

Contribution to DataPLANT July 25th, 2023

Dominik Brilhaus

## **Knowledge Base**

Create, share, reuse, collaborate on

- articles
- guides
- images
- slides
- ..

DataPLANT Knowledge Base: https://nfdi4plants.org/nfdi4plants.knowledgebase/







#### Content

- How to contribute to the DataPLANT Knowledge Base
- ... and DataPLANT projects in general







#### Resources

Contents shown here are (in part) already somewhere in the Knowledge Base or at least in the GitHub repo. However, ! Links there are somewhat volatile !

- Contribution Guide
- Markdown tutorial
- Marp slide decks







# Part 1: Setup







# Required

- ✓ a GitHub account
- ✓ Git installed and configured







#### Recommended software

- **✓** GitHub Desktop
  - git synchronization
  - pull requests
  - manage (local and remote) branches
- ✓ Visual Studio Code
  - all-in-one: text editor + file explorer + command line + git + ...
  - code highlighting and linting
  - many extensions available







## Recommended VS code extensions for markdown

- Markdown all in one
  - Creating a TOC, use of shortcuts, creating a table, copy/pasting a table from excel
- markdownlint
  - markdown linting and style checking
  - Structuring and formatting
- Code Spell Checker
  - basic spell checker that works well with code and documents
- Markdown Shortcuts
- Markdown PDF
  - Converting a markdown to PDF
  - this does not follow any style / layout, e.g. linked in the YAML heading







# Creating markdown slides in VS code: marp

Marp for VS Code







## Part 2: Basics







## Markdown

- general idea: WYSIWYG
- add YAML metadata
- See the Markdown tutorial and references therein







## Markdown Slides (with Marp)

- add marp: true to YAML metadata
- See the Marp slide decks tutorial







#### **GitHub**

The DataPLANT GitHub organization (https://github.com/nfdi4plants) and repositories are the place where most of the magic (tool development) happens.

Most repositories are **public** and open for (user) feedback







#### Issues

- Project-related task (lists)
- Communicate needs
- Example: Swate issues

See also: https://docs.github.com/en/issues/tracking-your-work-with-issues/quickstart







## **Exercise: Open a GitHub issue**

- 1. Navigate to the Knowledge Base or another DataPLANT repo
- 2. Raise an issue, e.g.
  - i. raise a question
  - ii. report a bug
  - iii. request a feature







## Forks and pull requests (PR)

- Fork = same project, different place
- Good routine to propose changes (contribute)
- Knowledge Base Forks
- See also: https://docs.github.com/en/get-started/quickstart/fork-a-repo



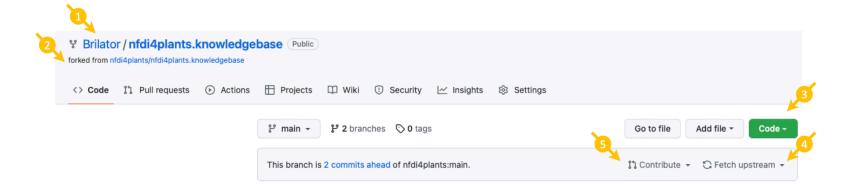






## Exercise: Fork and clone a GitHub repo

- 1. Navigate to the Knowledge Base
- 2. Fork the repo (i.e. create a copy under your user name)
- 3. Clone your fork locally (to your machine)











## Exercise: Create a new article (markdown)

- 1. Open your local "Knowledge Base" clone (File explorer or VS Code)
- 2. In src/docs/\_ignored , create a new text file <YourInitials>\_dsc.md
- 3. Add the following YAML header:

```
layout: docs
title: <YourTitle>
author: <YourName>
date: 2023-07-25
```

4. add some text below the YAML header



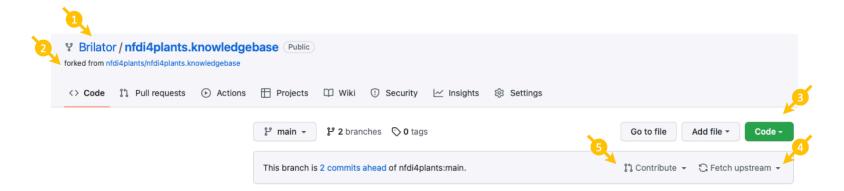






## **Exercise:** Open a pull request

- 1. Save your local changes
- 2. Sync to your fork
  - i. via command line (add, commit, push) or
  - ii. via VS Code *or*
  - iii. via GitHub Desktop
- 3. Contribute / open a PR (follow instructions on GitHub)









# Part 3: The Knowledge Base







## **Required software**

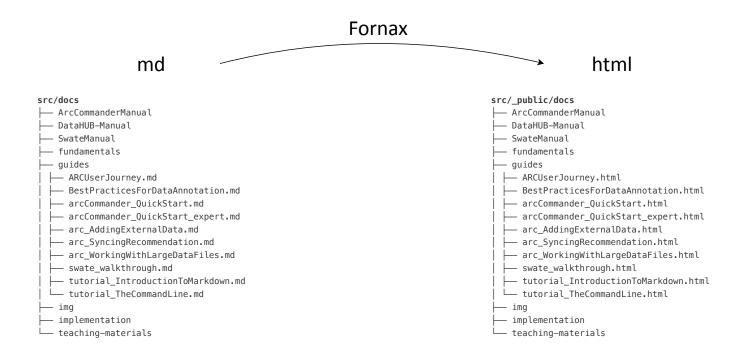
- **✓** Node.JS
- ✓ .NET
  - Both required for local testing of Knowledge Base







### **Knowledge Base backend: Fornax**





See nfdi4plants web components docs







#### Setup

- 1. Clone the repo.
- 2. Run dotnet tool restore in root directory.
- 3. Run dotnet paket install in root directory.
- 4. Run npm install in root directory.
- This needs to be done only once after cloning the repo.







## **Knowledge base local test**

- 1. Run npm run fornax.
- 2. Open the page in your browser http://127.0.0.1:8080/.







## Let's have a look at your articles (pull-requests)







#### Markdown syntax

- **MUST** start and end with --- .
- MUST contain layout: docs.
  - This triggers fornax parsing to html.
- MUST contain title: xxxx.
  - added as "# xxxx" to the html
  - used to name the generated webpage.
- MUST contain date: yyyy-MM-dd
- MAY contain author: xxxx.
- MAY contain add toc: true.
  - If true, adds automated table of contents from all found headers in content.
- MAY contain add support: true.
  - If true adds DataPlant support component at the bottom.
- MAY contain add sidebar: relative/path/to/sidebar.md to add the sidebar element to the page.
- MAY contain any other metadata. The information will be read but will not affect the generated html.
- Keys (layout, author, etc.) are NOT case sensitive.
- Fields MAY be in any order.





- contribution guide and
- nfdi4plants web components docs







## Slide decks – work in progress "

- Fornax currently does not auto-convert marp.md to marp.html
- Slides are mostly stored in src/docs/teaching-materials
  - based on the concept presented before
- Naming convention and YAML header are up for discussion

Feel free to create slide decks how and where you need them!







## Now it's your turn

- Read and use the knowledge base
- Raise issues
- Open pull-requests to
  - suggest changes
  - o create or edit articles, guides, tutorials





