# MkDocs Frinze Template

**Making documentation easier**

*Frinze Erin Lapuz*

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# 1. Welcome to MkDocs Frinze Template

This is my template that I have created while I was working for a cool workplaces namely Lotterywest and UWA System Health Lab. This is a template that contains extensions that are very nice to have when you just want a standard documentation for anything!

For full documentation visit:

- mkdocs.org for the generic MkDocs
- PyMdown Extensions for the different extensions that are installed
- MkDocs Material for the customisation of the web server documentation.

## 1.1 How easy is this to deploy?

1. Fork / Clone This Repo
2. Follow the installation
3. Delete the markdown files here and replace it with your own
4. Maybe put your own Nav in the `mkdocs.yml` file
5. Deploy somewhere ! (easist way Github Pages see here)

## 1.2 What inspired me to do this?

I have seen that a lot of the documentation is really scattered for Mkdocs. Like the documentation is good and there are a lot of them, but all I really wanted was a generic template with most of the extensions that I will need without being caught up on which one to pick, and so on; so, I ended up creating this which aims to give you a very easy way to start your documentation. In addition, there was some hussle sometimes, in trying to figure out why some extensions aren't working, and it is just frustrating and time-consuming.

Just erase those markdown files in the `/docs` file, and you can get started.

## 1.3 Installation

Install this preferably in your global environment because this is just a code generator and so.

```
pip install -r requirements.txt
```

## 1.4 Commands

- `mkdocs new [dir-name]` - Create a new project.
- `mkdocs serve` - Start the live-reloading docs server. Very helpful when you want to take a look at the docs before deploying.
- `mkdocs build` - Build the documentation site.
- `mkdocs -h` - Print help message and exit.
- `mkdocs gh-deploy` - Deploy in github pages

## 1.5 Project layout

```
mkdocs.yml    # The configuration file.
docs/
    index.md  # The documentation homepage.
    ...       # Other markdown pages, images and other files.
```

## 1.6 Extending this template

I made this template to be simple such that it gives you a brief overview of how you would be writing your documentation with a few configuration. This is the type of documentation that you just build on top of.

If in the scenario that you feel that I missed that is essential to be in the template, please feel free to give this repository a pull request. However, if you feel that you would like to extend this template much more, I would highly recommend to visit the original Mkdocs Material Documentation.

# 2. Extensions Installed Overview

This is a VERY VERY small overview to what you can do with this. I will just highlight some of them, because those are the only documentation syntax that I commonly use and usually remember.

## 2.1 Admonitions

These are kind of those fancy boxes that you usually in cool Science Books that adds extra information.

**Note**

As you can see this box, is very attractive.

The syntax for this is:

```
!!! note
As you can see this box, is very attractive.
```

**What If You want a different Title**

The syntax for this is:

```
!!! note "What If You want a different Title"
As you can see this box, is very attractive.
```

### 2.1.1 Icons

More info here

You can also change these icons by changing the first word after `!!!` or `???`.

`note`, `seealso`

**Note**

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nulla et euismod nulla. Curabitur feugiat, tortor non consequat finibus, justo purus auctor massa, nec semper lorem quam in massa.

`abstract`, `summary`, `tldr`

**Abstract**

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nulla et euismod nulla. Curabitur feugiat, tortor non consequat finibus, justo purus auctor massa, nec semper lorem quam in massa.

`info`, `todo`

**Info**

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nulla et euismod nulla. Curabitur feugiat, tortor non consequat finibus, justo purus auctor massa, nec semper lorem quam in massa.

`tip`, `hint`, `important`

> **Tip**
>
> Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nulla et euismod nulla. Curabitur feugiat, tortor non consequat finibus, justo purus auctor massa, nec semper lorem quam in massa.

`success`, `check`, `done`

> **Success**
>
> Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nulla et euismod nulla. Curabitur feugiat, tortor non consequat finibus, justo purus auctor massa, nec semper lorem quam in massa.

`question`, `help`, `faq`

> **Question**
>
> Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nulla et euismod nulla. Curabitur feugiat, tortor non consequat finibus, justo purus auctor massa, nec semper lorem quam in massa.

`warning`, `caution`, `attention`

> **Warning**
>
> Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nulla et euismod nulla. Curabitur feugiat, tortor non consequat finibus, justo purus auctor massa, nec semper lorem quam in massa.

`failure`, `fail`, `missing`

> **Failure**
>
> Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nulla et euismod nulla. Curabitur feugiat, tortor non consequat finibus, justo purus auctor massa, nec semper lorem quam in massa.

`danger`, `error`

> **Danger**
>
> Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nulla et euismod nulla. Curabitur feugiat, tortor non consequat finibus, justo purus auctor massa, nec semper lorem quam in massa.

`bug`

> **Bug**
>
> Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nulla et euismod nulla. Curabitur feugiat, tortor non consequat finibus, justo purus auctor massa, nec semper lorem quam in massa.

`example`

**Example**

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nulla et euismod nulla. Curabitur feugiat, tortor non consequat finibus, justo purus auctor massa, nec semper lorem quam in massa.

`quote`, `cite`

**Quote**

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nulla et euismod nulla. Curabitur feugiat, tortor non consequat finibus, justo purus auctor massa, nec semper lorem quam in massa.

### 2.1.2 Collapsible Block

More info here

If things are getting a little bit crowded, why not make some of them collapsible?

**Example of a More Complex Documentation**

Here is the basic idea of bubble sort!

```python
def bubble_sort(items):
    for i in range(len(items)):
        for j in range(len(items) - 1 - i):
            if items[j] > items[j + 1]:
                items[j], items[j + 1] = items[j + 1], items[j]
```

**The Syntax for the Example Above**

~~~
    ??? Example "Example of a More Complex Documentation"
    Here is the basic idea of bubble sort!
    ```python
    def bubble_sort(items):
        for i in range(len(items)):
            for j in range(len(items) - 1 - i):
                if items[j] > items[j + 1]:
                    items[j], items[j + 1] = items[j + 1], items[j]
    ```
~~~

## 2.2 Code Highlight

This is powered by codehilite. Whenever, you need code, this is the one that makes it pretty.

*For example:*

```python
def bubble_sort(items):
    for i in range(len(items)):
        for j in range(len(items) - 1 - i):
            if items[j] > items[j + 1]:
                items[j], items[j + 1] = items[j + 1], items[j]
```

**Syntax of the Example Above**

~~~
``` python linenums="1"
def bubble_sort(items):
    for i in range(len(items)):
        for j in range(len(items) - 1 - i):
            if items[j] > items[j + 1]:
                items[j], items[j + 1] = items[j + 1], items[j]
```
~~~

### 2.2.1 Highlight Specific Code Lines

What if I want to show some cool lines? I could highlight which specific line number should be highlighted.

```python
def bubble_sort(items):
    for i in range(len(items)):
        for j in range(len(items) - 1 - i):
            if items[j] > items[j + 1]:
                items[j], items[j + 1] = items[j + 1], items[j]
```

**Syntax of the Example Above**

~~~
``` python hl_lines="2 3"
def bubble_sort(items):
    for i in range(len(items)):
        for j in range(len(items) - 1 - i):
            if items[j] > items[j + 1]:
                items[j], items[j + 1] = items[j + 1], items[j]
```
~~~

## 2.3 Latex / Math Symbol Renderer

This is for math nerds that needs some Maths in their documentation. More info on Latex here.

For example, the Pythagoras Theorem $$ a^2 + b^2 = c^2 $$

**Syntax of the Example Above**

```
$$ a^2 + b^2 = c^2 $$
```

### 2.3.1 Inline Latex

According to the results with the p-value \(p < 0.05\), it means that we will reject the null Hypothesis \(H_0\), and that there is a significant difference in the means.

## 2.4 Footnotes

*Woah woah woah! Getting a little bit nerdy referencer here!*

"You can tell that I don't know much about referencing"[1]. If you click this shiny number, it takes you to the bottom of the page where the reference is.

**Syntax of the Example Above**

```
"You can tell that I don't know much about referencing"[^1]

[^1]:
Book of Wisdom - John Doe
```

## 2.5 Content Tabs

Very useful for when you need one or the other.

For example, when dealing with multiple programming languages.

**C**

```c
#include <stdio.h>

int main(void) {
  printf("Hello world!\n");
  return 0;
}
```

**C++**

```cpp
#include <iostream>

int main(void) {
  std::cout << "Hello world!" << std::endl;
  return 0;
}
```

**Syntax of Above**

~~~~
=== "C"

    ``` c
    #include <stdio.h>

    int main(void) {
    printf("Hello world!\n");
    return 0;
    }
    ```

=== "C++"

    ``` c++
    #include <iostream>

    int main(void) {
    std::cout << "Hello world!" << std::endl;
    return 0;
    }
    ```
~~~~

## 2.6 Icons and Emoji

Just worth mentioning, not too sure if you're going to use it.

- – `.icons/material/account-circle.svg`
- – `.icons/fontawesome/regular/laugh-wink.svg`
- – `.icons/octicons/octoface-16.svg`

**Syntax of Above**

```
- :material-account-circle: – `.icons/material/account-circle.svg`
- :fontawesome-regular-laugh-wink: – `.icons/fontawesome/regular/laugh-wink.svg`
- :octicons-octoface-16: – `.icons/octicons/octoface-16.svg`
```

## 2.7 Images

Can be done with Markdown or HTML.

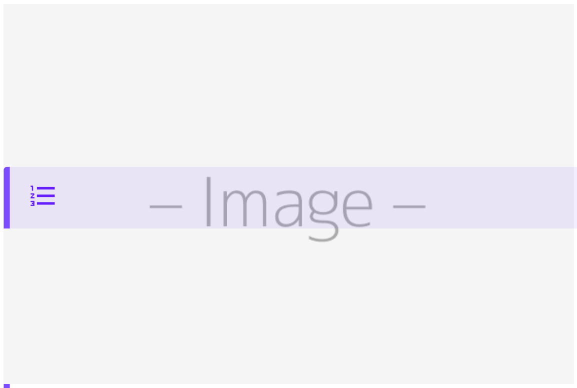
### 2.7.1 Image Captioning

*The Logo that Daphne from Coders for Causes gave me*

**Syntax of Above**

```
<figure>
    <img src="../images/docs.png" width="100" />
    <figcaption>The Logo that Daphne from Coders for Causes gave me</figcaption>
</figure>
```

### 2.7.2 Image Alignment



This is for when you have paragraphs and some text, but you really wanted those fancy images on the side. You can either say `left` or `right`. Now Let me just fill this with some random words so that the image doesn't look to weird.

**Syntax Above**

```
![Placeholder](https://dummyimage.com/600x400/f5f5f5/aaaaaa&text=–%20Image%20–){: align=left width=300 }

This is for when you have paragraphs and some text, but you really wanted those fancy images on the side. You can either say `left` or `right`. Now Let me
just fill this with some random words so that the image doesn't look to weird.
```

## 2.8 Graph In Markdown / Mermaid Markdown

More Information here.

What if you really just want to create some fancy graphs, but you really can't be bothered to:

1. Load some other software
2. Draw this graph that you wanted to show
3. Save this graph that you want to show
4. Upload this graph somewhere
5. Link this image back to this documentation

Like there are just soooo many steps.

Introducing **mermaid markdown**.

graph TD A --> B & C B --> C

**Syntax for Above**

~~~
```mermaid
graph TD
    A --> B & C
    B --> C
```
~~~

How about more complex ones? Is this complex enough for your

graph TD A[Hard] -->|Text| B(Round) B --> C{Decision} C -->|One| D[Result 1] C -->|Two| E[Result 2]

**Syntax for Above**

~~~
```mermaid
graph TD
    A[Hard] -->|Text| B(Round)
    B --> C{Decision}
    C -->|One| D[Result 1]
    C -->|Two| E[Result 2]
```
~~~

## 2.8.1 Some Examples of Other Charts

### Sequence Diagram

**Result**

sequenceDiagram participant Alice participant Bob Alice->>John: Hello John, how are you? loop Healthcheck John->>John: Fight against hypochondria end Note right of John: Rational thoughts
prevail! John-->>Alice: Great! John->>Bob: How about you? Bob-->>John: Jolly good!

**Syntax**

~~~
```mermaid
sequenceDiagram
participant Alice
participant Bob
Alice->>John: Hello John, how are you?
loop Healthcheck
    John->>John: Fight against hypochondria
end
Note right of John: Rational thoughts <br/>prevail!
John-->>Alice: Great!
John->>Bob: How about you?
Bob-->>John: Jolly good!
```
~~~

### Gantt Chart

**Result**

gantt dateFormat YYYY-MM-DD title Adding GANTT diagram to mermaid excludes weekdays 2014-01-10 section A section Completed task :done, des1, 2014-01-06,2014-01-08 Active task :active, des2, 2014-01-09, 3d Future task : des3, after des2, 5d Future task2 : des4, after des3, 5d

**Syntax**

~~~
```mermaid
gantt
dateFormat  YYYY-MM-DD
title Adding GANTT diagram to mermaid
excludes weekdays 2014-01-10

section A section
Completed task            :done,    des1, 2014-01-06,2014-01-08
Active task               :active,  des2, 2014-01-09, 3d
Future task               :         des3, after des2, 5d
Future task2               :         des4, after des3, 5d
```
~~~

### Class Diagram

**Result**

classDiagram Class01 <|-- AveryLongClass : Cool Class03 *-- Class04 Class05 o-- Class06 Class07 .. Class08 Class09 --> C2 : Where am i? Class09 --* C3 Class09 --|> Class07 Class07 : equals() Class07 : Object[] elementData Class01 : size() Class01 : int chimp Class01 : int gorilla Class08 <--> C2: Cool label

**Syntax**

~~~
```mermaid
classDiagram
Class01 <|-- AveryLongClass : Cool
Class03 *-- Class04
Class05 o-- Class06
Class07 .. Class08
Class09 --> C2 : Where am i?
Class09 --* C3
Class09 --|> Class07
Class07 : equals()
Class07 : Object[] elementData
Class01 : size()
Class01 : int chimp
Class01 : int gorilla
Class08 <--> C2: Cool label
```
~~~

---

1. Book of Wisdom - John Doe ↩

# 3. Automatic Site Deployment with Github Action

This is a configuration which allows your documentation from github to auto-deploy to the github pages.

**Why do I need this?**

Let me give you an example, for this documentation it is hosted at https://frinzekt.github.io/mkdocs-frinze-template/ . If this thing is configured, then whenever you modify the github repository, it automatically redeploys in github pages.

## 3.1 How do I do this?

If you look closely in the repository, there is a file `.github/workflows/main.yml`. Copy this file over to you repository. The content of it is roughly like below. Note that you have to change 2 lines highlighted to the path of your documentation.

**Example of Path that you will have to change**

If in the scenario that your repository is just documentation, which means that your `mkdocs.yml` file is in the root, then you don't have to change anything.

However, there are cases where you have a monorepo - a type of repository that contains multiple files such as for example in a software project, there are the documentation files, and source code files. It is quite common to have a file structure that looks like this:

```
frontend/
    ...
backend/
    ...
mkdocs/
    mkdocs.yml    # The configuration file.
    docs/
        index.md  # The documentation homepage.
        ...       # Other markdown pages, images and other files.
```

This means that you will have to change the one highlighted. From the example above here, the correct lines changes are:

`key: ${{ runner.os }}-pip-${{ hashFiles('**/requirements.txt') }}` to `key: ${{ runner.os }}-pip-${{ hashFiles('**/mkdocs/requirements.txt') }}`

and

`python3 -m pip install -r ./requirements.txt` to `python3 -m pip install -r ./mkdocs/requirements.txt`

```
# Workflow for deploying to github
name: Publish docs via GitHub Pages
on:
  push:
    branches:
      - master
      - main
      - mkdocs-experimental
  workflow_dispatch:

jobs:
  deploy:
    name: Deploy docs
    runs-on: ubuntu-latest
    steps:
      - name: Checkout main
        uses: actions/checkout@v2

      - name: Setup Python
        uses: actions/setup-python@v2
        with:
          python-version: '3.8'

      - name: Upgrade pip
        run: |
          # install pip=>20.1 to use "pip cache dir"
          python3 -m pip install --upgrade pip
      - name: Get pip cache dir
        id: pip-cache
        run: echo "::set-output name=dir::$(pip cache dir)"

      - name: Cache dependencies
        uses: actions/cache@v2
        with:
          path: ${{ steps.pip-cache.outputs.dir }}
          key: ${{ runner.os }}-pip-${{ hashFiles('**/requirements.txt') }}
          restore-keys: |
            ${{ runner.os }}-pip-
      - name: Install dependencies
        run: python3 -m pip install -r ./requirements.txt

      - run: mkdocs build
        env:
          ENABLE_PDF_EXPORT: 1

      - name: Deploy
        uses: peaceiris/actions-gh-pages@v3
        with:
          github_token: ${{ secrets.GITHUB_TOKEN }}
          publish_dir: ./site
```

## 3.2 Custom Domain Name

In the scenario that you like a custom domain name such as https://www.tutorial-mkdocs.systemhealthlab.com , follow this documentation.

tldr (too long didn't read) instructions: 1. Go to the domain registar, in my case Cloudflare 2. Register a "CNAME" of the domain/ subdomain going towards `<organisation/githubname>.github.io` (eg. `uwasystemhealth.github.io`) 3. Add a `CNAME` file with the name of the domain/subdomain in the `/docs` folder 4. Give the `CNAME` file a content of the subdomain name (eg. `tutorial-mkdocs.systemhealthlab.com`)