Markdown Guide

Puthearath Aim

June 19, 2022

Contents

Introduction **3**

What is markdown? **3**

Why use markdown? **3**

Where is markdown used? **3**

Headings and Sub-headings **4**
Raw 4
Formatted 4

Heading **4**
Sub-heading 4
Sub-sub-heading 4

Also Heading **5**
Also sub-heading 5

Generic Formatting **5**
Raw 5
Formatted 5

Lists **5**
Raw 5
Formatted 6

Links **7**
Raw 7
Formatted 7

Horizontal Rule **7**
Raw . . . 7
Formatted . . . 7

Images **8**
Raw . . . 8
Formatted . . . 8

Block-quotes **8**
Raw . . . 8
Formatted . . . 9

Code-blocks **9**
Raw . . . 9
Formatted . . . 10

Comments **10**
Raw . . . 10
Formatted . . . 10

Footnotes **10**
Raw . . . 10
Formatted . . . 11

LaTeX **11**
Raw . . . 11
Formatted . . . 11

Tables **11**
Raw . . . 11
Formatted . . . 12

Pandoc Tables **12**
Raw . . . 12
Formatted . . . 14

Line-block **15**
Raw . . . 15
Formatted . . . 15

Task-list **16**
Raw . . . 16
Formatted . . . 16

Superscripts and Subscripts **16**

Raw 16
Formatted 16

Line-break **16**
Raw 16
Formatted 16

Definition-list **17**
Raw 17
Formatted 17

Software **17**
ghostwriter 17
pandoc 17

Explore **18**

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.

Raw

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

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

Formatted

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__, `mono-space`, ~~strike-
```

Formatted

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

    ```
    if(height<10cm){shortPerson.drinkMilk()}
    ```

- Vegetables

Ordered list:

1. Uno
2) Dos
3) Tres

4. Cuatro
```

Formatted

Unordered list:

- Fruits
  - Apples
  - Oranges
    * Orange
    * Green
- Meat

  Subsequent indented paragraphs belong to the list element.
- Dairy

  `if(height<10cm){shortPerson.drinkMilk()}`
- Vegetables

Ordered list:

1. Uno

2) Dos
3) Tres

4. Cuatro

Links

Raw

```
A [Wikipedia](https://www.wikipedia.org "Wikipedia Home") and [Google][identifier] hyper-li

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

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

Formatted

A Wikipedia and Google hyper-link.

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

Horizontal Rule

Horizontal rules are not used that often.

Raw

```
Horizontal rule:

---

Also horizontal rule:

---

Also also horizontal rule:

***
```

Formatted

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")
```

Formatted

Figure 1: Markdown Icon

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.
```

>>>

Formatted

> 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++
// Another code-block
for(int i=0;i++;i<42){
  Serial.println(i);
}
~~~

    free(malloc(69))
    malloc(free(42))
```

Formatted

```
# 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
```

```
// Another code-block
for(int i=0;i++;i<42){
  Serial.println(i);
}
```

```
free(malloc(69))
malloc(free(42))
```

Comments

Raw

```
<Comment>

<!--
Comment
-->

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

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

Formatted

Footnotes

Raw

```
Text[^footnote-identifier] with a footnote[^long-footnote] and inline^[You do not have to c

[^footnote-identifier]: Footnote information.

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

```
    Subsequent indented paragraphs belong to the footnote.

        code.isNone() == True
```

Formatted

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

LaTeX

Surround LaTeX code with double `$`.

Raw

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

Formatted

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

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|
```

---

[1] Footnote information.

[2] Footnote with multiple blocks.

Subsequent indented paragraphs belong to the footnote.

```
code.isNone() == True
```

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

```
Table: Pipe Table
```

Formatted

Table 1: Pipe Table

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

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


-------------------------------------------------
Left                Centre                   Right
Aligned             Aligned                Aligned
---------------- ----------- --------------------
This sentence       1,2                       1,3
spans two lines
```

```
2,1                 2,2        Note the the blank
                                line between rows.

-------------------------------------------------
```

: Multi-line Table

: Grid Table

```
+-----------+-----------+
|    Default|    Default|
+===========+===========+
|- 0.33,1   |   1,2     |
|- 0.67,1   |           |
+-----------+-----------+
|- 1.33,1   |   2,2     |
|- 1.67,1   |           |
+-----------+-----------+
```

: Piped Grid Table

```
+----+------+-----+
|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|
+----+------+-----+
```

: Header-less Grid 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|
+----+------+-----+
```

Formatted

Table 2: Simple Table

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 3: Header-less 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

Table 4: Multi-line Table

Left Aligned	Centre Aligned	Right Aligned
This sentence spans two lines	1,2	1,3
2,1	2,2	Note the the blank line between rows.

Table 5: Grid Table

Default	Default
• 0.33,1 • 0.67,1	1,2
• 1.33,1 • 1.67,1	2,2

Table 6: Piped Grid Table

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 7: Header-less Grid 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

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.
```

Formatted

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.

Task-list

Raw

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

Formatted

- ☒ Done.
- ☐ Not done.

Superscripts and Subscripts

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

Conversely, surround literals between ^ for a superscript.

Raw

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

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

Formatted

H_2O is one of the main reasons to why life exists.

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

Line-break

Raw

```
\
```

Formatted

Definition-list

Raw

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

Formatted

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

Software

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 src/markdown-guide.md -o build/markdown-guide.html -s --mathjax`.
- To PDF example snippet: `pandoc src/markdown-guide.md -o build/markdown-guide.pdf --pdf-engine=pdflatex`.
- To beamer example snippet: `pandoc src/markdown-guide.md -o build/markdown-slide.pdf -t beamer -V theme:Luebeck`. Note: beamer does not like footnotes that take more than the available space (hence make sure that this is satisfied before converting to beamer); also it is best remove any geometry tags and decrease the font size as well.
- `-s` means standalone and not a fragment; e.g. an HTML file with `head` and `body`.
- `-f` and `-t` specifies input and output format respectively (markdown, latex, html), otherwise format is interpreted from file type.
- `--toc` for table of contents; useful with `-c style.css`.
- Make modifications to `latex-template.tex` from `pandoc -D latex >> latex-template.tex`, and then use `--template=latex-template.tex`.

- Can concatenate multiple input files.

Explore

- Labels
- Images
- Citations
- Citation Syntax