
Headings

The amount of # used denotes the heading level.

```
# Sample Heading 1
## Sample Heading 2
### Sample Heading 3
#### Sample Heading 4
##### Sample Heading 5
```

Sample Heading 1

Sample Heading 2

Sample Heading 3

Sample Heading 4

Sample Heading 5

Alternate Syntax

You can also use = or – to denote heading level 1 and 2 respectively.

```
Sample Heading 1
=====
```

```
Sample Heading 2
-----
```

Sample Heading 1

Sample Heading 2

Line Breaks

Two or more spaces at the end of a line, then hit return/enter.

This sentence
should split.

Emphasis

Bold

****bold****
__bold__
boldin**themiddle**

bold
bold
boldinthemiddle

Italics

italic
italic
*italic*in*themiddle*

italic
italic
*italicin*themiddle

Both Bold and Italic

******both******
___both___
both**in**themiddle

both
both
bothinthemiddle

Strikethrough

~~wrong~~ correct

wrong correct

Blockquote

> This is a blockquoted sentence.

> Sometimes, blockquotes have multiple paragraphs.
>
> Just put a `>` in the space between the paragraphs.
>
> > You can nest blockquotes.
>
> #### Even having other markdown elements is ok in blockquotes.
> - such
> - as
> - bullets (will discuss later).

This is a blockquoted sentence.

Sometimes, blockquotes have multiple paragraphs.

Just put a > in the space between the paragraphs.

You can nest blockquotes.

Even having other markdown elements is ok in blockquotes.

- such
- as
- bullets (will discuss later).

Lists

Ordered Lists

1. This is an ordered list.
2. Very self explanatory.

4. The numbers don't have to be in order.

6. Just as long as you start with `1.`.

1. Indents are also possible.

2. Just do a `TAB`.

1. This is an ordered list.

2. Very self explanatory.

3. The numbers don't have to be in order.

4. Just as long as you start with 1..

1. Indents are also possible.

2. Just do a TAB.

Unordered Lists

- You can use a `-`.

+ You can use a `+`.

* You can use a `*`.

- You can even mix them.

- Same as ordered lists, indentation is possible.

- Just do a `TAB`.

• You can use a -.

• You can use a +.

• You can use a *.

• You can even mix them.

- Same as ordered lists, indentation is possible.

- Just do a TAB.

Task Lists

- [x] ~~Task 1~~ done

- [] Task 2

- [] Task 3

☒ Task 1 done

☐ Task 2

☐ Task 3

Elements in Lists

- Say you have a list.
- I want to put stuff under this item in this list.

So I'll `TAB` to preserve continuity, as well as leave spaces above and below this sentence.

- See? Nothing out of place.
 - Say you have a list.
 - I want to put stuff under this item in this list.

So I'll TAB to preserve continuity, as well as leave spaces above and below this sentence.
 - See? Nothing out of place.

Code Blocks

This entire document is full of them.

This sentence has an inline code block.

Images

Make sure that your images are in the same directory.

![Optional description(in this case, a juuling cat)](image0.jpg)



Figure 1: Optional description(in this case, a juuling cat)

Horizontal Rules

You can make a horizontal rule with three or more asterisks.



You can make a horizontal rule with three or more asterisks.

Links

This is a link to [GitHub](github.com "This is an optional title").

This is a link to [GitHub](#).

URLs and Email Addresses

<https://www.example.com>

<fake@example.com>

<https://www.example.com>

fake@example.com

Links are compatible with emphasis.

Escaping Characters

* Without the backslash, this would be bulleted.

* Without the backslash, this would be bulleted.

Tables

```
| Header | Header 2 |  
|-----|-----|  
| Table | this is a table|  
| The size of columns can be irregular | It doesn't matter |
```

Header	Header 2
Table	this is a table
The size of columns can be irregular	It doesn't matter

Table Alignment

```
| Syntax      | Description | Test Text      |
| :---       | :----:    | ---:          |
| Left align  | Center align | Right align    |
```

Syntax	Description	Test Text
Left align	Center align	Right align

Footnotes

Here's a simple footnote,^[^1] and here's a longer one.^[^bignote]

[^1]: This is the first footnote.

[^bignote]: Here's one with multiple paragraphs and code.

 This is a paragraph.

Here's a simple footnote,¹ and here's a longer one.²

Heading IDs

Heading IDs {#custom-id}

Definition Lists

Definition

: The meaning of a word.

: The meaning of a phrase.

¹This is the first footnote.

²Here's one with multiple paragraphs and code.
 This is a paragraph.

Definition The meaning of a word.

The meaning of a phrase.

Some markdown processors might not show this correctly.

Pandoc, LaTeX, and converting Markdown files into documents/slides

Pandoc

Pandoc is magic and can be used for document conversion of all sorts.

Pandoc and related information can be found [here](#).

LaTeX

The full installation of LaTeX is quite large, around 2 GB, if you want that, use [TeX Live](#).

A smaller LaTeX is [MiKTeX](#). (Around 220 MB for Windows users, less so for OSX/Linux.)

LaTeX allows for formatting complex math equations in Markdown documents, an example of which is this:

```
$$
z \left( 1 + \sqrt{\omega_{i+1} + \zeta - \frac{x+1}{\Theta+1} y + 1} \right)
\backslash \backslash \backslash = \backslash \backslash \backslash 1
$$
```

$$z \left(1 + \sqrt{\omega_{i+1} + \zeta - \frac{x+1}{\Theta+1} y + 1} \right) = 1$$

A guide to LaTeX math can be found [here](#).

Converting Markdown to documents

With Pandoc and LaTeX installed, simply open a terminal at the directory of the .md file and enter the command:

```
pandoc filename.md -o filename.pdf
```

This will produce a basic .pdf of your Markdown file.

Further customization of the way the .pdf is compiled can be found [here](#).

My personal command is this, if you wish to use it:

```
pandoc filename.md -o filename.pdf --template eisvogel -V linkcolor:blue -
-pdf-engine=xelatex --highlight-style monochrome
```

Eisvogel, a custom LaTeX template

I personally like to use a custom template for document compilations, so that my documents don't look like a generic *blargh*.

Details for Eisvogel can be found [here](#).

Converting Markdown to slides

A guide for using Pandoc and Markdown to make slides can be found [here](#).

Here's some decent, non-academic-stuffy-generic looking themes.

[Material Design](#) by GitHub user [edasubert](#)

[Metropolis](#) by GitHub user [matze](#)

These themes are designed to be used primarily with LaTeX, so they may not be necessarily be compatible with Markdown. Your mileage may vary.

Credit where credit is due

A lot of this document is shortened versions of Markdown documentation from various sites.

[Pandoc's Markdown](#)

[Markdown Guide](#)

Some of the elements in this document may break due to the template, differences in pandoc's Markdown and GitHub Markdown, or other weird reasons, apologies for that.