

MkDocs for HamPUG meetings repository

Using MkDocs application to create a static project website off the /docs folder of the HamPUG Github “meetings” repository.

Hamilton Python Users Group

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2019-09-09.

Introduction

- GitHub Pages

You can configure GitHub Pages to publish your site's source files from master, gh-pages, or a /docs folder on your master branch for Project Pages and other Pages sites that meet certain criteria. Refer:: <https://pages.github.com/>

- MkDocs

MkDocs is a fast, simple and downright gorgeous static site generator that's geared towards building project documentation. Documentation source files are written in Markdown, and configured with a single YAML configuration file.

Refer: <https://www.mkdocs.org/>

MkDocs – Markdown to Static Website 1/4

Edit file using:
ReText or Mark Text

My Website

This is **my website**.

This document is created using [Markdown]
(<https://www.markdownguide.org/>).

Folder: docs/

Markdown file:
index.md

**MkDocs
Application**

Users
Browser

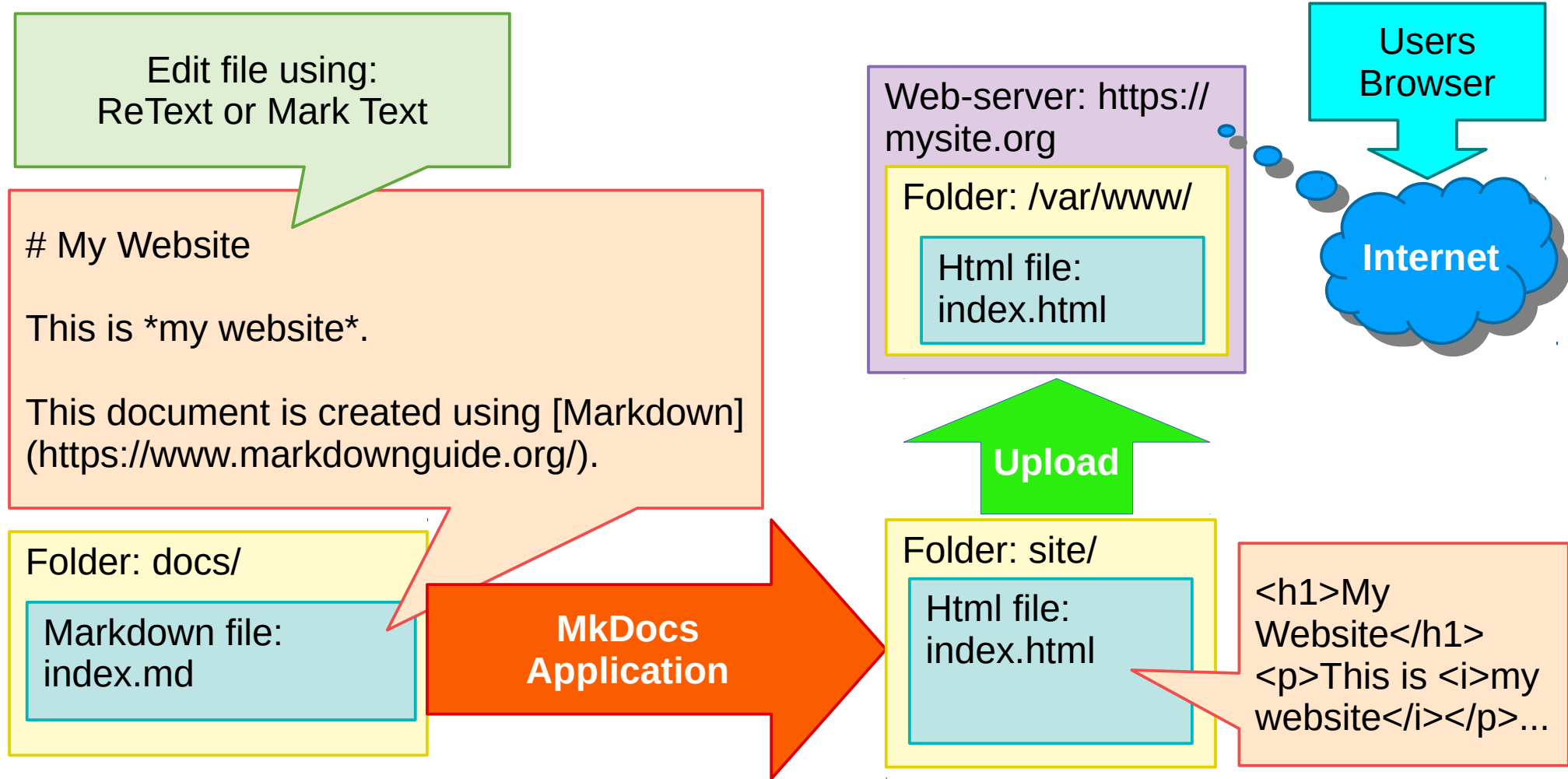
Local web-server:
<http://127.0.0.1:8000>

Folder: site/

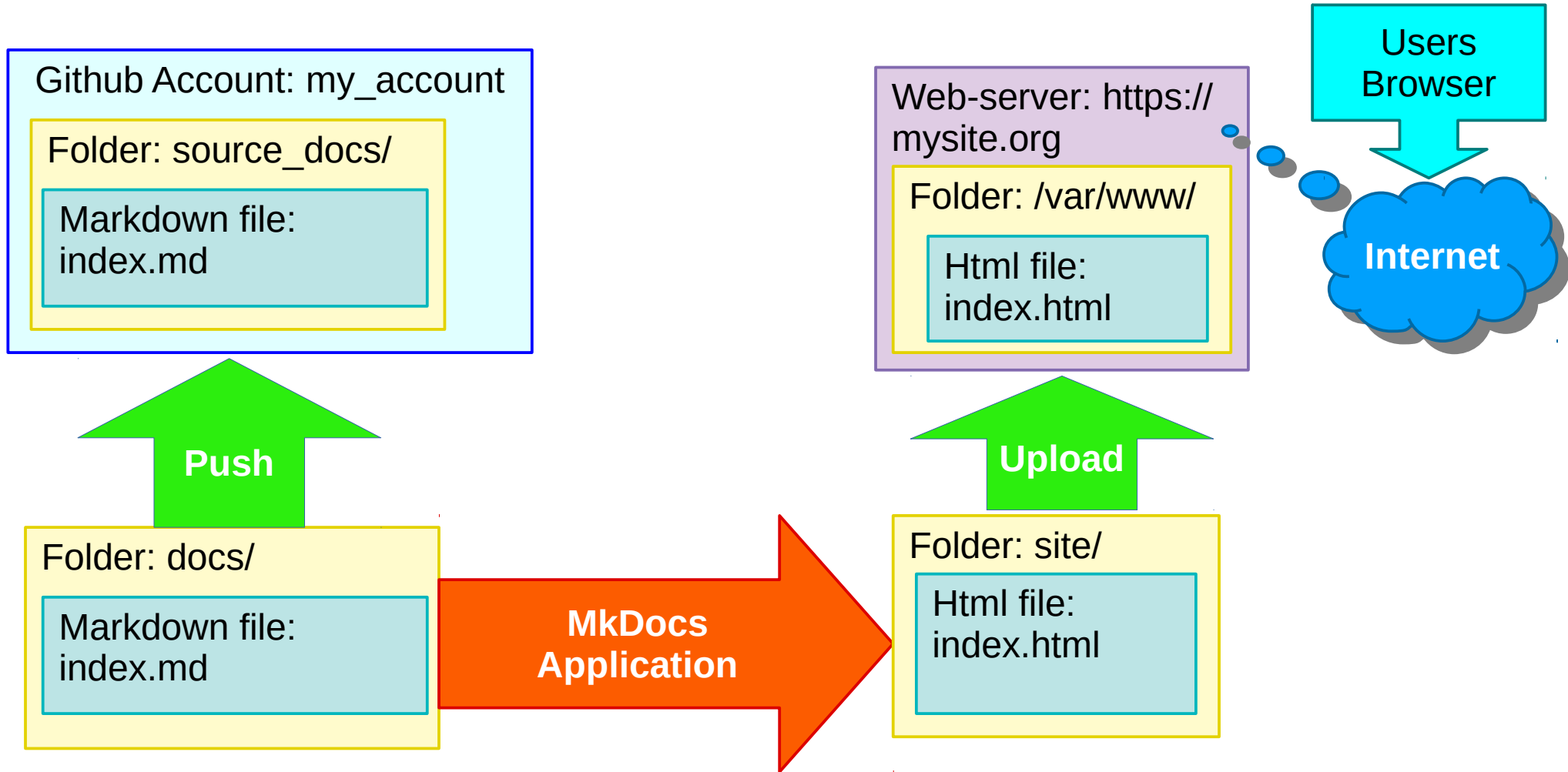
Html file:
index.html

<h1>My
Website</h1>
<p>This is <i>my
website</i></p>...

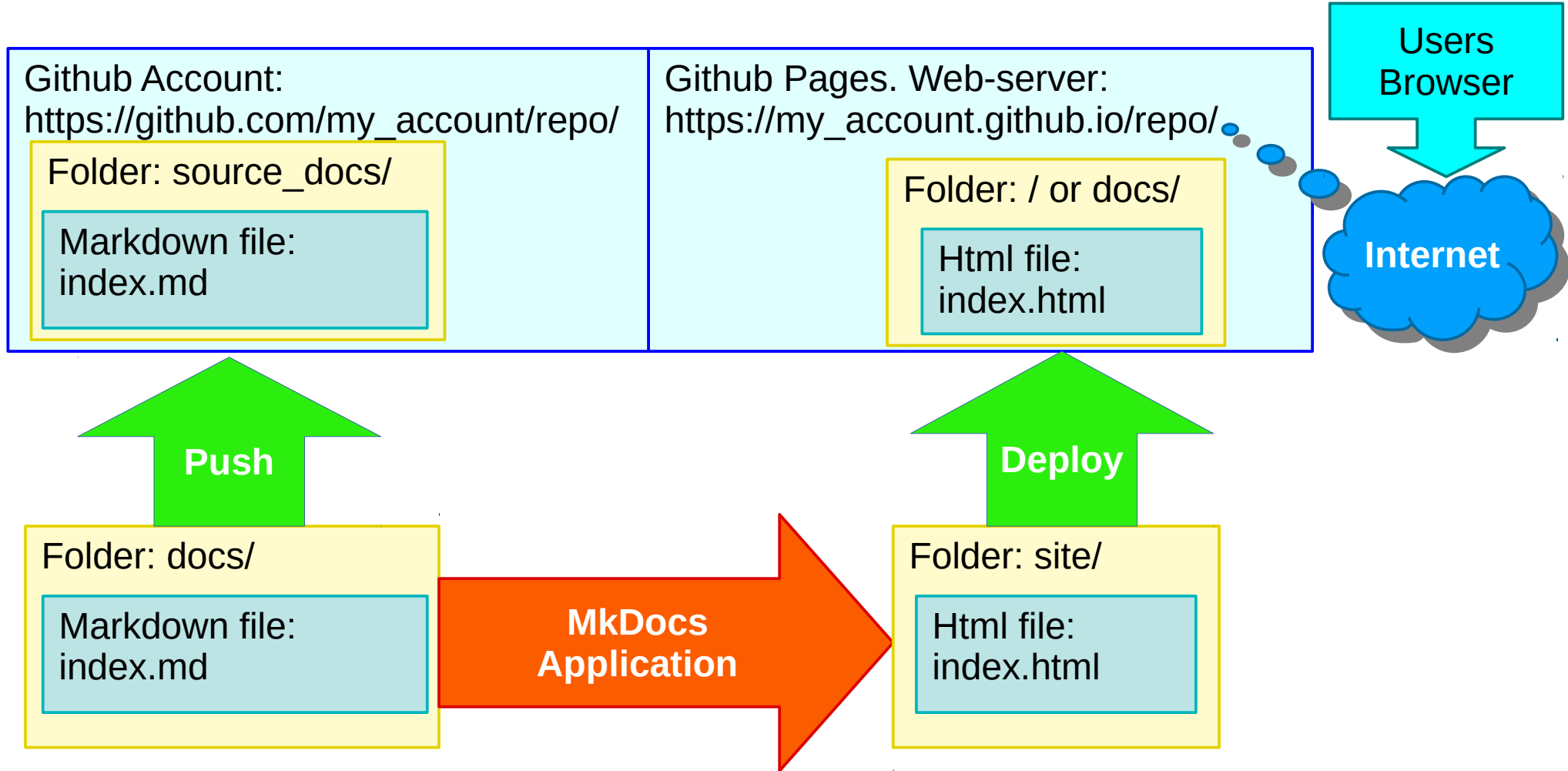
MkDocs – Markdown to Static Website 2/4



MkDocs – Markdown to Static Website 3/4



MkDocs – Markdown to Static Website 4/4

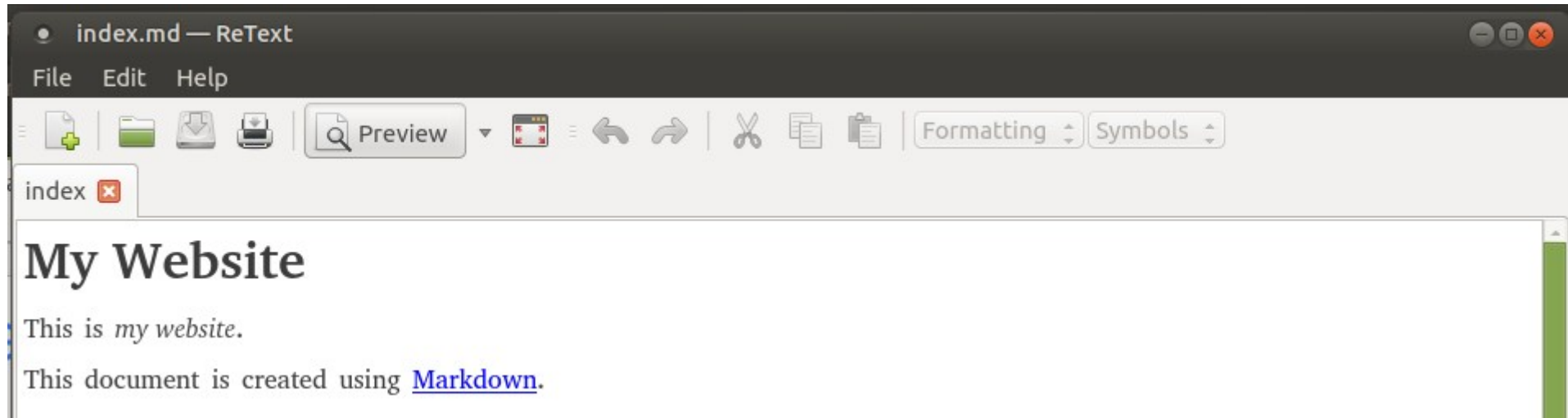


MkDocs – Create index.md file



A screenshot of the ReText editor window titled "index.md — ReText". The window has a menu bar with "File", "Edit", and "Help". Below the menu is a toolbar with icons for file operations (new, open, save, print), a "Preview" button, undo/redo arrows, cut/copy/paste icons, and "Formatting" and "Symbols" dropdown menus. A tab labeled "index" is active. The text area contains the following Markdown code, with lines 1 through 6 highlighted in blue:

```
1 # My Website
2
3 This is *my website*.
4
5 This document is created using [Markdown](https://www.markdownguide.org/).
6
```



A screenshot of the ReText editor window titled "index.md — ReText", showing the rendered HTML output of the Markdown code from the previous image. The window layout is identical. The text area displays the rendered content:

My Website

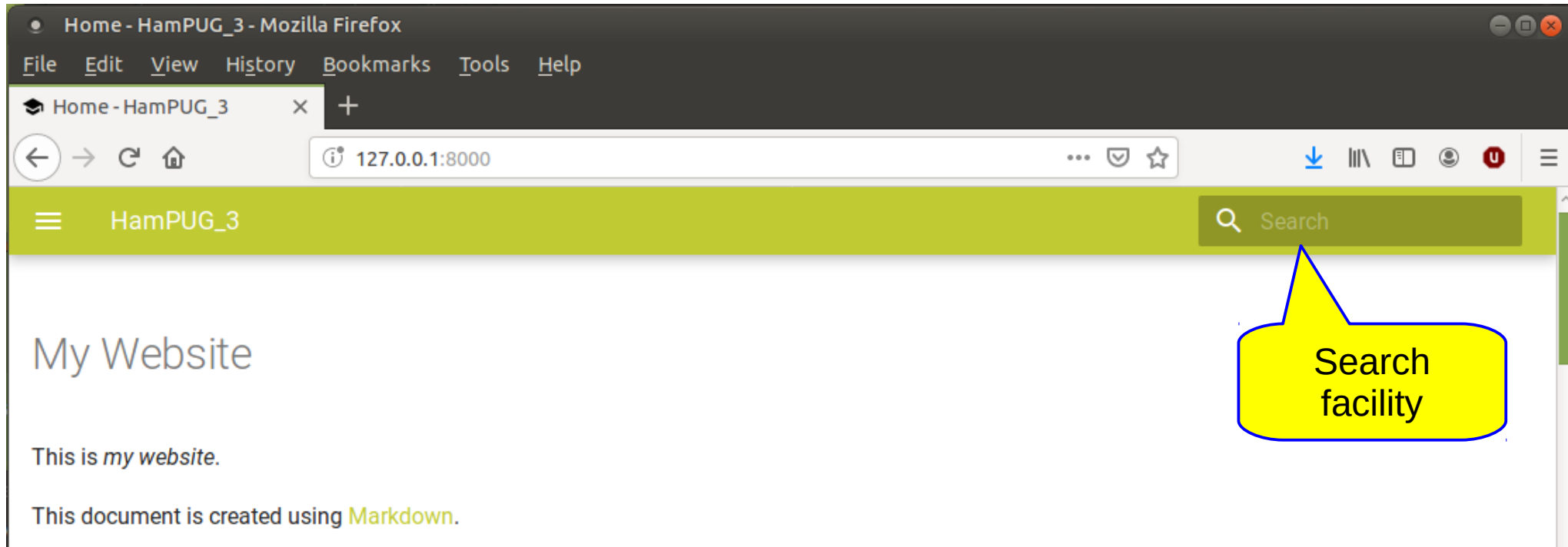
This is *my website*.

This document is created using [Markdown](https://www.markdownguide.org/).

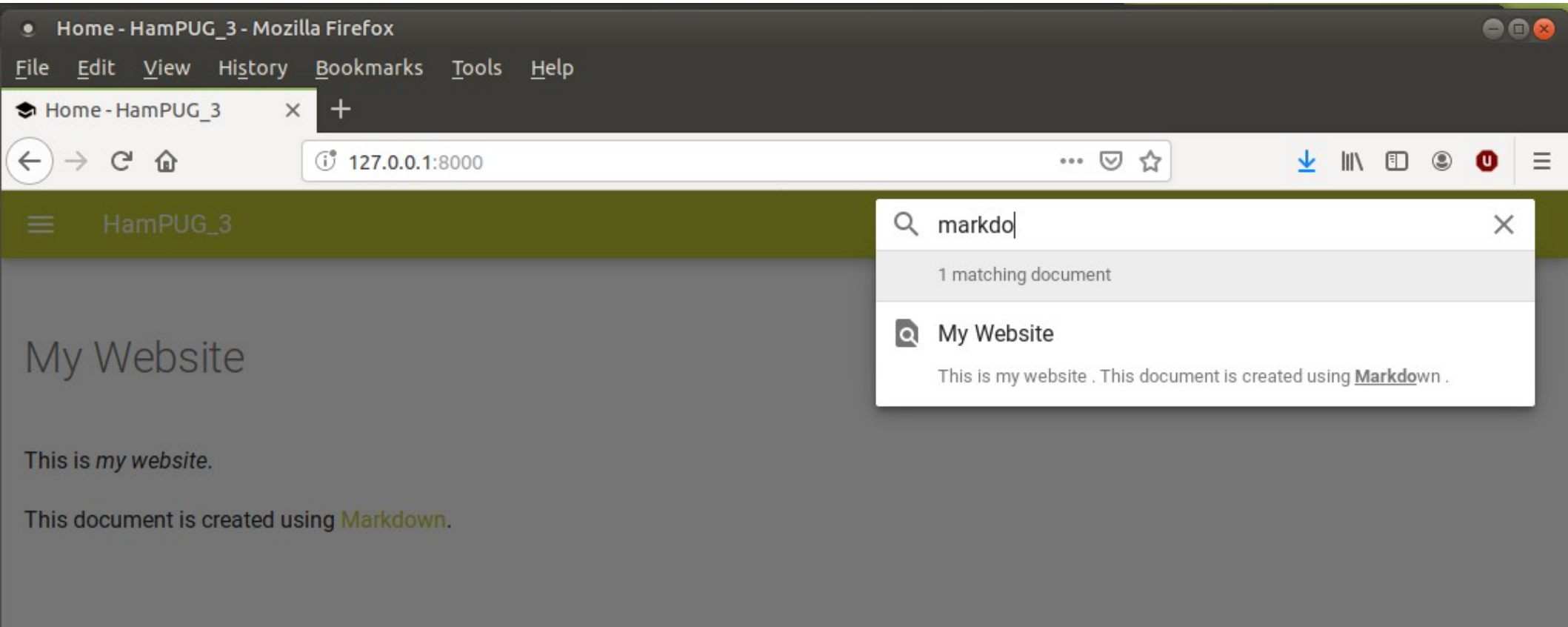
\$ mkdocs build converts to html, build website.

```
<h1 id=my-website>My Website</h1>
<p>This is <em>my website</em>.</p>
<p>This document is created using <a href=https://www.markdownguide.org/>Markdown</a>. </p>
```

\$ mkdocs serve displays the website



Website using search feature



Using MkDocs to create Meetings website

Steps:

- Fork HamPUG meetings to personal Github repository
- Create local directory
- Git clone of GitHub to local repository
- Generate a index.html as a test website home page
- Push to Github
- Update settings on Github to support project webpages.
- Check project website

HamPUG meetings repository

HamPUG/meetings: Stuff from meetings: slides, code, etc - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Your Repositories x HamPUG/meetings: Stufi x +

GitHub, Inc. (US) | https://github.com/hampug/meetings/ 90% ... ☆

HamPUG / meetings Unwatch 10 Star 1 Fork 1

<> Code Issues 0 Pull requests 0 Projects 0 Wiki Security Insights

Stuff from meetings: slides, code, etc

382 commits 1 branch 0 releases 5 contributors

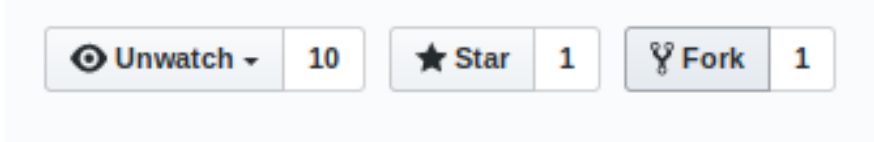
Branch: master New pull request Create new file Upload files Find File Clone or download

irbugs 35 Latest commit d085fe2 23 days ago

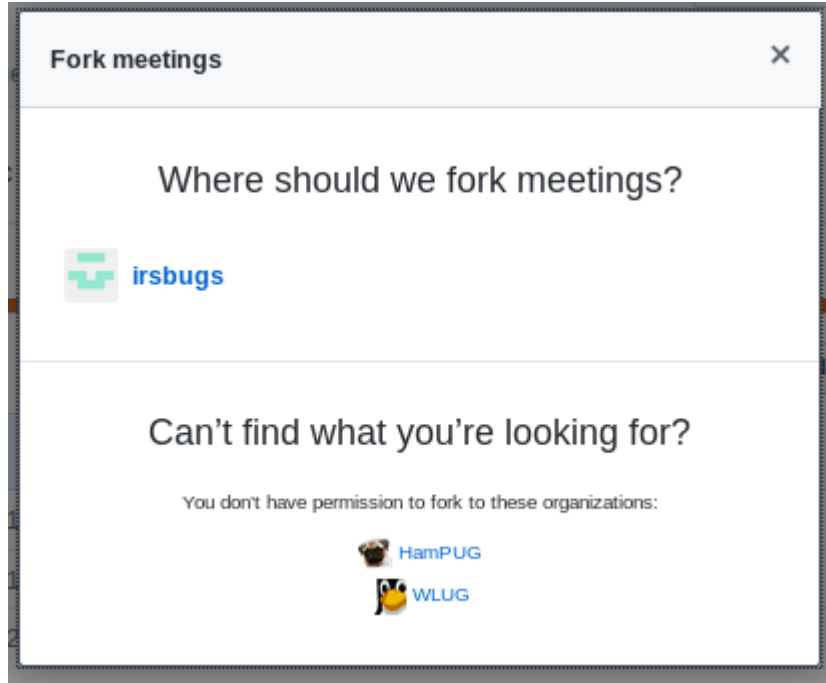
2014	1	26 days ago
2015	12	24 days ago
2016	23	24 days ago
2017	35	23 days ago
2018	45	23 days ago
2019	56	23 days ago
misc	added printout for TX3 meeting room	2 years ago
.gitignore	added presentation	3 years ago
README.md	Initial commit	6 years ago

Fork

In HamPUG meeting repository – Click on “Fork”



In Fork meetings – Click on personal Github account



Personal Github account now has “meetings”


The screenshot shows a Mozilla Firefox browser window with the address bar displaying 'https://github.com/irsbugs/meetings'. The page title is 'irsbugs/meetings: Stuff from meetings: slides, code, etc - Mozilla Firefox'. The browser's menu bar includes File, Edit, View, History, Bookmarks, Tools, and Help. The address bar also shows 'GitHub, Inc. (US)' and a 90% zoom level. The page content features a large blue header with the text 'Learn Git and GitHub without any code!' and a subtext 'Using the Hello World guide, you'll start a branch, write comments, and open a pull request.' Below this is a green button labeled 'Read the guide'. The repository name 'irsbugs / meetings' is shown, along with a note 'forked from HamPUG/meetings'. The repository statistics are displayed: Watch 0, Star 0, and Fork 2. The navigation bar includes links for Code, Pull requests 0, Projects 0, Wiki, Security, Insights, and Settings. The page footer shows the repository name 'Stuff from meetings: slides, code, etc' and an 'Edit' button.

irsbugs/meetings: Stuff from meetings: slides, code, etc - Mozilla Firefox

File Edit View History Bookmarks Tools Help

irsbugs/Spoon-Knife: Thi × irsbugs/meetings: Stuff f × +


← → ↻ 🏠 ⓘ **GitHub, Inc. (US)** | https://github.com/irsbugs/meetings 90% ⋮ 📄 👤 🔴 ☰

 Search or jump to... / Pull requests Issues Marketplace Explore 🔔 + 📧

Learn Git and GitHub without any code!

Using the Hello World guide, you'll start a branch, write comments, and open a pull request.

[Read the guide](#)


 **irsbugs / meetings**
forked from **HamPUG/meetings**


👁 Watch 0 ★ Star 0 🍴 Fork 2


🔗 Code 📄 Pull requests 0 📁 Projects 0 📖 Wiki 🛡 Security 📊 Insights ⚙ Settings


Stuff from meetings: slides, code, etc [Edit](#)

Branch is even with HamPUG master

 **382** commits

 **1** branch

 **0** releases

 **5** contributors

Branch: **master** ▾

New pull request


Create new file


Upload files


Find File

Clone or download ▾










This branch is even with HamPUG:master.

 Pull request

 Compare

 **irsbugs** 35

Latest commit d085fe2 23 days ago

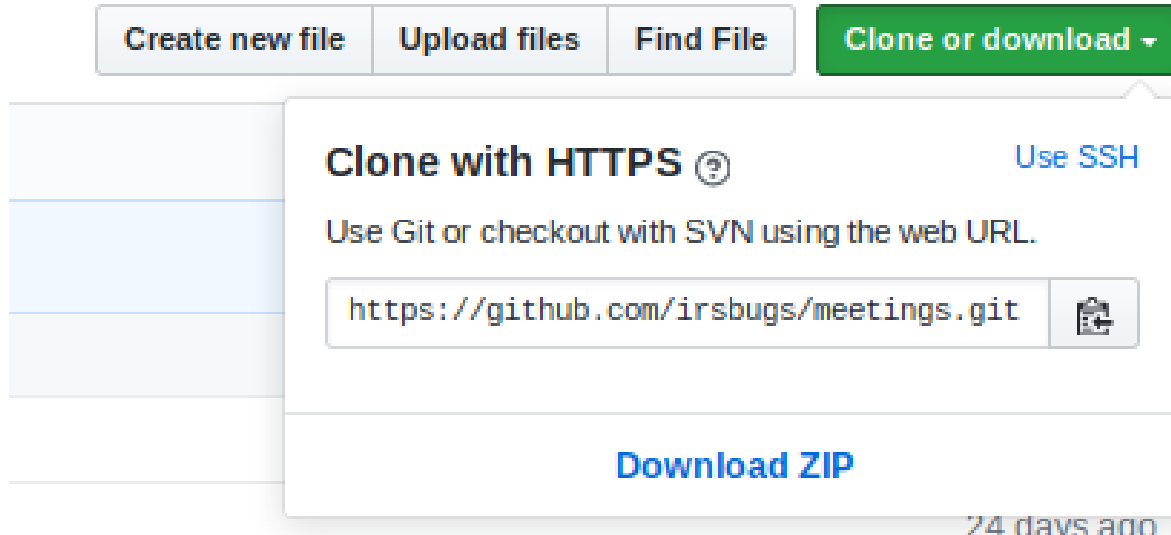
 2014	1	26 days ago
 2015	12	24 days ago
 2016	23	24 days ago
 2017	35	23 days ago
 2018	45	23 days ago
 2019	56	23 days ago
 misc	added printout for TX3 meeting room	2 years ago
 .gitignore	added presentation	3 years ago
 README.md	Initial commit	6 years ago

Prepare local directory for meeting repository

Launch Virtual Environment and create directory for cloned repository

```
ian@X200:~$ source venv7/bin/activate  
(venv7) ian@X200:~$ mkdir hampug-website  
(venv7) ian@X200:~$ cd hampug-website
```

Click on “Clone or download” and copy URL



Clone “meetings”

```
(venv7) ian@X200:~/hampug-website$ git clone https://github.com/irsbugs/meetings.git
```

```
Cloning into 'meetings'...
```

```
remote: Enumerating objects: 175, done.
```

```
remote: Counting objects: 100% (175/175), done.
```

```
remote: Compressing objects: 100% (165/165), done.
```

```
remote: Total 2360 (delta 66), reused 0 (delta 0), pack-reused 2185
```

```
Receiving objects: 100% (2360/2360), 98.39 MiB | 1.27 MiB/s, done.
```

```
Resolving deltas: 100% (995/995), done.
```

(Duration: About 1 minute)

Folders created

```
(venv7) ian@X200:~/hampug-website$ ls -l
drwxrwxr-x 11 ian ian 4096 Sep  5 19:43 meetings
```

```
(venv7) ian@X200:~/hampug-website$ ls -la meetings
drwxrwxr-x 10 ian ian 4096 Sep  5 19:37 .
drwxrwxr-x  3 ian ian 4096 Sep  5 19:36 ..
drwxrwxr-x 13 ian ian 4096 Sep  5 19:37 2014
drwxrwxr-x 13 ian ian 4096 Sep  5 19:37 2015
drwxrwxr-x 13 ian ian 4096 Sep  5 19:37 2016
drwxrwxr-x 13 ian ian 4096 Sep  5 19:37 2017
drwxrwxr-x 13 ian ian 4096 Sep  5 19:37 2018
drwxrwxr-x  9 ian ian 4096 Sep  5 19:37 2019
drwxrwxr-x  8 ian ian 4096 Sep  5 19:37 .git
-rw-rw-r--  1 ian ian   28 Sep  5 19:37 .gitignore
drwxrwxr-x  2 ian ian 4096 Sep  5 19:37 misc
-rw-rw-r--  1 ian ian   58 Sep  5 19:37 README.md
```



“meetings” folder is a
git repository

Checking

Check Git status

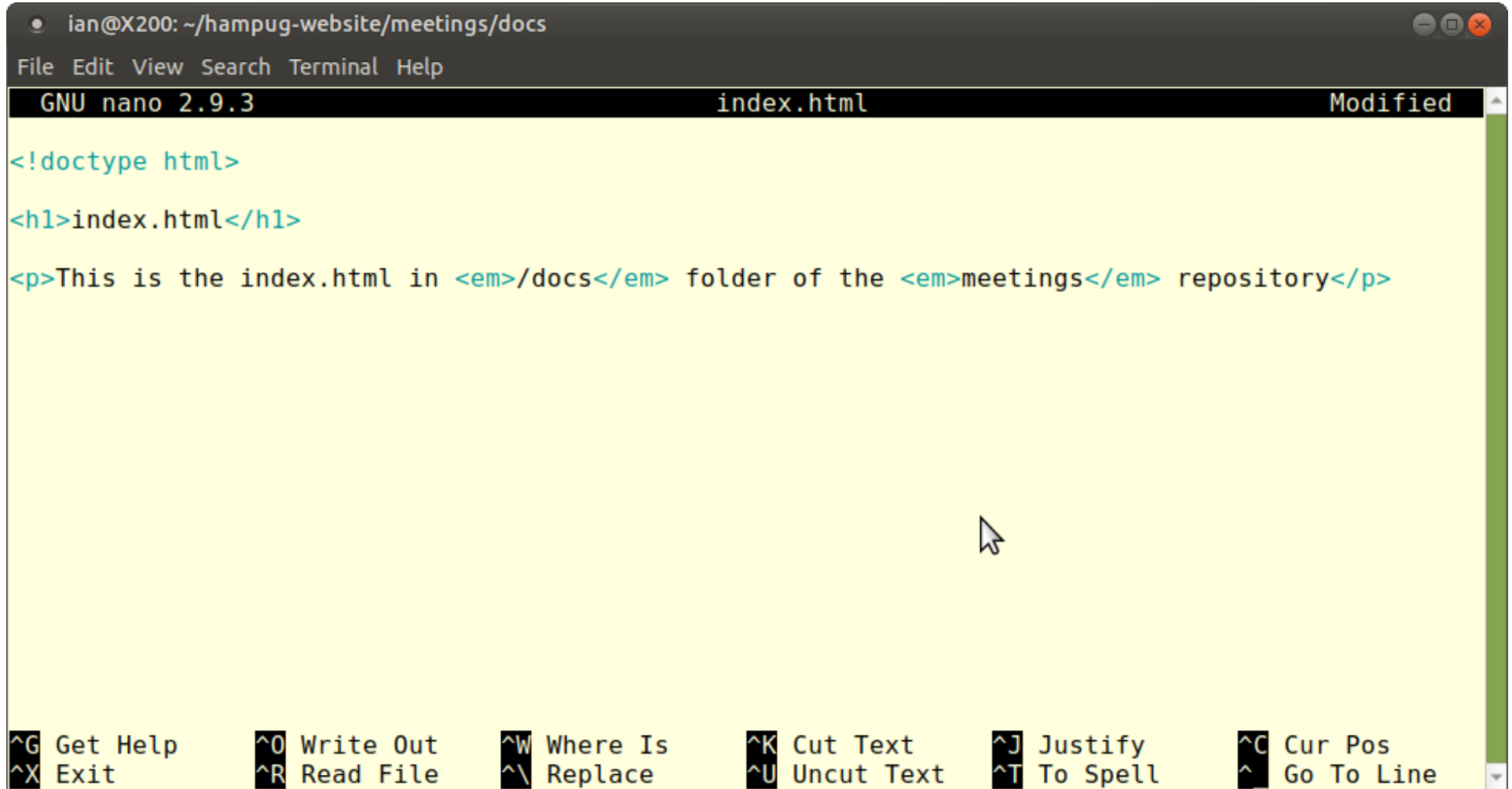
```
(venv7) ian@X200:~/hampug-website$ cd meetings  
(venv7) ian@X200:~/hampug-website/meetings$ git status  
On branch master  
Your branch is up to date with 'origin/master'.
```

nothing to commit, working tree clean

Generate a “test” website.

```
(venv7) ian@X200:~/hampug-website/meetings$ mkdir docs  
(venv7) ian@X200:~/hampug-website/meetings$ cd docs  
(venv7) ian@X200:~/hampug-website/meetings/docs$ touch index.html  
(venv7) ian@X200:~/hampug-website/meetings/docs$ nano index.html
```

Use nano editor to create index.html



The screenshot shows a terminal window with the nano text editor open. The window title is 'ian@X200: ~/hampug-website/meetings/docs'. The nano editor's status bar at the top shows 'GNU nano 2.9.3', the filename 'index.html', and the status 'Modified'. The editor's menu bar includes 'File', 'Edit', 'View', 'Search', 'Terminal', and 'Help'. The main editing area contains the following HTML code:

```
<!doctype html>

<h1>index.html</h1>

<p>This is the index.html in <em>/docs</em> folder of the <em>meetings</em> repository</p>
```

The bottom status bar of the nano editor displays various keyboard shortcuts for navigation and editing, such as '^G Get Help', '^O Write Out', '^W Where Is', '^K Cut Text', '^J Justify', '^C Cur Pos', '^X Exit', '^R Read File', '^_ Replace', '^U Uncut Text', '^T To Spell', and '^_ Go To Line'.

Check “test” webpage and git status

```
(venv7) ian@X200:~/hampug-website/meetings/docs$ cat index.html
<!doctype html>
```

```
<h1>index.html</h1>
```

```
<p>This is the index.html in <em>/docs</em> folder of the <em>meetings</em>
repository</p>
```

```
(venv7) ian@X200:~/hampug-website/meetings/docs$ cd ..
```

```
(venv7) ian@X200:~/hampug-website/meetings$ git status
```

```
On branch master
```

```
Your branch is up to date with 'origin/master'.
```

```
Untracked files:
```

```
(use "git add <file>..." to include in what will be committed)
```

```
docs/
```


```
nothing added to commit but untracked files present (use "git add" to track)
```











Git: add, commit, push

```
(venv7) ian@X200:~/hampug-website/meetings$ git add --all
(venv7) ian@X200:~/hampug-website/meetings$ git commit -m "add test website"
[master 12c243c] add test website
 1 file changed, 5 insertions(+)
 create mode 100644 docs/index.html
(venv7) ian@X200:~/hampug-website/meetings$ git push -u origin master
Username for 'https://github.com': irsbugs
Password for 'https://irsbugs@github.com':
Counting objects: 4, done.
Delta compression using up to 2 threads.
Compressing objects: 100% (3/3), done.
Writing objects: 100% (4/4), 403 bytes | 403.00 KiB/s, done.
Total 4 (delta 1), reused 0 (delta 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/irsbugs/meetings.git
   d085fe2..12c243c  master -> master
Branch 'master' set up to track remote branch 'master' from 'origin'.
```

Review Github meetings repository


This branch is 1 commit ahead of HamPUG:master. [Pull request](#) [Compare](#)


 **ian** add test website Latest commit 12c243c 2 minutes ago


 2014	1	26 days ago
 2015	12	24 days ago
 2016	23	24 days ago
 2017	35	23 days ago
 2018	45	23 days ago
 2019	56	23 days ago
 docs	add test website	2 minutes ago
 misc	added printout for TX3 meeting room	2 years ago
 .gitignore	added presentation	3 years ago
 README.md	Initial commit	6 years ago


“docs” folder has been added


Review Github meetings/docs/ folder


 **irsbugs / meetings**
forked from [HamPUG/meetings](#)


 Watch ▾ 0


 Star 0


 Fork 2


 Code


 Pull requests 0

 Projects 0

 Wiki

 Security

 Insights

 Settings

Branch: **master** ▾ **meetings / docs /**


Create new file


Upload files


Find file

History

This branch is 1 commit ahead of HamPUG:master.


 Pull request

 Compare

 **ian** add test website

Latest commit 12c243c 5 minutes ago

..

 [index.html](#)

add test website

5 minutes ago

“index.html” will become the home page of the website

Change the Settings

The screenshot shows a web browser window displaying the GitHub repository page for 'irsbugs/meetings'. The browser's address bar shows the URL 'https://github.com/irsbugs/meetings'. The repository page includes a header with the repository name, a description 'forked from HamPUG/meetings', and buttons for 'Watch', 'Star', and 'Fork'. Below the header is a navigation bar with tabs for 'Code', 'Pull requests', 'Projects', 'Wiki', 'Security', 'Insights', and 'Settings'. The 'Settings' tab is highlighted with a blue circle and a mouse cursor. The main content area shows the repository's commit history, including a table of commits with columns for year, count, and time ago.

irsbugs/meetings: Stuff from meetings: slides, code, etc - Mozilla Firefox

File Edit View History Bookmarks Tools Help

irsbugs/meetings: Stuff x +

GitHub, Inc. (US) | https://github.com/irsbugs/meetings 90%

irsbugs / meetings
forked from HamPUG/meetings

Watch 0 Star 0 Fork 2

Code Pull requests 0 Projects 0 Wiki Security Insights Settings

Stuff from meetings: slides, code, etc Edit

Manage topics

383 commits 1 branch 0 releases 5 contributors

Branch: master New pull request Create new file Upload files Find File Clone or download

This branch is 1 commit ahead of HamPUG:master. Pull request Compare

ian add test website Latest commit 12c243c 6 minutes ago

2014	1	26 days ago
2015	12	24 days ago
2016	23	24 days ago
2017	35	23 days ago
2018	45	23 days ago

Settings. Scroll down

 **irsbugs / meetings**
forked from HamPUG/meetings

 Watch ▾

0

 Star

0


 Fork

2

 Code


 Pull requests 0

 Projects 0

 Wiki

 Security

 Insights

 Settings

Options

[Collaborators](#)

[Branches](#)

[Webhooks](#)

[Notifications](#)

[Integrations & services](#)

[Deploy keys](#)

Moderation

[Interaction limits](#)

Settings

Repository name

Rename

☐ Template repository

Template repositories let users generate new repositories with the same directory structure and files. Indicate if **irsbugs/meetings** can be used as a template for creating other repositories.

Social preview

Upload an image to customize your repository's social media preview.

Images should be at least 640×320px (1280×640px for best display).

[Download template](#)

Settings. GitHub Pages

GitHub Pages

GitHub Pages is designed to host your personal, organization, or project pages from a GitHub repository. [Learn more.](#)

Source

GitHub Pages is currently disabled. Select a source below to enable GitHub Pages for this repository. [Learn more.](#)

None ▾

Default is "None"

Theme Chooser

Select a theme to publish your site with a Jekyll theme using the master branch. [Learn more.](#)

Choose a theme

Settings. GitHub Pages

GitHub Pages

GitHub Pages is designed to host your personal, organization, or project pages from a GitHub repository. [Learn more.](#)

Source

GitHub Pages is currently disabled. Select a source below to enable GitHub Pages for this repository. [Learn more.](#)

None ▾

Select source

master branch

Use the master branch for GitHub Pages.

master branch /docs folder

Use only the /docs folder for GitHub Pages.

✓ **None**

Disable GitHub Pages.

... using the master branch. [Learn more.](#)

Select: master
branch /docs folder

Settings. GitHub Pages

GitHub Pages

GitHub Pages is designed to host your personal, organization, or project pages from a GitHub repository.

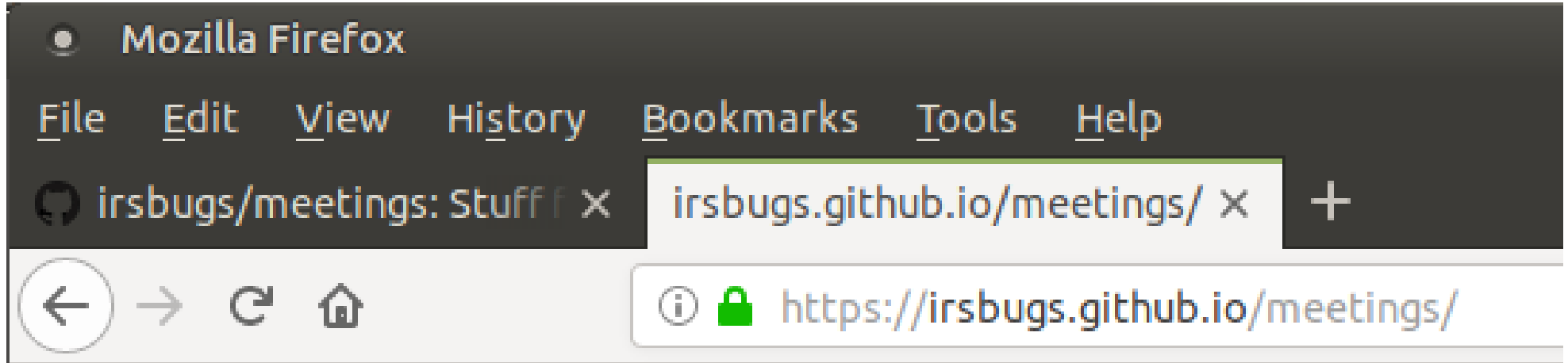
Your site is ready to be published at <https://firsbugs.github.io/meetings/>.

Source

Your GitHub Pages site is currently being built from the `/docs` folder in the `master` branch. [Learn more.](#)

master branch /docs folder ▾

Check website: [irsbugs/github.io/meetings](https://irsbugs.github.io/meetings)



index.html

This is the index.html in */docs* folder of the *meetings* repository

Python mkdocs-auto program

Objective:

- A program that resides in the *meetings* repository that can be run to create a website of the markdown files in the *meetings* repository.
- The *meetings* repository and the *project website* reside on Github.

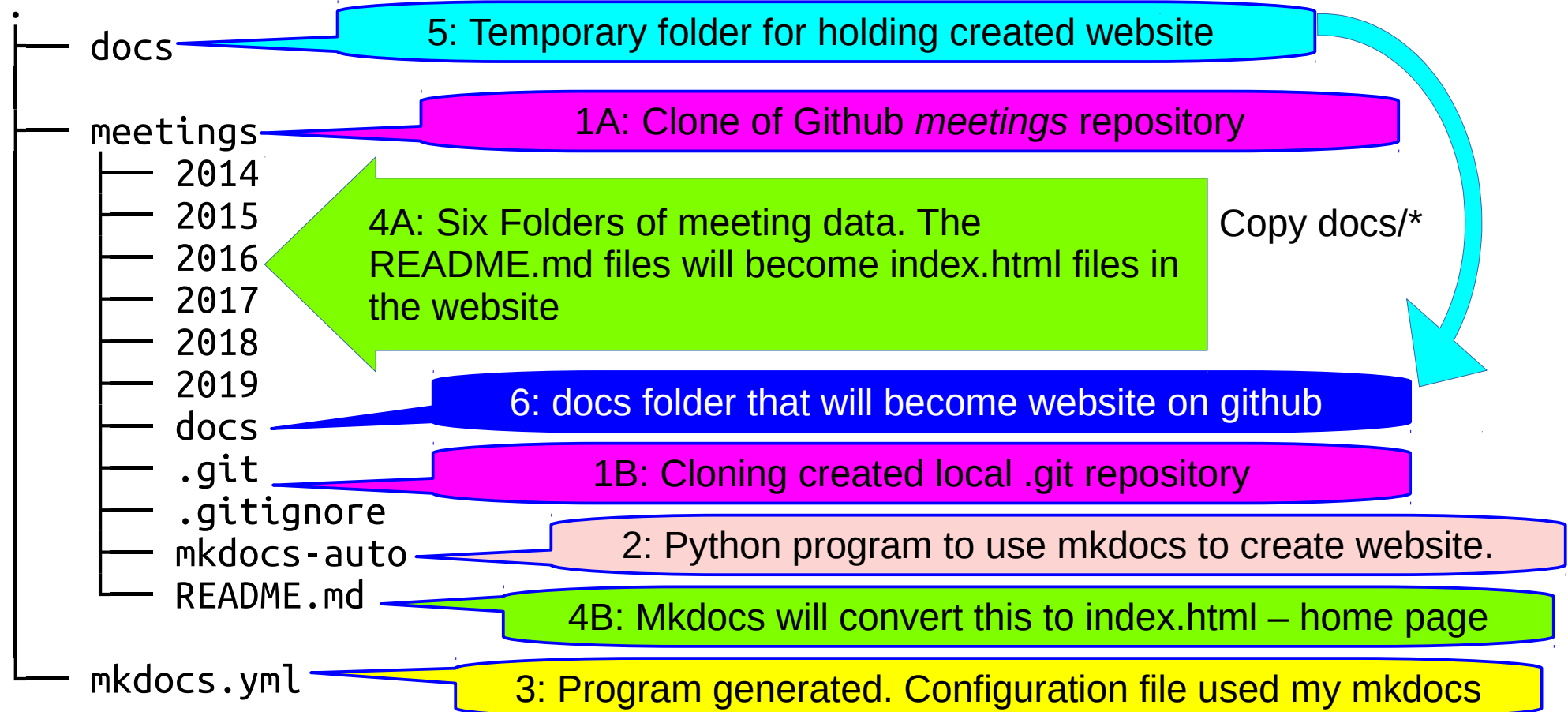
Python mkdocs-auto program.

Operation:

- Check it is being run from meetings folder / repository
- Check the markdown files in the meetings repository.
- Create a *mkdocs.yml* configuration file and save up-one-level.
- Go up-one-level and run *mkdocs build --clean*
- *meetings* folder is the source, exclude *meetings/docs/*
- Copy website files in *docs/* to *meetings/docs/*
- Push to Github
- Website available at: <https://irsbugs.github.io/meetings/>

Python mkdocs-auto program. Steps:

```
(up one level)$ tree -L 2 -a
```



Python mkdocs-auto program

mkdocs.yml

```
site_name: HamPUG
docs_dir: meetings # Source files. Default is docs
site_dir: docs      # Website files. (Temporary) Default is site.
                    # Website files are later rsync'ed to meetings/docs

plugins:
  - exclude:
      glob:
        - docs/*
        - "*.odp"
        - "*.ipynb"
        - "*.yml"
        - about.md
  - search:
```

Github website folder

Ensure that "search" plugin is invoked.

Currently there is no *nav:* in the *mkdocs.yml* file.

Python mkdocs-auto program

To Do's:

- Create *nav:* to place in *mkdocs.yml*?
- Which theme and search engine?
- Test adding images.
- Standardize the README.md file layout.
- Implement links
- Implement using \$ mkdocs gh-deploy
- Source file using symbolic links to README's

Demonstration / Questions

__end__

Links:

<https://www.mkdocs.org/>

<https://www.mkdocs.org/user-guide/configuration/>

<https://github.com/apenwarr/mkdocs-exclude>

<https://github.com/mkdocs/mkdocs/blob/master/docs/user-guide/writing-your-docs.md>

<https://squidfunk.github.io/mkdocs-material/>

<https://github.com/adam-p/markdown-here/wiki/Markdown-Cheatsheet>

<https://daringfireball.net/projects/markdown/syntax>

<https://guides.github.com/activities/hello-world/>

<https://github.com/irsbugs/website/blob/master/source/about.md>

<https://www.mkdocs.org/user-guide/deploying-your-docs/>

<https://mkdocs.readthedocs.io/en/0.15.3/user-guide/deploying-your-docs/>

<https://romandc.com/techtalk-mkdocs/>

<https://help.github.com/en/articles/user-organization-and-project-pages#project-pages-sites>

<https://pages.github.com/>

<https://yaml.org/>