Getting Started with MkDocs

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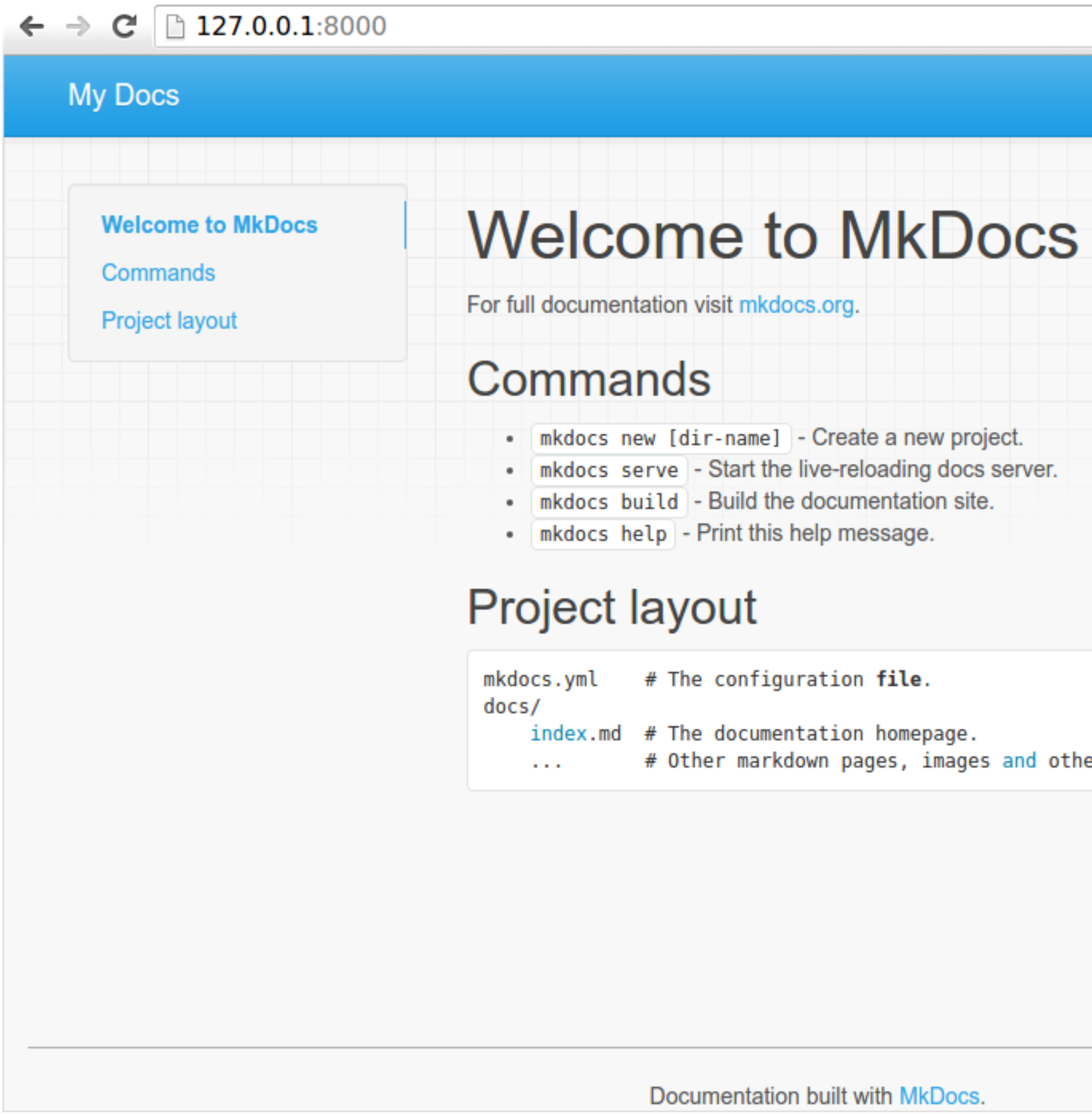
Good documentation is what makes a project great. I was recently introduced to a new way to cre
created a documentation site for my open-source project pyTigerGraph, as well as updating my p
easy way to create great looking documentation, only using markdown and a couple configuratio
deploy the hosting of these documents to GitHub pages.

Installation and Getting Started

First, make sure you have Python and pip installed. The simply run: `pip install mkdocs`. Once t
project. For a documenting a project, you probably want all the documentation to reside inside th
terminal to that directory, and then run `mkdocs new my-project` where my-project is the project r
folder named after whatever the project name is. You want to then take the contents out of this fo
Therefore, you should have a project file structure like this:

```
project -
         |- docs -
         |       |- index.md
         |       |- anyothermarkdownfiles.md
         |       |_ stylesheets - (this has to be created)
         |                       |_ extra.css (this has to be created)
         |
         |-mkdocs.yml
         |
         |- other project files
```

To make sure that this works, simply run `mkdocs serve` in your terminal and open up `127.0.0.1`
something like this:



Welcome to MkDocs

For full documentation visit mkdocs.org.

Commands

- `mkdocs new [dir-name]` - Create a new project.
- `mkdocs serve` - Start the live-reloading docs server.
- `mkdocs build` - Build the documentation site.
- `mkdocs help` - Print this help message.

Project layout

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

Documentation built with MkDocs.

Screenshot from MkDocs documentation

You can then edit the `index.md` page that was automatically generated with your homepage con
MkDocs automatically refreshes the preview server that is locally hosted.

Adding Pages

After editing your homepage, you probably want to add other pages to your documentation. To do
probably looks somthing like this:

```
site_name: MkLorum
nav:
    - Home: index.md
```

You can change the site name by simply changing the `site_name` parameter in the file. To add an
`gettingStarted.md`. Then, we will add it to the YAML file like this:

```
site_name: MkLorum
nav:
    - Home: index.md
    - Getting Started: gettingStarted.md
```

Follow this process for any other files that you want included on the webpage.

Choose Your Theme

Personally, I don't like the default website theme provided by MkDocs. For both my personal and p
use this theme, run `pip install mkdocs-material`, and add this to your `mkdocs.yml` file:

```
theme:
  name: material
```

Other themes can be viewed here. The customization step below might work on different themes

Customize

To change the color of the theme, we will create a CSS file. In the YAML file, we need to declare th

```
extra_css:
  - stylesheets/extra.css
```

Then we need to create the `stylesheets` folder, inside of the `docs` folder. Then we will create th

```
:root {
    /* Primary color shades */
    --md-primary-fg-color:               #7A0019;
    --md-primary-fg-color--light:        #ffffff;
    --md-primary-fg-color--dark:         #7A0019;
    --md-primary-bg-color:               #ffffff;
    --md-primary-bg-color--light:        #ffffff;
    --md-text-link-color:                #7A0019;

    /* Accent color shades */
    --md-accent-fg-color:                #7A0019;
    --md-accent-fg-color--transparent:   #7A0019;
    --md-accent-bg-color:                #7A0019;
    --md-accent-bg-color--light:         #7A0019;
}
```

This file is where you can define any sort of custom color scheme. In the case above, it is maroon

With the material theme, we can also add a logo and favicon to our site. This can be done by addi

```
theme:
  name: material
  logo: https://avatars1.githubusercontent.com/u/9616171?s=460&v=4
  favicon: https://avatars1.githubusercontent.com/u/9616171?s=460&v=4
```

This adds my GitHub profile picture to the site, but it could also be an image found within the repo

We can also add the status of the desired repository. To do this, simply add `repo_url: REPO_NAM`

My personal portfolio website also contains links to various social media platforms at the bottom

```
extra:
  social:
    - icon: fontawesome/brands/github
      link: https://github.com/parkererickson
    - icon: fontawesome/brands/twitter
      link: https://twitter.com/p_erickson30
    - icon: fontawesome/brands/linkedin
      link: https://linkedin.com/in/parker-erickson
    - icon: fontawesome/brands/medium
      link: https://medium.com/@parker.erickson
```

In total, your `mkdocs.yml` should look something like this:

```
site_name: Parker Erickson
nav:
  - 'Home': index.md
  - 'Projects': projects.md
  - 'Blog':
    - 'Getting Started with MkDocs': blog/gettingStartedWithMkdocs.md
    - 'IPO Prediction Using Graph Convolutional Neural Networks': blog/ipoGCN.md
    - 'Do You Really Need Trash Cans?': blog/doYouReallyNeedTrashCans.md

theme:
  name: material
  logo: https://avatars1.githubusercontent.com/u/9616171?s=460&v=4
  favicon: https://avatars1.githubusercontent.com/u/9616171?s=460&v=4

extra:
  social:
    - icon: fontawesome/brands/github
      link: https://github.com/parkererickson
    - icon: fontawesome/brands/twitter
      link: https://twitter.com/p_erickson30
    - icon: fontawesome/brands/linkedin
      link: https://linkedin.com/in/parker-erickson
    - icon: fontawesome/brands/medium
      link: https://medium.com/@parker.erickson

extra_css:
  - stylesheets/extra.css
```

Deploy

To deploy to GitHub pages, make sure you have a GitHub repository initialized and properly setup `.gitignore`. Then, simply run `mkdocs gh-deploy`. This should create a new branch in your repos HTML and CSS, and enable GitHub Pages to host it. After a while, you should be able to go to `YO` `NAME` to view the completed documentation.