Introduction to MH + MkDocs

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Contents

- Markdown
- GitHub Flavored Markdown
- Typora
- Pandoc
- Mkdocs



Markdown

- Lightweight markup language
- Can be converted to many formats



GitHub Flavored Markdown

Markdown Editor

- GitHub Gist
- Stackedit.io

Headers

```
# This is an <h1> tag
## This is an <h2> tag
###### This is an <h6> tag
```

This is an <h1> tag

This is an <h2> tag

This is an <h6> tag

Emphasis

```
*This will be italic* _This will also be italic_

**This will be bold** __This will also be bold__
```

You **can** combine them

Unordered Lists

```
* Item 1
* Item 2
  * Item 2a
  * Item 2b
```

- Item 1
- Item 2
 - Item 2a
 - o Item 2b

Ordered Lists

- 1. Item 1
- 2. Item 2
- 3. Item 3
 - 1. Item 3a
 - 2. Item 3b

- 1. Item 1
- 2. Item 2
- 3. Item 3
 - 1. Item 3a
 - 2. Item 3b

Links

```
http://github.com
```

[GitHub](http://github.com)

http://github.com GitHub

lmages

```
![SUTD Logo]
(https://www.sutd.edu.sg/assets/sutd/img/logo-
white.png)
```



Tables

```
First Header | Second Header
----- | Content from cell 1 | Content from cell 2
Content in the first column | Content in the second column
```

First Header	Second Header
Content from cell 1	Content from cell 2
Content in the first column	Content in the second column

Activity 1 (10 mins)

- Make a to-do list with 3 categories
 - 1. To do
 - 2. In progress
 - 3. Done

```
#### To do
1. Pray for good fortune
- Temple
- Bell curve god
##### In progress
1. Catching up on **_SLEEP_**
##### Done
1. School
```

To do

- 1. Pray for good fortune
 - Temple
 - Bell curve god

In progress

1. Catching up on **SLEEP**

Done

1. School

Inline code

I think you should use an `<addr>` element here instead.

I think you should use an <addr> element here instead.

Syntax highlighting

```
```javascript
function fancyAlert(arg) {
 if(arg) {
 $.facebox({div:'#foo'})
 }
}
```

```
```python
def foo():
    if not bar:
       return True
```
```

## Blockquotes

As Kanye West said:

- > We're living the future so
- > the present is our past.

As Kanye West said:

We're living the future so the present is our past.



#### Works with HTML.



## Typora

http://typora.io/

#### Inline Math

The identity matrix is 
$$\left[egin{array}{cc} 1 & 0 \ 0 & 1 \end{array}
ight].$$
  $e=mc^2$ 

## Chemistry

\$\ce{CH4 + 2 \$\left( \ce{02 + 79/21 N2} \right)\$}\$

$$CH_4$$
 +  $2(O_2 + rac{79}{21}N_2)$ 

#### Introduction to LaTeX

```
20 January 2020 (Monday)
TT16 (2.201)
7 - 10 pm
```

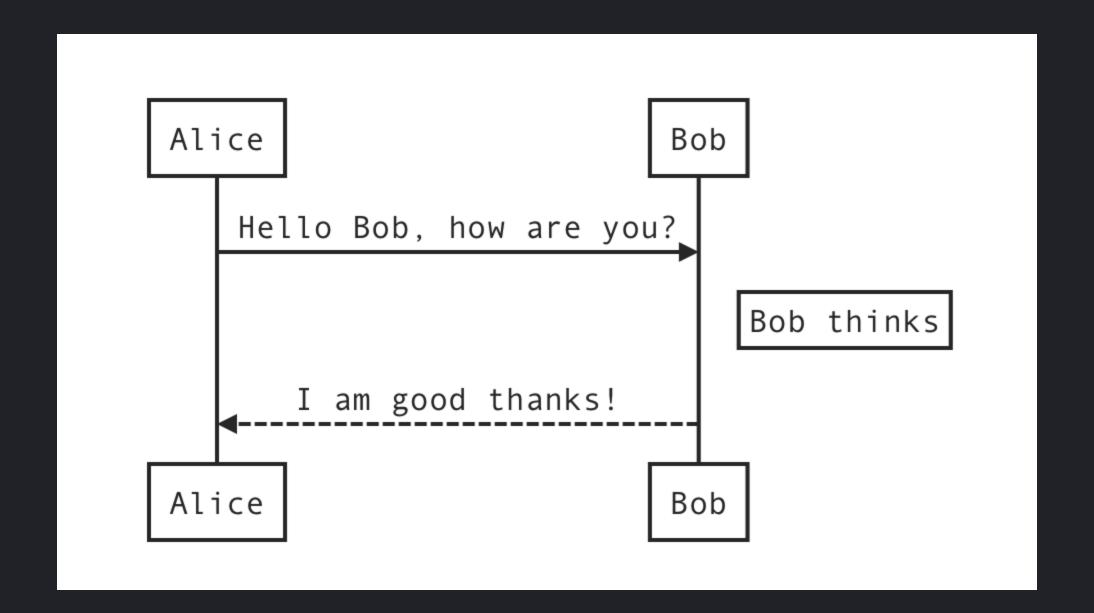
## Diagrams

- Mermaid mermaid-js
  - Sequence
  - Flowchart
  - Gantt
  - Class Diagram
  - State DiagramPie Chart

## UML Sequence

js-sequence

```
```sequence
Alice->Bob: Hello Bob, how are you?
Note right of Bob: Bob thinks
Bob-->Alice: I am good thanks!
```

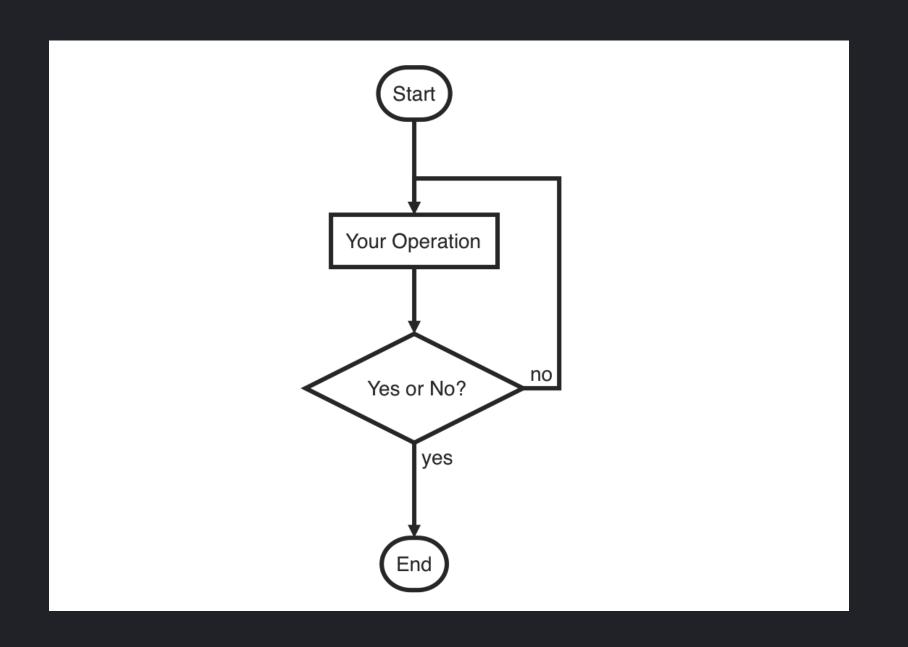


Flowchart

flowchart.js

```
flow
st=>start: Start
op=>operation: Your Operation
cond=>condition: Yes or No?
e=>end

st->op->cond
cond(yes)->e
cond(no)->op
```





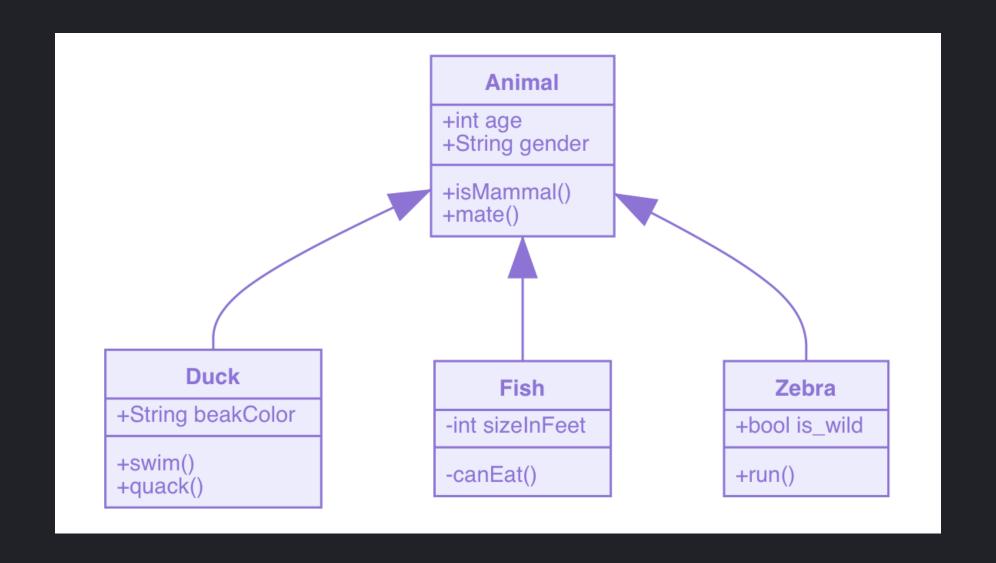
Mermaid

mermaid-js

Class Diagram

```
```mermaid
classDiagram
 Animal <|-- Duck
 Animal <|-- Fish
 Animal <|-- Zebra
 Animal : +int age
 Animal : +String gender
 Animal: +isMammal()
 Animal: +mate()</pre>
```

```
class Duck{
 +String beakColor
 +swim()
 +quack()
class Fish{
 -int sizeInFeet
 -canEat()
class Zebra{
 +bool is_wild
 +run()
```

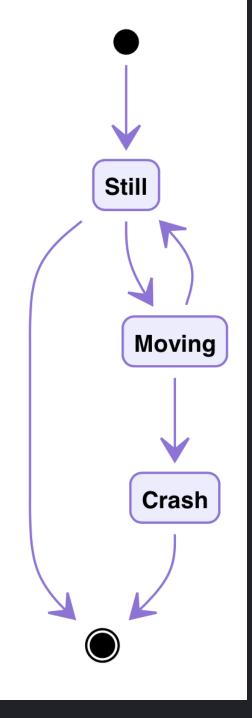


# State Diagram

```
```mermaid
stateDiagram
    [*] --> Still
Still --> [*]

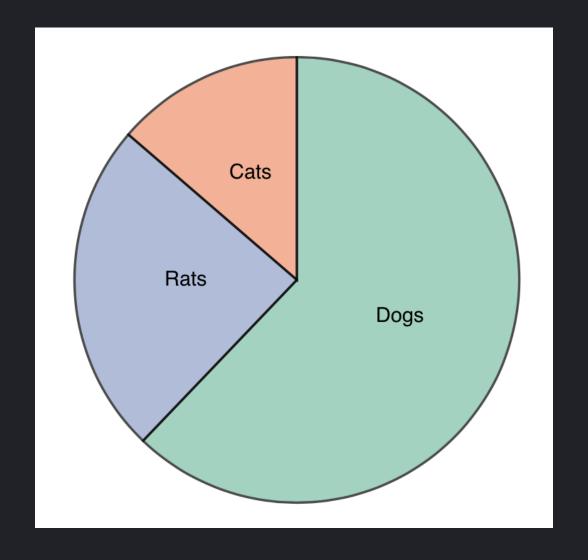
Still --> Moving
Moving --> Still
Moving --> Crash
Crash --> [*]

```
```



### Pie Chart

```
```mermaid
pie
    title Pie Chart
    "Dogs" : 386
    "Cats" : 85
    "Rats" : 150
````
```



### Pandoc

Swiss-army knife to convert content

#### Conversion between

- PDF
- Markup formats
- HTML formats
- Ebooks
- XML formats
- ullet TeX formats
- Word processor formats
- Interactive notebook formats

• • •

#### Demo

Converting Markdown to PDF

### MkDocs

Project documentation with Markdown.

# Installing MkDocs

pip install mkdocs

#### Material theme for MkDocs

pip install mkdocs-material

#### Create a new site

• cd to the appropriate folder

mkdocs new my-project
cd my-project

# Editing mkdocs.yml

```
site_name: Test
nav:
 - Home: index.md
 - About: about.md
theme:
 name: "material"
```

# Serving the site

mkdocs serve site

• Site up at localhost:8000

### Activity 2 (15 min)

- Play around with the Material themed site
- Refer to Getting Started for more customization

# Building the site

mkdocs build site

• By default, files at /site

#### **GitHub** Pages

Free web hosting for GitHub users

#### **Personal Sites**

- at *username*.github.io
- Repository should be 'username.github.io'
- Source: master branch
  - Contents of \site to be placed here

### **Project Sites**

- at username.github.io/project
- Repository can have any name
- Source: master branch /docs folder
  - Contents of \site to be placed inside /docs

# Activity 3 (5 mins)

Host the website on GitHub.

### Powered by



Markdown Presentation Ecosystem

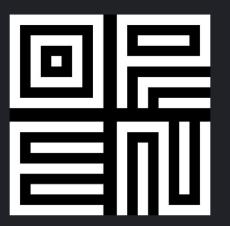
This entire slide deck was done entirely in Markdown.

### Source Code



OpenSUTD / IAP2020-MkDocs

# OpenSUTD



An open organisation owned by the SUTD community.

### Signing off,

flmnt.

@flamanta