	Advantages
Bananas	$1.34	- built-in wrapper - bright color
Oranges	$2.10	- cures scurvy - tasty

Method 6

@ghpages

|—————+————+—————+————-| | | Default aligned |Left aligned| Center aligned | Right aligned | |—————|:————|:————:|————:| | First body part |Second cell | Third cell | fourth cell | | Second line |foo | **strong** | blah | | Third line |blah | blah | bar | |—————+————+—————+————-|| Second body | | | | | 2 line | | | | |================+===========+================+================ | Footer row | | | | | |—————+————+—————+————-|

See Syntax | kramdown

Links

- https://www.wikipedia.org @pandoc(extension:autolink_bare_uris)
- https://www.wikipedia.org @markdown
- Wikipedia.org @markdown
- Wikipedia.org @markdown
- Mail to GitHub @markdown

Reference Links

- Search here @markdown
- A [link][] with attributes. @mmd
- [Another link to the link above][link]. @mmd
- A link1 with attributes. @markdown
- Another link. @markdown
- link3. @markdown

[link]: image.png "Title" class=external style="border: solid black 1px;"

Footnotes

- Footnotes [^This is a mmd inline footnote] @mmd
- Footnotes [1] @pandoc

Reference Footnotes

- Footnotes[2] @markdown
- Long Footnotes [3] @pandoc @ghpages @mmd

This paragraph won't be part of the note, because it isn't indented.

Glossaries

A special kind of footnote [4]. @mmd

See more at Glossary—MultiMarkdown Documentation.

---

[1] This is a pandoc inline footnote

[2] This is a footnote

[3] Here's one with multiple blocks.

Subsequent paragraphs are indented to show that they belong to the previous footnote.
```
{ some.code }
```
The whole paragraph can be indented, or just the first line. In this way, multi-paragraph footnotes work like multi-paragraph list items.

[4] glossary: term (optional sort key) The actual definition belongs on a new line, and can continue on just as other footnotes. Note how it fallbacks gracefully in Markdown.

Citations

It can looks like footnotes in HTML output.

MultiMarkdown

@mmd

- This is a statement that should be attributed to its source p. 23.

Not cited

See more at Citations—MultiMarkdown Documentation.

Pandoc

@pandoc

Very powerful but complicated. See more at Citations—Pandoc Documentation.

Images

-

@markdown

Reference Images

-
@markdown
- [An Image with Attributes][wikipedia] @mmd @pandoc(extension:mmd_link_attributes)
- @pandoc @phpextra(partial)

- a reference
  with attributes. @pandoc @phpextra(partial)

[wikipedia]: image.png "Title of the Image" width=40px height=40px

Image with Links by Nesting Image and Link

-

  @markdown

Block Level Images

- Block level: HTML `figure` element in MultiMarkdown @mmd @pandoc

Figure 1: ***Block*** **Level**

RAW

HTML

- This should *not* be markdown (or is it?)

  @markdown

- This *is* markdown

  @mmd @pandoc(non-default-extension:markdown_attribute)

See more at Raw—MultiMarkdown Documentation. See test in [Babelmark 2 - Compare markdown implementations](http://johnmacfarlane.net/babelmark2/?normalize=1&text=%3Cdiv%3E

LaTeX

- @mmd
- @pandoc(parsed)

- \begin{. . . } @pandoc

Other Syntaxes

Metadata

Note: mmd accepts capitalized metadata keys but others do not. For maximum compatibility, `author(s)`, `title`, etc. should be in lower cases.

MultiMarkdown Metadata Block

@mmd @pandoc(extension:mmd_title_block)

```
title:    A Sample MultiMarkdown Document
author:   Fletcher T. Penney
date:     February 9, 2011
comment:  This is a comment intended to demonstrate
          metadata that spans multiple lines, yet
          is treated as a single value.
CSS:      http://example.com/standard.css
```

See more at Metadata—MultiMarkdown Documentation.

Pandoc Title Block

@pandoc

```
% title
% author(s) (separated by semicolons)
% date
```

YAML Metadata Block

@Mmd(Partial)

@pandoc @ghpages

```
---
title:    A Sample MultiMarkdown Document
author:   Fletcher T. Penney
date:     February 9, 2011
tags: [nothing, nothingness]
abstract: |
  This is the abstract.
```

```
  It consists of two paragraphs.
---
```

TOC

Pandoc

@pandoc

Use `--toc` as a command argument.

MultiMarkdown

@mmd

`{{TOC}}`, see beginning. It preprocess the headings and generate a ToC on its own, and doesn't give instruction for LaTeX to generate one. A hack is like this:

```
---
...
LaTeX Input:    mmd-load-toc-setcounter
LaTeX Input:    mmd-load-toc
...
---
<!-- \begin{comment} -->
{{TOC}}
<!-- \end{comment} -->
...
```

See more at ickc/peg-multimarkdown-latex-support: Default support files for generating LaTeX documents with MMD 3 through MMD 5.

Kramdown

@ghpages

```
# Contents
{:.no_toc}

* Will be replaced with the ToC, excluding the "Contents" header
{:toc}
```

Math

MathJax is assumed. MathJax has many configurable options. See MathJax TeX and LaTeX Support — MathJax 2.6 documentation.

Markdown

@markdown

Add the following at the beginning of the document:

```
<script type="text/javascript"
    src="https://cdn.mathjax.org/mathjax/latest/MathJax.js?config=TeX-AMS_CHTML-full">
    </script>
```

MathJax.js is used and any codes within math delimiters are treated as raw HTML and to be processed by MathJax.

MathJax delimiter are `$$...$$`, `\\(...\\)` and `\\[...\\]` (because an extra `\` can be used to escape from MarkDown).

Depending on the markdown parser, extra tricks might be needed to make sure nothing within the math delimiter is treated as markdown (see TeX and LaTeX in HTML documents — MathJax 2.6 documentation). `$...$` can be used with MathJax configuration (see TeX and LaTeX math delimiters — MathJax 2.6 documentation).

MultiMarkdown and Pandoc

There are subtleties how math should be used in HTML+MathJax and LaTeX output from single markdown source. See more in Testing LaTeX Environments Usage in MathJax From Markdown Conversion (including mmd and pandoc).

MultiMarkdown

@mmd

Add the following metadata at the beginning of the document:

```
HTML header:    <script type="text/javascript"
    src="https://cdn.mathjax.org/mathjax/latest/MathJax.js?config=TeX-AMS_CHTML-full">
    </script>
```

MultiMarkdown math delimiter are `$...$`, `$$...$$`, `\\(...\\)` and `\\[...\\]`.

Pandoc

@pandoc

For pandoc, add `--mathjax` in the command-line argument.

Default math delimiter for pandoc is `$...$`, `$$...$$`. Other options are configurable. See more in Pandoc - Pandoc User's Guide.

Inline Math

- $1 + 1$
- \(1 + 1\)

Block Math

-
$$RR^T = I$$

- \[A^T_S = B\]

Other Examples

-
$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

-
$$\dot{x} = \sigma(y - x)$$
$$\dot{y} = \rho x - y - xz$$
$$\dot{z} = -\beta z + xy$$

-
$$\left(\sum_{k=1}^{n} a_k b_k \right)^2 \leq \left(\sum_{k=1}^{n} a_k^2 \right) \left(\sum_{k=1}^{n} b_k^2 \right)$$

-
$$\mathbf{V}_1 \times \mathbf{V}_2 = \begin{vmatrix} \mathbf{i} & \mathbf{j} & \mathbf{k} \\ \frac{\partial X}{\partial u} & \frac{\partial Y}{\partial u} & 0 \\ \frac{\partial X}{\partial v} & \frac{\partial Y}{\partial v} & 0 \end{vmatrix}$$

-
$$P(E) = \binom{n}{k} p^k (1 - p)^{n-k}$$

-
$$\frac{1}{\left(\sqrt{\phi \sqrt{5}} - \phi \right) e^{\frac{2}{5}\pi}} = 1 + \frac{e^{-2\pi}}{1 + \frac{e^{-4\pi}}{1 + \frac{e^{-6\pi}}{1 + \frac{e^{-8\pi}}{1 + \ldots}}}}$$

- $$\nabla \times \vec{\mathbf{B}} - \frac{1}{c}\frac{\partial \vec{\mathbf{E}}}{\partial t} = \frac{4\pi}{c}\vec{\mathbf{j}}$$
$$\nabla \cdot \vec{\mathbf{E}} = 4\pi\rho$$
$$\nabla \times \vec{\mathbf{E}} + \frac{1}{c}\frac{\partial \vec{\mathbf{B}}}{\partial t} = \vec{\mathbf{0}}$$
$$\nabla \cdot \vec{\mathbf{B}} = 0$$

- $$1 + \frac{q^2}{(1-q)} + \frac{q^6}{(1-q)(1-q^2)} + \cdots = \prod_{j=0}^{\infty} \frac{1}{(1-q^{5j+2})(1-q^{5j+3})}, \qquad \text{for } |q| < 1.$$

File Transclusion

@mmd

See more at File Transclusion—MultiMarkdown Documentation.

References

Some examples are directly or indirectly copied from the following documentations:

1. Pandoc - Pandoc User's Guide
2. MultiMarkdown User's Guide
3. Syntax | kramdown