

# Minimal file-based note system for messy scientists

**Static site generator for hyperlinked notes**

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**1 There are many ways to  
take notes in this modern  
world**

## Existing solutions

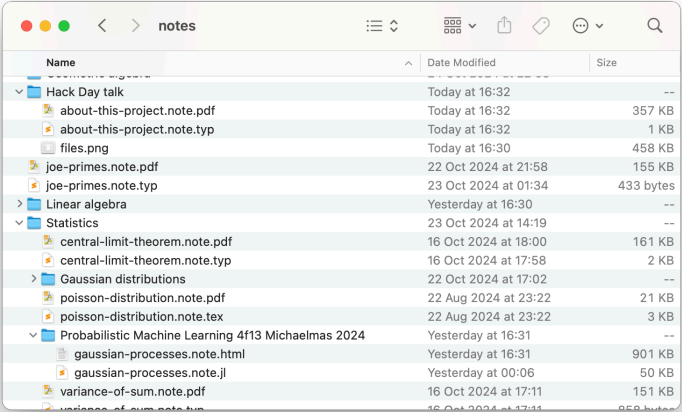
- Obsidian, <http://obsidian.md/>
  - Markdown-based
  - Extensible
- Notion, <http://notion.so>
  - All-in-one organisational tool
- “Zettelkasten” gardens, <https://notes.andymatuschak.org>
  - Highly hyperlinked webs of small markdown files
  - Beautiful web frontend
- Evernote, <https://evernote.com/>

# What I want

- Format agnostic
  - Markdown files for quick notes
  - Jupyter notebooks with code and data
  - Word documents
  - LaTeX or Typst PDFs
  - Screenshots or image files with explanations
- Easy hyperlinking and cross-referencing
  - To other notes
  - Cite published material
- Free hosting, easy sharing
- Don't tell me how I should take and organise my notes!

## **2 The simplest useful solution**

# Just store notes as files



## Just store notes as files (ii)

Mark files as notes with `.note.` in filename.

Notes can have multiple files:

- `A.note.tex` + `A.note.pdf` = A LaTeX PDF
- `B.note.typ` + `B.note.pdf` = A Typst PDF
- `C.note.md` = A standalone markdown document
- `D.note.jl` = A raw Julia script
- `E.note.ipynb` + `E.note.html` = A Jupyter notebook with exported HTML
- `F.note.jl` + `F.note.html` = A Pluto.jl notebook
- `G.note.png` + `G.note.txt` = A picture with words

(All this is currently hard-coded into the build script)

## Make simple static site to host them

Put your notes in a Git repo.

Add a GitHub workflow to run this action:

<https://github.com/Jollywatt/notes-deploy-action>

When pushed, a static site is built and hosted on GitHub pages:

<https://jollywatt.github.io/notes/>



## Advantages

- Notes of all different sorts can live together
- Notes get permalinks so you can link to them and cross-reference
- To add a different format, the build script can be extended
- You can build and serve the site locally as an alternative way to navigate your files
- You get free hosting if you want your notes to be public

## Disadvantages

- Currently super basic and breakable
- Doesn't work with notes that you couldn't easily put on a Git repo (Google Docs, Apple Notes)

## **3 Next steps**

## Integration with Typst

To cite other notes, you can write, e.g.:

```
This was proven in #link("https://jollywatt.github.io/notes/proof-of-thing")[this note].
```

With a simple Typst package that hooks into metadata produced by the build script, you can write:

```
#import "@local/notes:0.1.0"  
#show: notes.style
```

```
This was proven in @proof-of-thing[this note].
```

## Adding HTML renderers for different formats

- Renderer for plain markdown files
- A format for adding words to pictures, e.g., `idea.note.png` + `idea.note.txt` could produce an HTML page with both side-by-side.