Yet Another Markdown Cheatsheet Including MarkDown, MultiMarkdown, pandoc, GFM and LaTeX Math Syntax by MathJax

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March 30, 2016

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$\begin{array}{c} {\rm Part\ I} \\ {\rm Introduction} \end{array}$

1. ORGANIZATION 5

Examples (Part II) shows explicit examples for different syntaxes. Other Syntaxes (Part V) show the syntaxes that can't be shown explicitly.

1 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
 - Cmarkdown: supported by original markdown, hence understood to be supported by all variants of markdown
 - Qghpages: GitHub-Favored Markdown, built by kramdown with GFM option.
 i.e. GitHub Pages' GitHub-Favored Markdown
 - @mmd: MultiMarkdown
 - **Opandoc**: pandoc-favored markdown
 - Ophpextra: PHP Markdown Extra (inspired some syntax in pandoc and mmd and gfm, not exhaustively tested here)
- TaskPaper Tags
 - @...(partial): partial supports only
 - 0...(+...): when the extension is used
 - Opandoc(--...): when the command line argument is used
 - @pandoc(parsed): not verbatim, but parsed

Note:

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

Part II

Examples

2. HEADER 7

2 Header

@markdown

See Emphasis (chapter 4) and Other Syntaxes (Part V) to see alternative Setext-style header styles @markdown

2.1 Header Containing Styling and a Link

@markdown

2.2 Header Containing Attributes {#identifier .class1 key=value1}

@pandoc @phpextra

2.3 Header Unnumbered {-}

@pandoc

2.4 Header Unnumbered 2 {.Unnumbered}

@pandoc

2.5 Auto Cross Reference

- Link to Header (chapter 2) @pandoc @ghpages @mmd
- Link to Header (chapter 2) @pandoc @mmd
- Header (chapter 2) @mmd @pandoc
- Header (chapter 2) @mmd @pandoc

2.6 User defined reference

- ullet userdefined reference (section 2.6) @mmd
- Link to userdefinedreference (section 2.6) @mmd @pandoc(+mmd_header_identifiers)
- Link to "Header Containing Attributes" (??) @pandoc
- another-link (??) @pandoc

2.7 Deeper Levels of Headers

2.7.1 Header4

2.7.1.1 Header5

2.7.1.1.1 Header6 3 Backslash Escapes

testing @markdown

4 Emphasis

- italic or italic @markdown
- bold or bold @markdown
- ullet bold italic or bold italic @markdown
- $\sim\sim$ strikethrough $\sim\sim$ @pandoc
- Small caps @pandoc @markdown(html)

4.1 CriticMarkup

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

See more at CriticMarkup—MultiMarkdown Documentation¹.

5 Horizontal Rules

@markdown		
3 or more hyphens	or asterisks	

6 Break

@markdown
No break like this
Soft break
like this
Hard break

 $^{^{1} \}rm http://fletcher.github.io/MultiMarkdown-5/criticmarkup.html$

like this

7 Superscript & Subscript

- \bullet x^2 @mmd
- \bullet d_o @mmd
- \bullet x^{a+b} @mmd @pandoc
- \bullet $x_{y,z}$ @mmd @pandoc
- Pa\ cat

 @pandoc

8 Smarty Pants

@markdown(+smartypants) @pandoc(-smart) @ghpages

- "Example 1"
- 'Example 2'
- \bullet en-dash
- \bullet em—dash
- ellipsis...

@mmd

• "Example 3"

9 Abbreviations (PHP Markdown Extra)

```
@mmd @phpextra @pandoc(+abbreviations)
```

Testing abbreviations: HyperText Markup Language (HTML), World Wide Web Consortium (W3C) (mouseover it to see)

10 Lists

10.1 Ordered Lists

@markdown

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

10. LISTS 10

10.2 Unordered Lists

@markdown

- test
- test
- \bullet test

10.3 Nested Lists

@markdown

- test
 - test
- \bullet test
 - 1. test
 - 2. test
 - test
 - a) test
 - b) 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.

10.4 Cutoff a List

@markdown

- 1. one
- 2. two
- 3. three
- 1. uno
- 2. dos
- 3. tres
- item one

10. LISTS 11

```
• item two
end of list
{ my code block }
```

10.5 List Item in a Block

@markdown

 $\bullet\,$ First paragraph.

Continued.

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

```
{ code }
```

10.6 Fancy Lists

@pandoc

Part III

. one

Part IV

. two

9) Ninth 10) Tenth 11) Eleventh i. i ii. ii iii. iii (2) Two (5) Three 1. Four * Five

11 Definition Lists

11.1 Method 1

@mmd @phpextra @pandoc @ghpages

Physics The Fundamental of Science

Describe the Nature

Make Prediction

11.2 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.

12 Numbered Example Lists

@pandoc

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

Explanation of examples.

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

(@good) This is a good example.

As (@good) illustrates, ...

13 Code

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

13.1 Fenced Code Blocks

13.1.1 Method 1

```
@markdown

test

test

test

# test
```

13.1.2 Method 2

13.1.3 Method 3

```
@pandoc
```

```
\sim\sim\simmarkdown test test test # test \sim\sim\sim {#mycode .markdown .numberLines startFrom="100"} test test test # test \sim\sim\sim
```

14 Block-quotes

@markdown

14.0.1 Test

test

 test

test

- test
- test

14.1 Block-quotes Quoting Codes

@markdown

\newcommand...

15 Line Blocks

@ghpages(partial) @pandoc

 \mid The limerick packs laughs an atomical \mid In space that is quite economical. \mid But the good ones I've seen \mid So seldom are clean \mid And the clean ones so seldom are comical 16. TABLES

| 200 Main St. | Berkeley, CA 94718

16 Tables

16.1 Method 1

@ghpages @pandoc @mmd

 $\mid \mathbf{1} \mid \mathbf{1} \mid \mathbf{1} \mid \mathbf{1} \mid \mathbf{1} \mid$ Notice how pandoc can have optional caption like this

16.2 Method 2

@mmd

Table 1: Table Caption

Left align	Right align	Grouping Center align
This	This	This
column	column	column
will	will	will
be	be	be
left	$_{ m right}$	center
aligned	aligned	aligned
And a big	g grouping is li	ke this

16.3 Method 3

@pandoc Right Left Center Default ——— ——— ————————————————————————————	- 12 12 12 12 1:	23 123 123 123 1	111
16.4 Method 4			
@pandoc			
		_	
Centered Default Right Left Header Aligned Aligned	0		

Second row 5.0 Here's another one. Note the blank line between

17. LINKS 17

rows.

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

16.5 Method 5

@pandoc Sample grid table.

16.6 Method 6

```
@ghpages See Syntax | kramdown^2
```

17 Links

- $\bullet \ \, \rm https://www.wikipedia.org \ @pandoc(+autolink_bare_uris)\\$
- https://www.wikipedia.org @markdown
- Wikipedia.org³ @markdown
- Wikipedia.org⁴ @markdown
- Mail to GitHub⁵ @markdown

17.1 Reference Links

- Search here⁶ @markdown
- A link⁷ with attributes. @mmd
- Another link to the link above⁸. @mmd
- A link1⁹ with attributes. @markdown

²http://kramdown.gettalong.org/syntax.html#tables

³https://www.wikipedia.org

⁴https://www.wikipedia.org

 $^{^5}$ mailto:support@github.com

⁶https://www.google.com

⁷image.png

⁸image.png

⁹/foo/bar.html

18. FOOTNOTES 18

- Another link¹⁰. @markdown
- link3¹¹. @markdown

18 Footnotes

- Footnotes ¹² @mmd
- Footnotes ^[This is a pandoc inline footnote] @pandoc

18.1 Reference Footnotes

- Footnotes¹³ @markdown
- Long Footnotes ¹⁴ @pandoc @ghpages @mmd

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

18.2 Glossaries

A special kind of footnote . @mmd See more at Glossary—MultiMarkdown Documentation 15 .

18.3 Citations

It can looks like footnotes in HTML output.

18.3.1 MultiMarkdown

@mmd

• This is a statement that should be attributed to its source (1, p. 23).

See more at Citations—MultiMarkdown Documentation ¹⁶.

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.

¹⁰http://fsf.org

^{11/}bar#special

¹²This is a mmd inline footnote

 $^{^{13}\}mathrm{This}$ is a footnote

¹⁴Here's one with multiple blocks.

¹⁵http://fletcher.github.io/MultiMarkdown-5/glossary.html

 $^{^{16} \}rm http://fletcher.github.io/MultiMarkdown-5/citations.html$

18.3.2 Pandoc

@pandoc

Very powerful but complicated. See more at Citations—Pandoc Documentation¹⁷.

19 Images



 17 http://pandoc.org/README.html#citations

19.1 Reference Images



@markdown



@mmd @pandoc(+mmd_link_attributes)



.class width=30 height=20px} @pandoc @phpextra(partial)

 \bullet a reference ! [image][ref] with attributes. @pandoc @phpextra(partial)

[ref]: image.png "optional title" {#id .class key=val key2="val 2"}

 $\{\#\mathrm{id}$

19.2 Image with Links by Nesting Image and Link



@markdown

19.3 Block Level Images

• Block level: HTML figure element in MultiMarkdown @mmd @pandoc

¹⁸https://www.wikipedia.org/

20. RAW 23



Figure 1: Block Level



20. RAW 24

 $See \ more \ at \ Raw-MultiMarkdown \ Documentation^{19}. \ See \ test \ in \ [Babelmark 2-Compare markdown implementations] (http://johnmacfarlane.net/babelmark2/?normalize=1\&text=\%3Cdiv\%3EThis+should) (http://johnmacfarlane.net/babelmark2) (http://$

20.2 LaTeX

- @mmd
- \newcommand\rawlatex{} @pandoc(parsed)

¹⁹ http://fletcher.github.io/MultiMarkdown-5/raw.html

$\begin{array}{c} {\rm Part} \ {\rm V} \\ \\ {\rm Other} \ {\rm Syntaxes} \end{array}$

21. METADATA 26

21 Metadata

CSS:

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

21.1 MultiMarkdown Metadata Block

@mmd @pandoc(+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. http://example.com/standard.css

See more at Metadata—MultiMarkdown Documentation²⁰.

21.2 Pandoc Title Block

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

21.3 YAML Metadata Block

 $^{^{20} \}rm http://fletcher.github.io/MultiMarkdown-5/metadata.html$

22. TOC 27

22 TOC

22.1 Pandoc

@pandoc

Use --toc as a command argument.

22.2 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-multimark down-latex-support: Default support files for generating LaTeX documents with MMD 3 through MMD $5^{21}.$

22.3 Kramdown

```
@ghpages
    # Contents
    {:.no_toc}

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

23 Math

MathJax is assumed. MathJax has many configurable options. See MathJax TeX and LaTeX Support — MathJax 2.6 documentation²².

23.1 Markdown

@markdown

Add the following at the beginning of the document:

 $^{^{21} \}rm https://github.com/ickc/peg-multimarkdown-latex-support$

²²http://mathjax.readthedocs.org/en/latest/tex.html

23. MATH 28

```
<script type="text/javascript"
src="https://cdn.mathjax.org/mathjax/latest/MathJax.js?config=TeX-AMS_CHTML-
</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 documentation²³). \$...\$ can be used with MathJax configuration (see TeX and LaTeX math delimiters — MathJax 2.6 documentation²⁴).

23.2 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)²⁵.

23.2.1 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-
</script>
```

MultiMarkdown math delimiter are \dots , \dots , \dots , and \dots .

23.2.2 Pandoc

@pandoc(-mathjax)

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 Guide²⁶.

23.3 Inline Math

- 1+1
- $1 + 1 @pandoc(+tex_math_double_backslash)$

 $^{^{23}}$ http://mathjax.readthedocs.org/en/latest/tex.html#tex-and-latex-in-html-documents

 $^{^{24} \}rm http://mathjax.readthedocs.org/en/latest/tex.html\#tex-and-latex-math-delimiters$

²⁵https://github.com/ickc/mathjax-latex-md-mmd-pandoc

²⁶http://pandoc.org/README.html#non-pandoc-extensions

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23.4 Block Math

•

$$RR^T = I$$

•

$$A_S^T = B$$

23.5 Other Examples

•

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

• \$\$ \begin{aligned} \\dot{x} & = \sigma(y-x) \ \\dot{y} & = \rho x - y - xz \ \\dot{z} & = -\beta z + xy \end{aligned} \$\$\$

.

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

•

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

•

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

•

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

• \$\$ \begin{aligned} \nabla \times \vec{\mathbf{B}} -\, \frac1c\, \frac{\partial\vec{\mathbf{E}}}{\partial t} & = \frac{4\pi^{2}}{c} \cdot \frac{1c}{j} \ \abla \cdot \sqrt{E}} & = 4 \pi \cdot \frac{4\pi^{2}}{c} \cdot \frac{1c}{\pi^{2}} & = 4 \pi \cdot \frac{4\pi^{2}}{c} \cdot \frac{1c}{\pi^{2}} & = 4 \pi \cdot \frac{1c}{\pi^{2}

•

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

24 File Transclusion

@mmd

See more at File Transclusion—MultiMarkdown Documentation²⁷.

²⁷http://fletcher.github.io/MultiMarkdown-5/transclusion.html

$\begin{array}{c} {\rm Part\ VI} \\ {\rm References} \end{array}$

BIBLIOGRAPHY31

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

- 1. Pandoc Pandoc User's Guide 28
- 2. MultiMarkdown User's Guide 29
- 3. Syntax | kramdown³⁰

Bibliography

- [1] John Doe. Some Big Fancy Book. Vanity Press, 2006.
- [2] John Doe. Another Big Fancy Book. Vanity Press, 2016. 18

²⁸http://pandoc.org/README.html 29http://fletcher.github.io/MultiMarkdown-5/

³⁰ http://kramdown.gettalong.org/syntax.html#tables