Obsidian suggested practices

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Outline & Goals

Outline

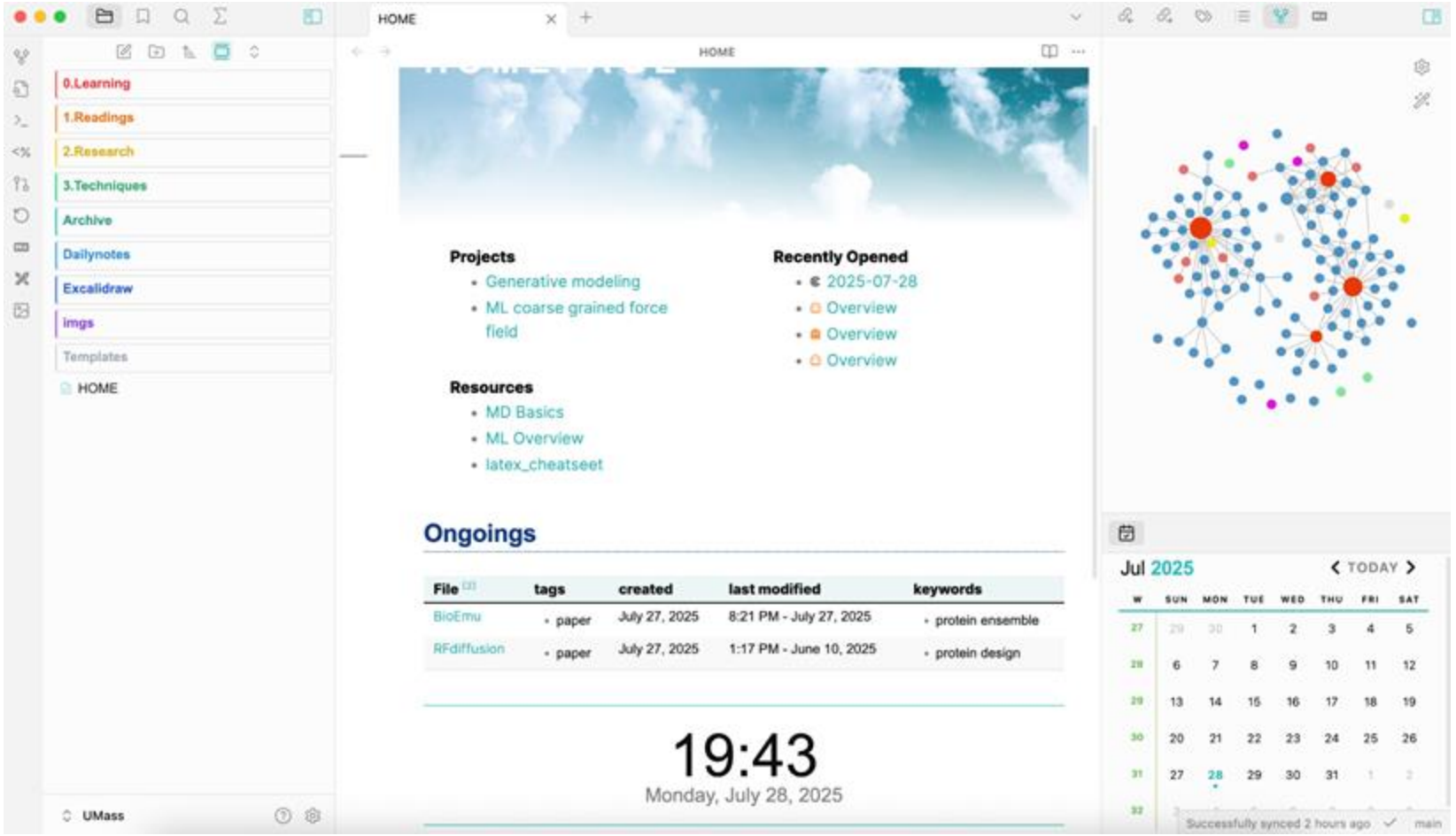
1. Appearance, directory structure and general editor options
2. Link/backline, metadata, tags
3. Synchronization and backup
4. Image management

Goal of this workshop

1. Basic configurations to set up your own obsidian
2. Note organization
3. Plugin suggestions

Introduction

Obsidian is a **markdown**-based, **multi-platform**, **decentralized** and **highly customizable** notebook application



Uniqueness

1. Link/backlink
2. Thousands of plugins
3. Safety and self-owned PI

Not just for taking notes:

1. Databases
2. Goal Management
3. More for you to explore

Appearance and some default behaviors

1. **Theme**: controls the overall global appearance

   Settings → Appearance → Themes → manage (recommend: minimal; Blue Topa; Border; Dune etc).

   Explore other options inside Appearance for further fine-tuning.

1. **Editor**: controls the editing interface appearance

   Settings → Editor, turn on all options except: Right-to-left, Vim key bindings (optional)

   set the Default view for new tabs to be Editing view

   set the Default editing mode to be Live Preview

   set the Properties in document to be Source

1. Other useful options to consider

   Settings → Files and links

   Default location for new attachments: in the folder specific below (and make folder for this)

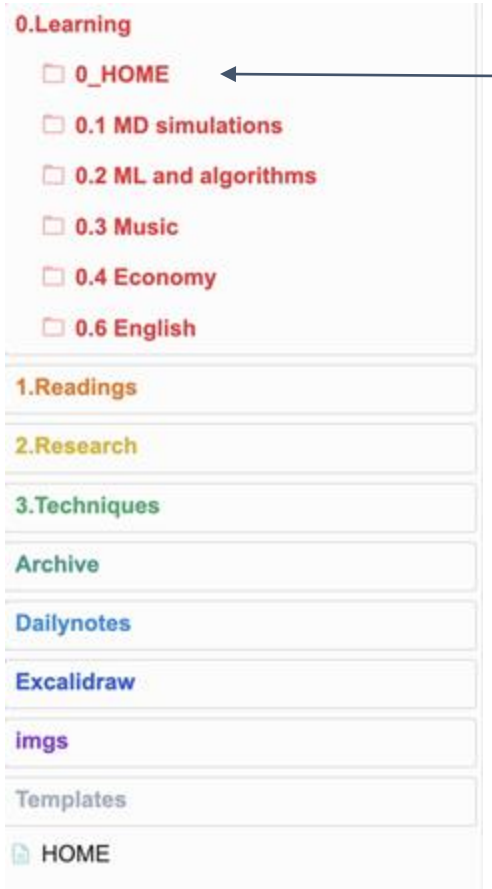
1. Explore other settings as you will

Hierarchical directory structure

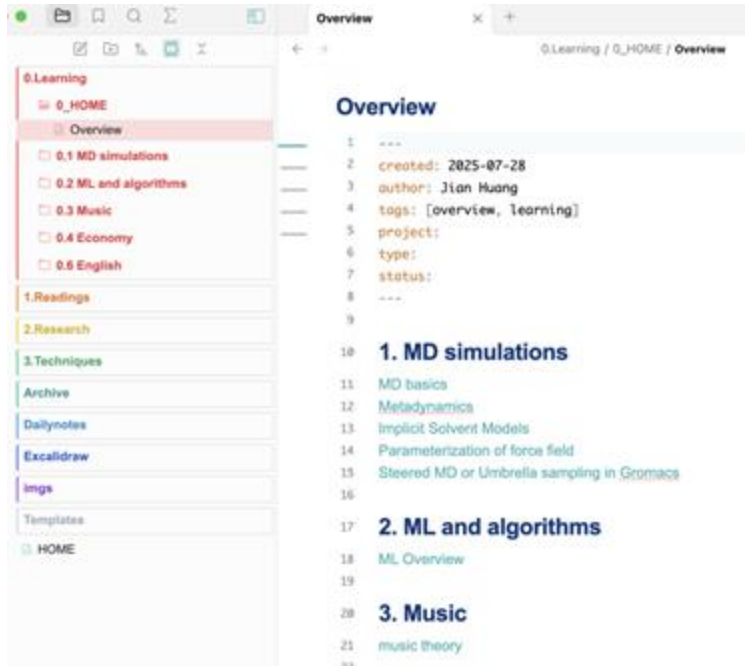
Basic rules:

- use no more than **3** layers/levels for your directories
- Sequential integer for numbering categories and subcategories

Example:



Personally, I also create a 0_HOME folder which only has a overview.md for indexing all files. under the major category 0_HOME wil always be shown on the top.



Link and backlink for referencing

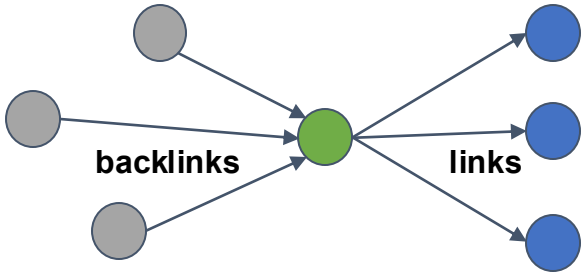
In real life, the “tree” structure might not be sufficient
Use the overview.md for example

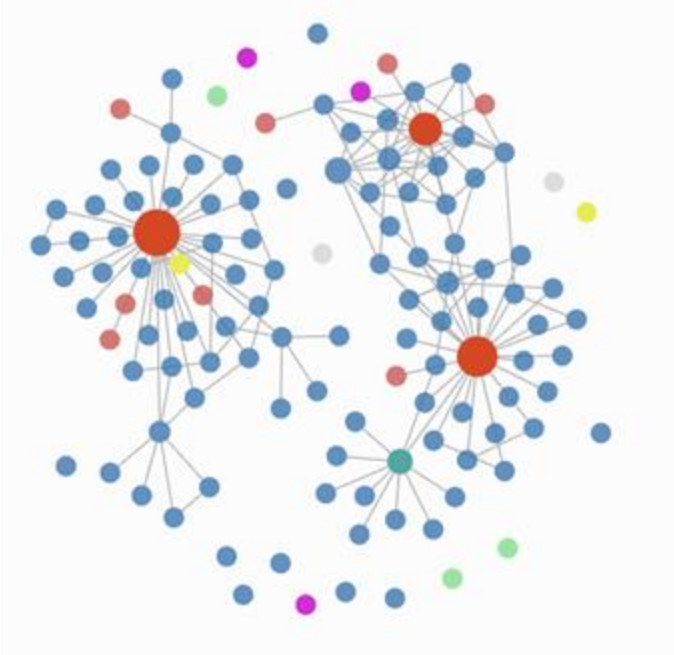
```
# 1. MD simulations
[[MD basics]]
[[Metadynamics]]
[[../0.1 MD simulations/Implicit Solvent Models|Implicit Solvent Models]]
[[../0.1 MD simulations/Parameterization of force field|Parameterization of force field]]
[[../0.1 MD simulations/Steered MD or Umbrella sampling in Gromacs|Steered MD or
Umbrella sampling in Gromacs]]

# 2. ML and algorithms
[[../0.2 ML and algorithms/0_HOME/Overview|ML Overview]]

# 3. Music
[[../0.3 Music/music theory|music theory]]

# 4. Economy
[[../0.4 Economy/利率|利率]]

# 5. English
[[../0.6 English/Gathering-01|Gathering-01]]
[[../0.6 English/Gathering-02|Gathering-02]]
```

Source mode (command+shift+E)

Links/backlinks are basically references, allowing for **network**-like structures.
Syntax for creating links/backlinks: **[[note_path]]**

As you can image, a note can link to other notes (“**link**”), while itself can also be linked by other notes (“**backlink**”).





You do not actually need to create a note for using link/backlink

Metadata for your note

Metadata for a note describes the basic information (author, created date, type, status etc).
Using metadata is highly recommended, even more than links/backlinks!

Overview

```
---
created: 2025-07-28
author: Jian Huang
tags: [overview, learning]
project:
type:
status:
---
```

Metadata

```
# 1. MD simulations
[[MD basics]]
[[Metadynamics]]
[[../0.1 MD simulations/Implicit Solvent Models|Implicit Solvent Models]]
[[../0.1 MD simulations/Parameterization of force field|Parameterization of force field]]
[[../0.1 MD simulations/Steered MD or Umbrella sampling in Gromacs|Steered MD or Umbrella sampling in Gromacs]]
```

Actual content

Metadata in Obsidian is defined using the **YAML** format.

Why this is so necessary?

1. can be used with **Dataview** plugin for sorting and indexing your vault.
2. It is another method for organizing your whole notebook. e.g., tags can be used to cross-referencing and grouping

No worries for typing so many char for the metadata since we have **templater** plugin to automatically generate the code

Synchronization and backup

Basic rules:

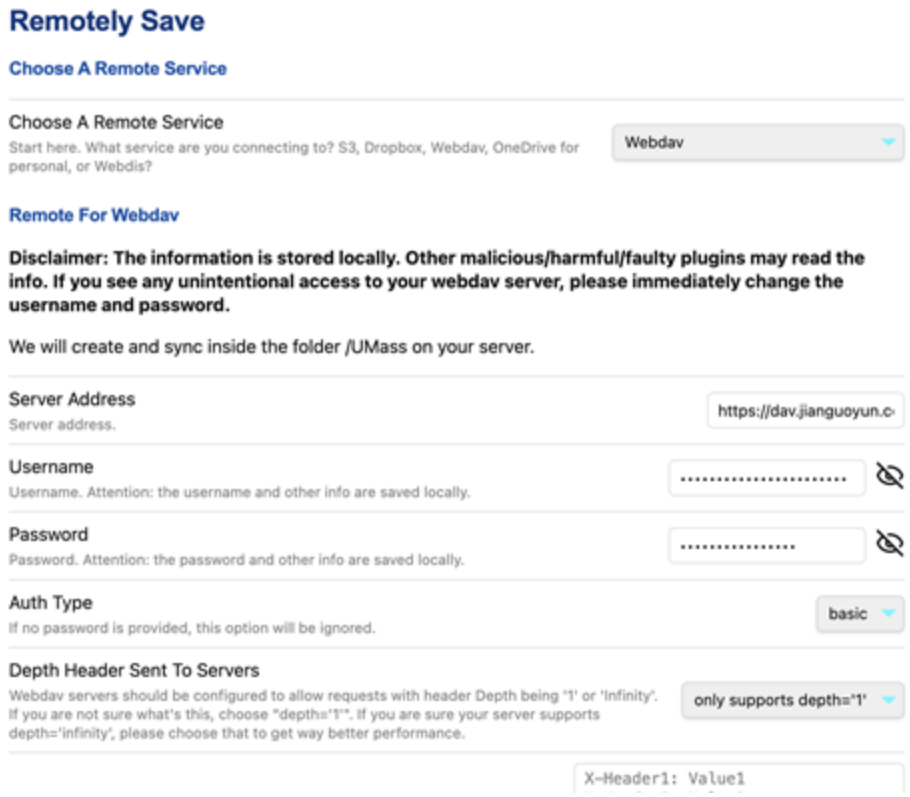
1. **Complete segregation** of local vaults, cloud vaults and github repositories
2. For daily syncing, always use Remotely Save to sync vault to your **cloud folder**
3. Weekly or monthly (or your have major changes in obsidian plugin and settings updates), use git to upload your vault changes to **github repository**

My setup:

1. **ALWAYS** keep a local copy of your vault (could use “git clone” to pull from your github repo.)
   This should be the working environment. You will consistently make changes to your local copy.
1. One copy in my cloud service for syncing across platforms.
   (I am using nutstore; other could services also work, like onedrive)
1. A private remote github repo for version control.
   (Only manually run monthly)

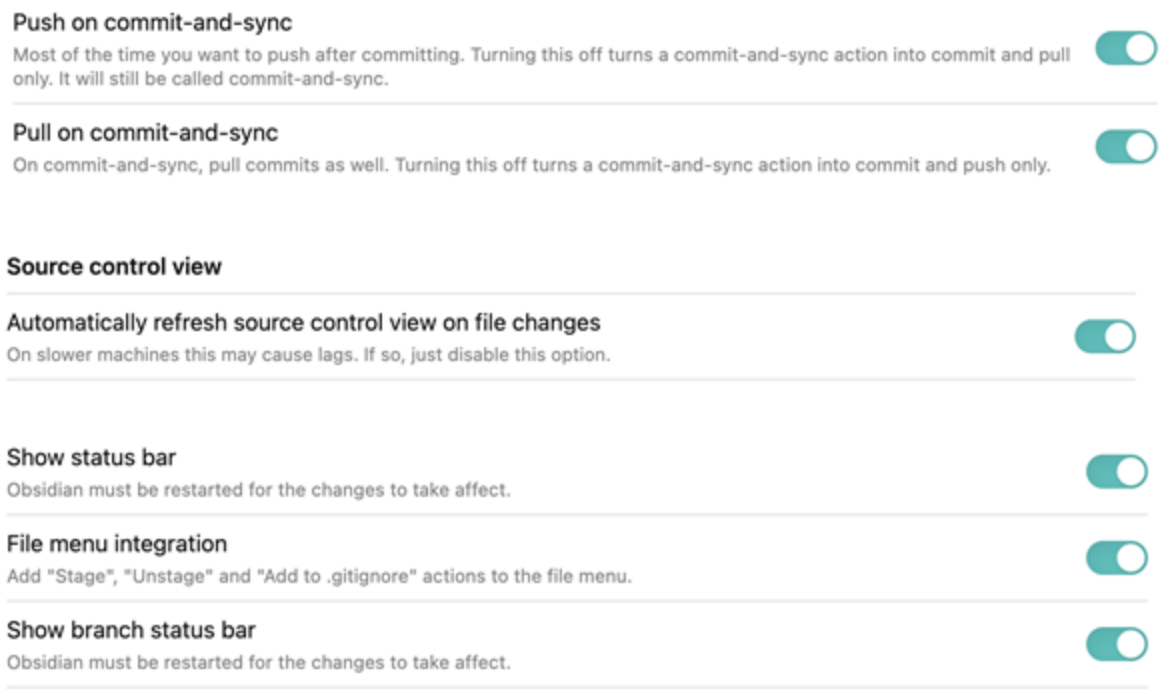
Synchronization and backup

Use cloud service for syncing and github for version control.
Install the **Remotely save** and **Git** plugin in Obsidian.



Set “Schedule For Auto Run” to be 30 min

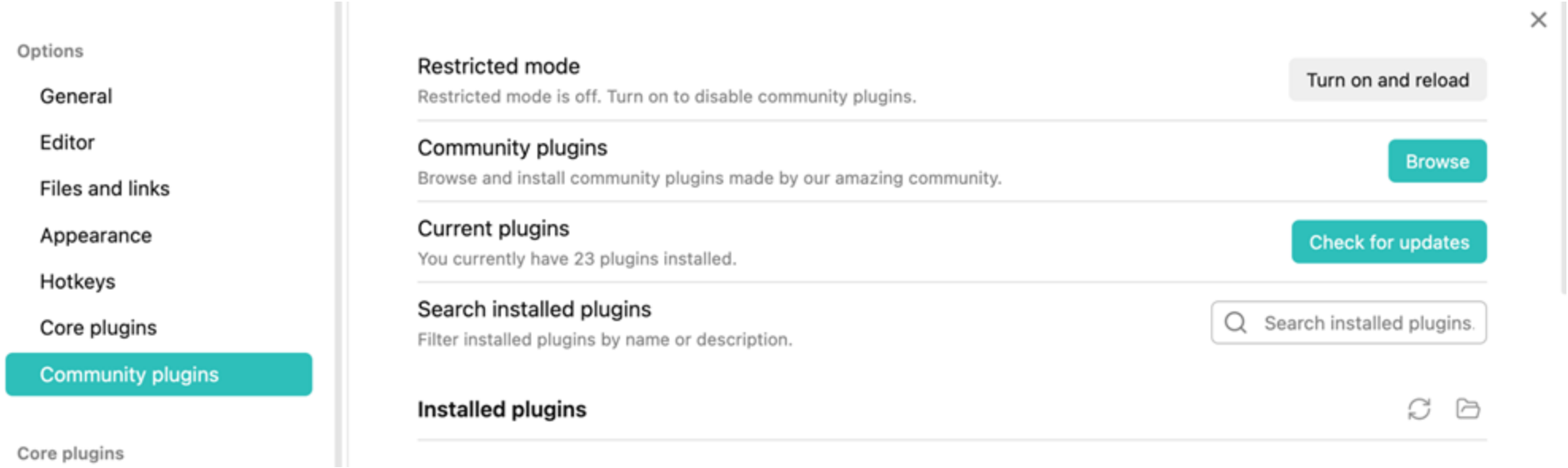
For Git: mute all other options, except the following:



In principle, run “commit-and-sync” once per month

Use powerful community plugins

Turn on community plugins: go to Settings → Community plugins → turn off Restricted mode
Then we can use the Browse to search for plugins



Use hotkeys to simplify your life

command/ctrl + o: switcher

command/ctrl + p: command palette

customize your own hotkeys: Settings → Hotkeys

Caveat: for Mac users, do NOT use the crtl key (conflicts with windows crtl key)

Image management

Locally:

use **Image converter** plugin

Caveat: difficult for sharing and publishing your notes to others

Remote: (more steps but convenient for sharing and publishing; **highly recommended**)

create a github repository for images (has to be a public repo);

download **PicGo** and configure it to connect with your image github repo;

download **the Image auto upload plugin** in Obsidian

Done! [you need to turn off Image converter plugin if you installed and enabled]

Caveat: images are public

You can find more details here:
https://share.note.sx/21at8p4b#ejb8TCuj8pzCqSCRp9+mVAzRO70/lKymrUsU3rN1Ofw

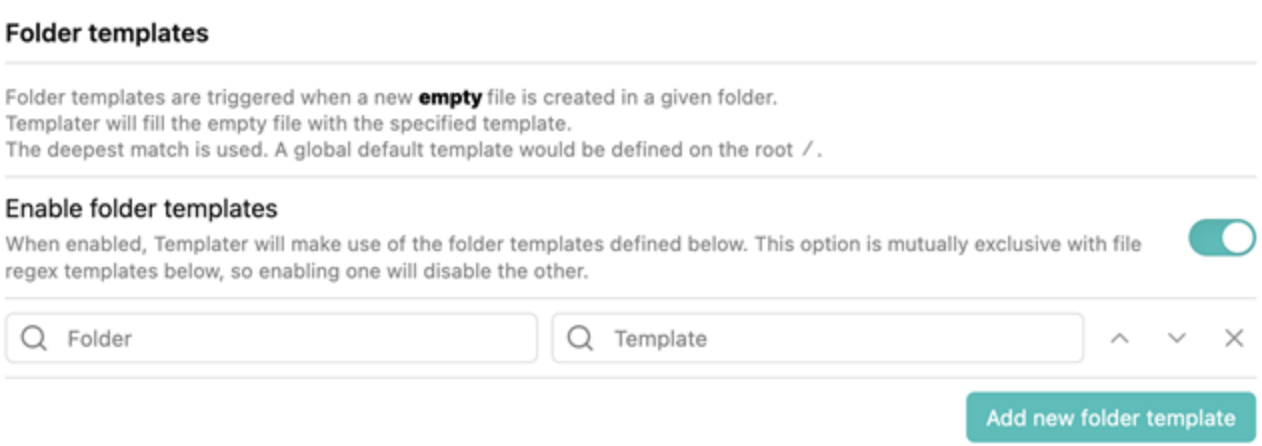
Other useful plugins

1. **Calendar**
2. Clear Unused Images
3. **Dataview**
4. **Excalidraw**
5. Markdown formatting assistant
6. **Mathpad: (similar to the desmo tool)**
7. PDF++: (for PDB annotation and viewing and taking notes)
8. **Share note**
9. Style setting
10. **Templater**
11. **Latex Suite**
12. Banner
13. Homepage

To create your homepage
find more here:
https://share.note.sx/6mb3ef8u#AOC/14p7CZagkBPIibMh87YxxdeySrMEgNSsWBa+PB8

Templater

Use Templater plugin to format your note, especially automatically generating metadata



Normal notes

```
1  ---
2  created: <% tp.date.now("YYYY-MM-DD") %>
3  author: Jian Huang
4  tags: [note]
5  project:
6  type:
7  status:
8  ---
9
```

Dataview example

```dataview
TABLE tags, created, file.ctime AS "last modified", keywords
from ""
where status = "ongoing"
    and !contains(file.path, "archive/")
    and !contains(file.path, "Templates/")
sort file.ctime desc
```

key:value pairs defined in your metadata

File (2)	tags	created	last modified	keywords
BioEmu	• paper	July 27, 2025	10:29 AM - July 29, 2025	• protein ensemble
RFdiffusion	• paper	July 27, 2025	10:29 AM - July 29, 2025	• protein design

No need to worry about writing the code. Chatgpt can totally handle it.

Thank you.

Outline

Caveat & Solutions for conflicts

Since your obsidian in all platforms will essentially be individual copies, when you have major plugin updates or changes of workspace settings in one PC, you need to **avoid conflicts** between different platforms.

BE VERY **CAREFUL** ABOUT THIS! Below is what I do:

Assuming I am working on Obsidian on my Mac and I updated lots of settings, downloaded lots of plugins and notes, i.e., **A major version update/change**.

1. synchronize your vault through Remotely Save on the Mac
2. Backup your vault using Git to your remote github repository on the Mac
3. Moving to your Windows or Ubuntu, use the git (not the git plugin inside Obsidian) under your vault directory to do the following:

```
git pull    # try pull the remote synchronized version of your vault
# if the above reported some conflicts, try the following
git fetch origin
git reset –hard orgin/main
git clean -fd
```

1. Run Remotely Save on your windows or ubuntu (you might need to disable the protection on **Abort Sync if Modification Above Percentage** in the Remotely Save settings)