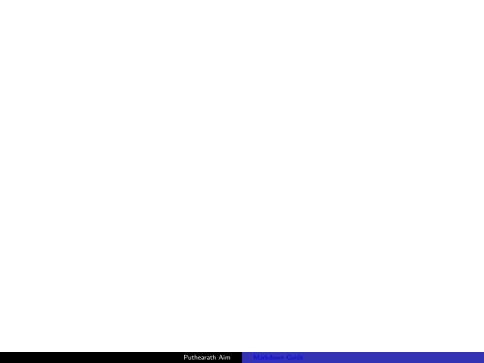# Markdown Guide

Puthearath Aim

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Introduction

Welcome to my (arguably scuffed) markdown guide. The aim to provide the general quirks of markdown; intended to be revisited as often as needed.

I tend to forget some specific markdown syntax; by which this guide provides a nice reference for. Also, writing this markdown guide in markdown is just wonderful.

What is markdown?

Markdown is a markup language with plain text formatting syntax (basically better text). It converts plain text to HTML.

Why use markdown?

- Markdown is incredibly lightweight compared to rich text formats; such as `.rtf` or `.docx`.
- It is arguably the simplest markup language there is.
- Can be converted to a plethora of formats seamlessly, such as `.html`, `.tex`, `.pdf`, etc.

Where is markdown used?

- Repositories such as GitHub (`README.md` files) for software documentation.
- Forums and blog posts within applications or websites.
- Static websites.
- Documents and notes.
- Email formatting.
- This markdown guide.

Headings and Sub-headings

Prepending a # before some text promotes it to a heading. Prepending additional #'s demotes it to a sub-heading, sub-sub-heading and so on.

Adding one (or multiple) = below the text also promotes it to a heading. Use – for a sub-heading.

```
# Heading
## Sub-heading
### Sub-sub-heading
#### Sub-sub-sub-heading
##### Sub-sub-sub-sub-heading

Also Heading
===
Also sub-heading
---
```

Heading

Sub-heading

Sub-sub-heading

Sub-sub-sub-heading

Sub-sub-sub-sub-heading

Also Heading

Also sub-heading

Generic Formatting

Raw

```
Paragraphs are separated by a blank line.

Two spaces at the end of a line
produce a line break.

Text attributes: _italic_, *also italic*, **bold**, __also bold_
```

Compiled

Paragraphs are separated by a blank line.
Two spaces at the end of a line
produce a line break.
Text attributes: *italic*, *also italic*, **bold**, **also bold**, `mono-space`,
~~strike-through~~.

Lists

A blank line between list elements (sometimes) produces a larger space between the elements.

Raw

```
Unordered list:

* Fruits
    - Apples

    - Oranges

        + Orange
        - Green

+ Meat

    Subsequent indented paragraphs belong to the list element.

* Dairy
```

Links

A [Wikipedia](https://www.wikipedia.org "Wikipedia Home") and [G

A <https://directlink.tv> and <directlink@email.org>.

[identifier]: https://www.google.com "Google Home"

A Wikipedia and Google hyper-link.
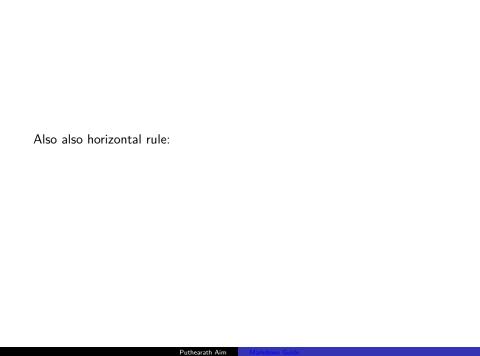A https://directlink.tv and directlink@email.org.

Horizontal Rule

Horizontal rules are not used that often.

```
Horizontal rule:

---

Also horizontal rule:

---

Also also horizontal rule:

***
```

Horizontal rule:

Also horizontal rule:

Also also horizontal rule:
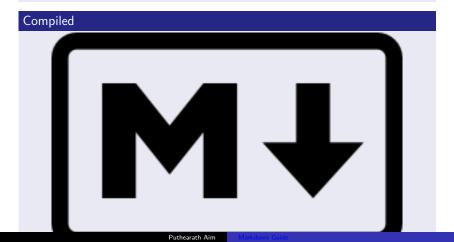
Images

Text within the quotes after the image directory is the text displayed when the image directory is not found.

Raw

```
![Markdown Icon](./figures/markdown-icon.png  "Markdown Icon")
```

Compiled

Block-quotes

Prepend a > in every line of the block for a block-quote.

Raw

```
> Append two space in first line
> for a line-break in block-quote.
>
> Second paragraph in block-quote.
>
>> Deeper block-quote with additional `>`.
>>
>>> Even deeper block-quote.
>>>
```

Compiled

> *Append two space in first line*
> *for a line-break in blockquote.*
>> *Second paragraph in blockquote.*
>> *Deeper blockquote with additional >.*
>> *Even deeper blockquote.*

Code-blocks

Surround the block with three `` ` ``'s or three ~'s (above and below the block).

Optionally append the first line with the name of the defined language for syntax highlighting.

A code-block can also be formed with a prepended tab (four spaces) in each line.

Raw

```
```Python
# A code-block
import numpy as np
def func(x):
    """Returns sin squared of a number."""
    assert type(x) in (int,float)
    return np.sin(x)**2
if __name__ == '__main__':
    pass
```
~~~C++
```

Comments

```
<Comment>

<!--
Comment
-->

[//]: # (This is the most platform independent syntax.)

[///]: # (This will not be included in the output file.)
```

Compiled

Footnotes

Raw

```
Text[^footnote-identifier] with a footnote[^long-footnote] and i

[^footnote-identifier]: Footnote information.

[^long-footnote]: Footnote with multiple blocks.

    Subsequent indented paragraphs belong to the footnote.

        code.isNone() == True
```

Compiled

Text[1] with a footnote[2] and inline[3].

---

[1] Footnote information.

[2] Footnote with multiple blocks.

[3] You do not have to create an identifier.

LaTeX

Surround LaTeX code with double $.

Raw

`$$\frac{some}{69}\cdot\frac{420}{LaTeX}$$`

Compiled

$$\frac{some}{69}\cdot\frac{420}{LaTeX}$$

Tables

Generally and unfortunately, for some table styles, you cannot directly set the column width; unless you perform some wonky stuff with its behaviour.

Raw

```
|Left|Centre|Right|
|:--|:-:|--:|
|1,1|1,2|1,3|
|2,1|2,2|2,3|
|3,1|3,2|3,3|
|4,1|4,2|4,3|

Table: Pipe Table
```

Compiled

Table 1: Pipe Table

Left	Centre	Right
1,1	1,2	1,3

Pandoc Tables

```
Raw

Left    Centre    Right
-----   --------  ------
1,1      1,2        1,3
2,1      2,2        2,3
3,1      3,2        3,3
4,1      4,2        4,3

: Simple Table


-----  ------  -----
1,1     1,2     1,3
2,1     2,2     2,3
3,1     3,2     3,3
4,1     4,2     4,3
-----  ------  -----

: Header-less Simple Table
```

Line-block

Prepend a | in each line of the line-block.

This allows new lines without an empty line between each line, which is useful for verses and addresses.

Raw

```
| An iconic lullaby:
|     Twinkle twinkle little star,
|     how I wonder what you are.
|     Up above the world so high,
|     like a diamond in the sky.
|     Twinkle twinkle little star,
|     how I wonder what you are.
```

Compiled

An iconic lullaby:
  Twinkle twinkle little star,
  how I wonder what you are.
  Up above the world so high,
  like a diamond in the sky.

Task-list

Raw
```
- [x] Done.
- [ ] Not done.
```

Compiled

☒ Done.
☐ Not done.

Superscripts and Subscripts

Surround literals between~ for a subscript. Very useful in chemical formulae.

Conversely, surround literals between ˆ for a superscript.

Raw

```
H~2~O is one of the main reasons to why life exists.

f(x) = Ae^-bx^ describes exponential decay.
```

Compiled

H_2O is one of the main reasons to why life exists.
$f(x) = Ae^{-bx}$ describes exponential decay.

Line-break

Raw

\

Compiled

Definition-list

Raw

```
Term
: This is a definition.
: This is an alternate definition.
```

Compiled

Term This is a definition.
This is an alternate definition.

Compiling

I mainly use ghostwriter and pandoc.

ghostwriter

- Can choose `Markdown Flavor` and `Style Sheet` for HTML preview.
- Can see `Outline HUD` and `Documents Statistics HUD`; and can use `ctrl + shift + h` to remove or show them.
- Can `Insert Image` by dragging in an image.
- Can `Copy HTML` with `ctrl + shift + c`.
- Can `Export` directly.
- Can use `Distraction Free Mode` with no HUD and no HTML preview.

pandoc

- To HTML example snippet: `pandoc .\markdown-guide.md -o markdown-guide.html -s --mathjax`.
- To PDF example snipper: `pandoc .\markdown-guide.md -o markdown-guide.pdf --pdf-engine=pdflatex`.
- To beamer example snippet: `pandoc .\markdown-guide.md -o markdown-slide.pdf -t beamer -V theme:Luebeck`.

Explore

- Labels
- Images
- Citations
- Citation Syntax