

# Quarto for Knowledge Management

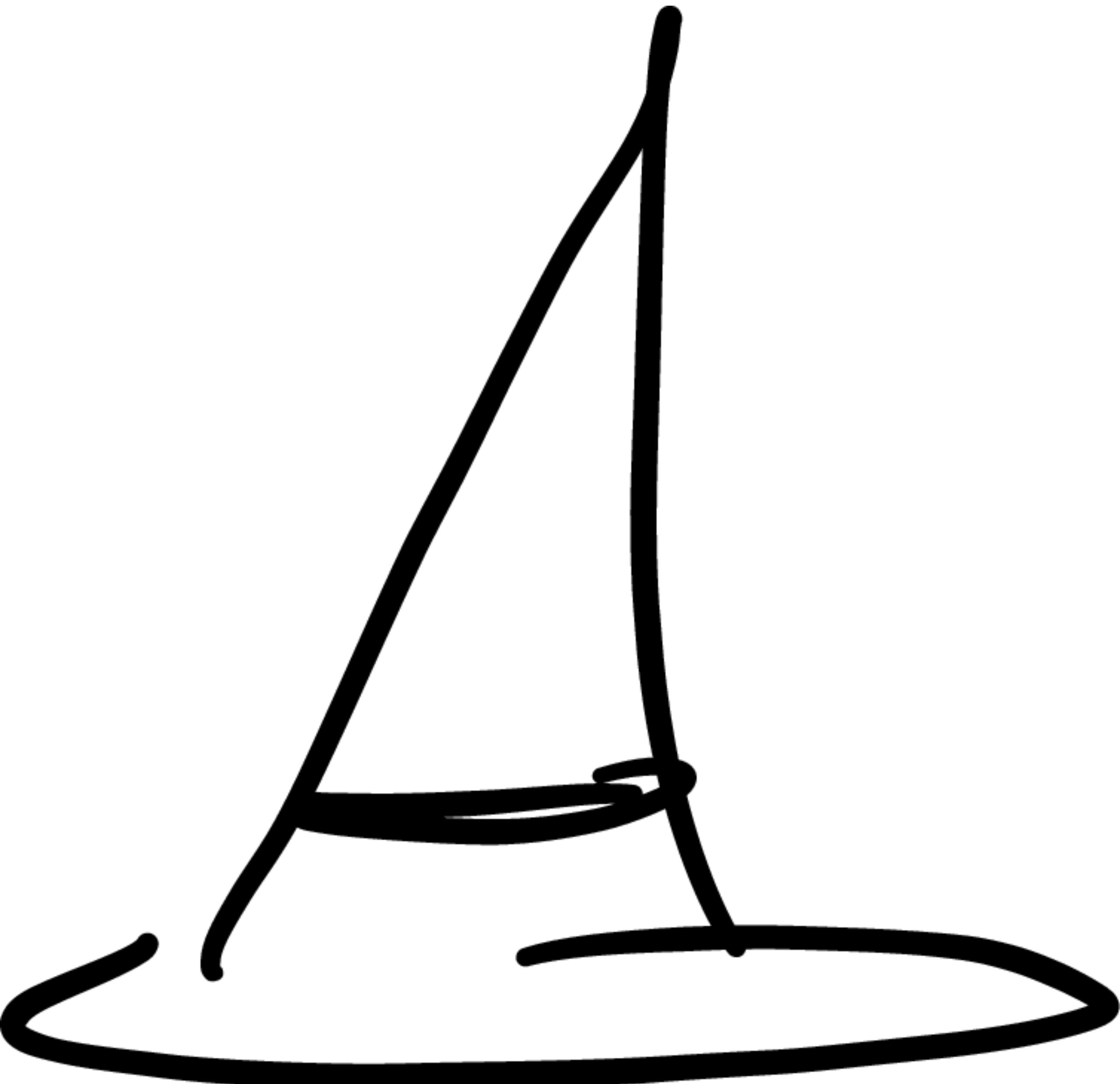
  
Cynthia A. Huang

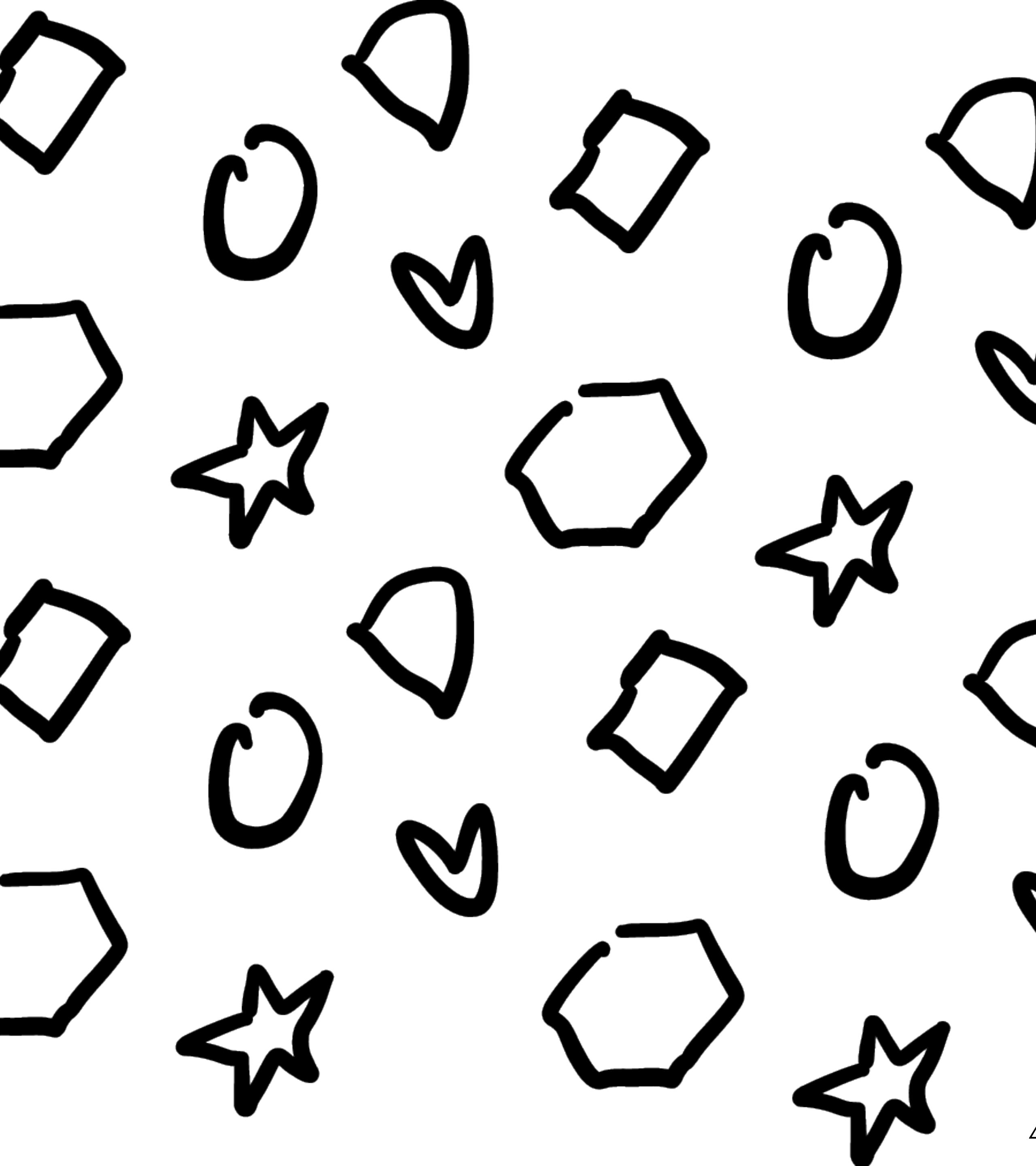
# **Hi! I'm Cynthia!**

**... a PhD Candidate,  
Data Scientist,  
Podcast Host,  
Quarto Enthusiast,**  
...



**...and clearly...**  
a serial hat collector 🧙  
and plate juggler 🍲

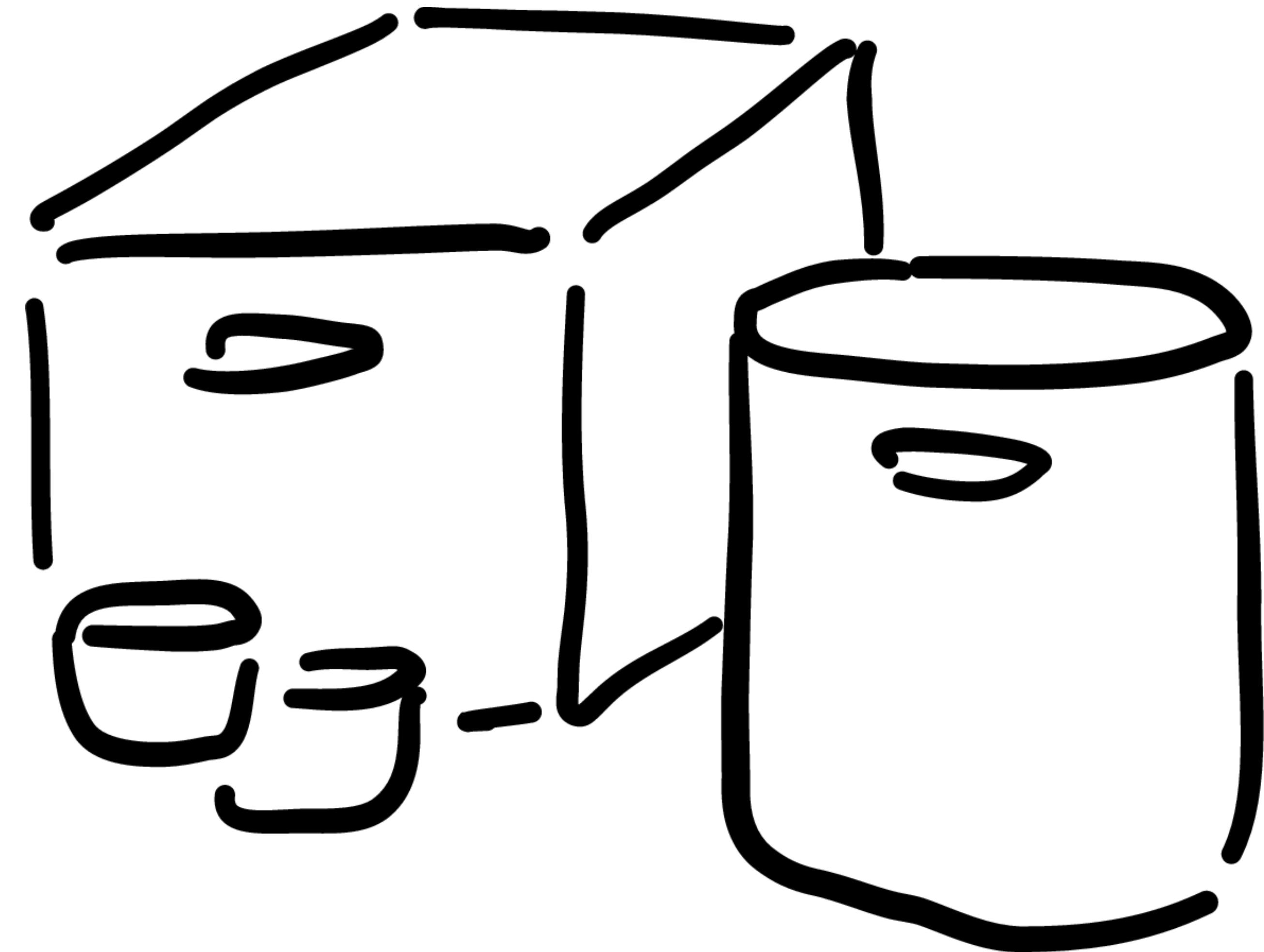




**Unsurprisingly, things  
can get chaotic...**

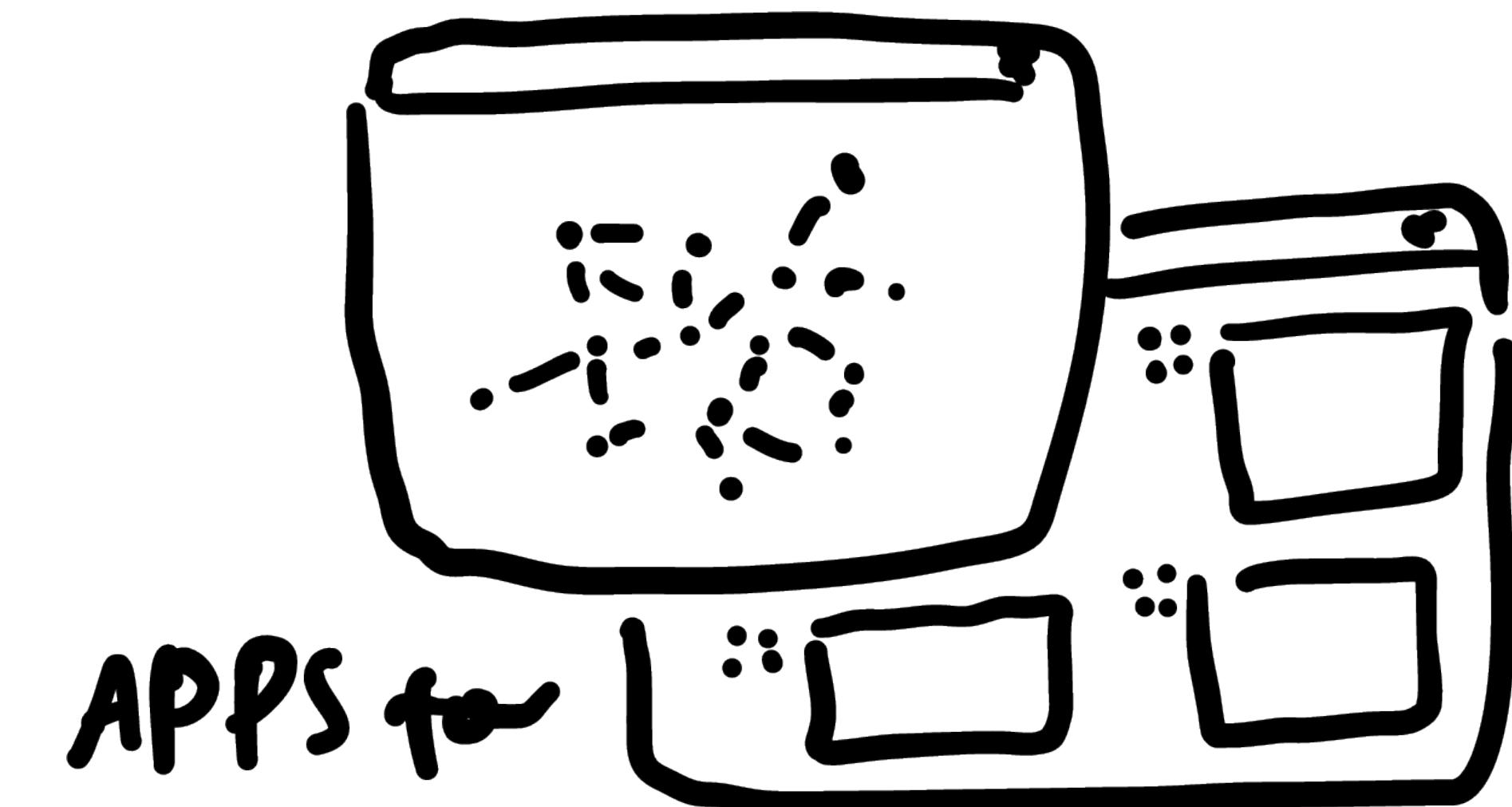
too many ideas,  
too little time...

**So naturally, I need  
strategies and tools to  
wrangle the chaos**



# Before Quarto...

- KNOWLEDGE MANAGEMENT



NOTE TAKING

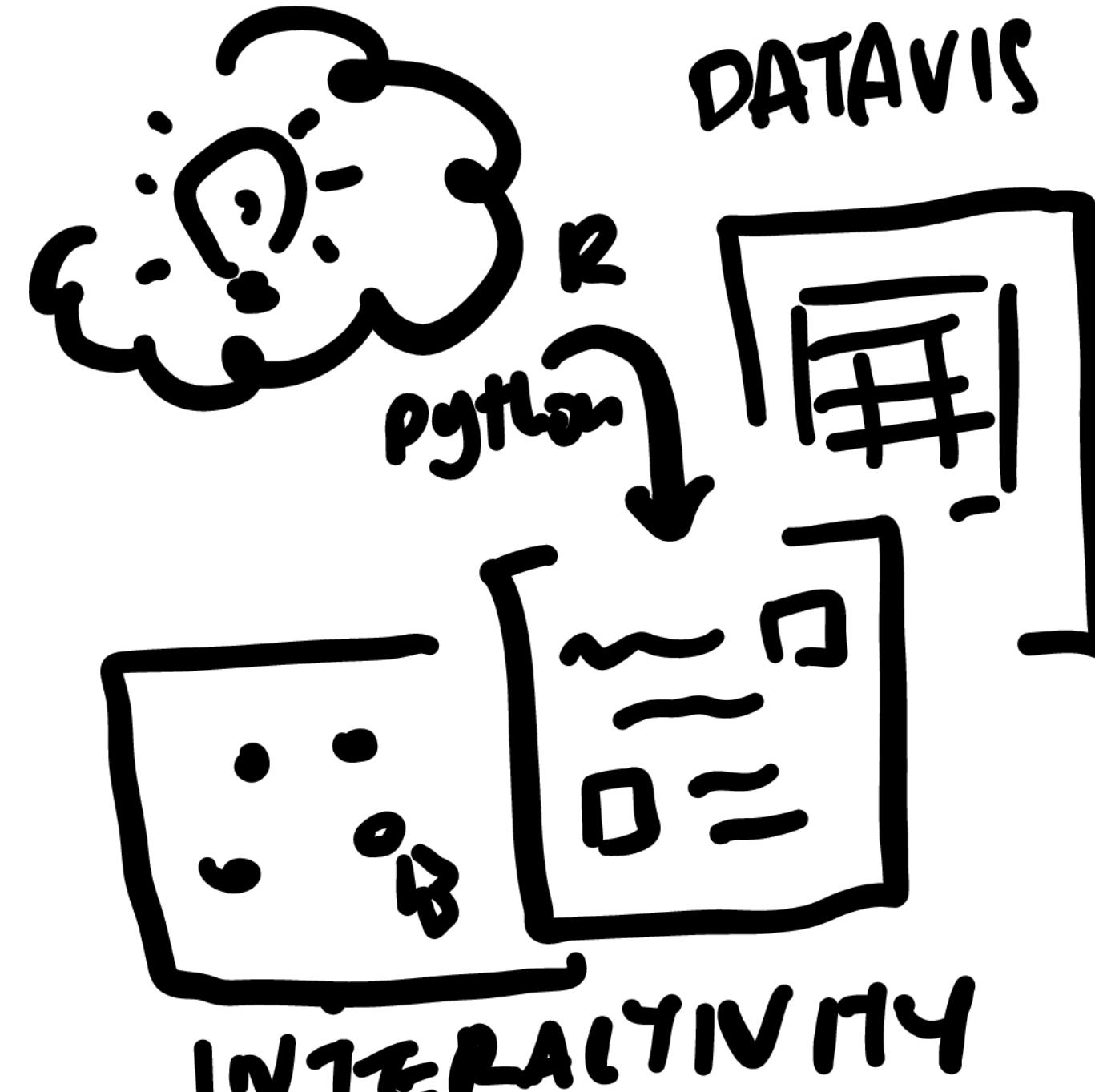
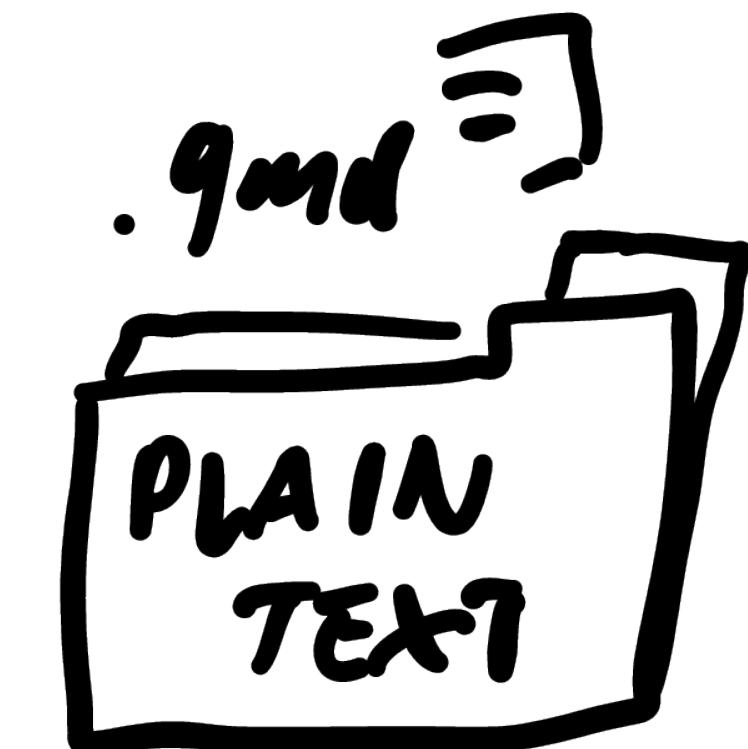
# Now with Quarto...

Simple



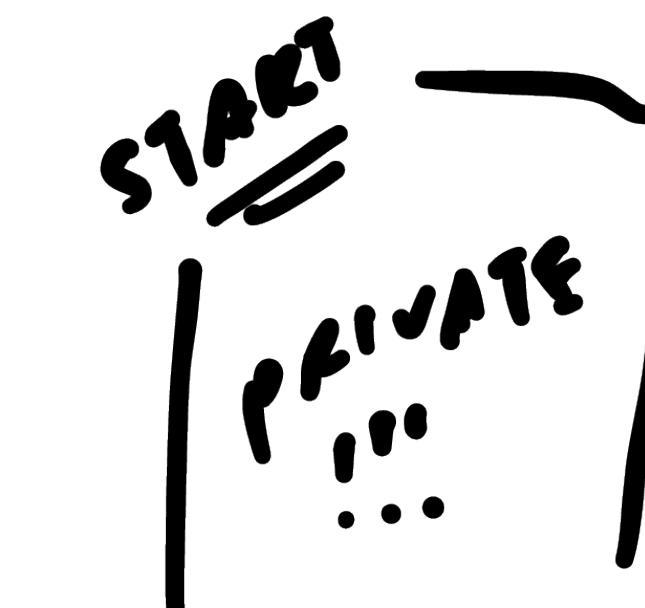
SEARCH Q

theme:  
c view  
c content  
c config

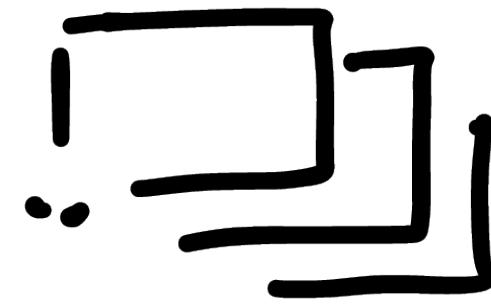


Powerful

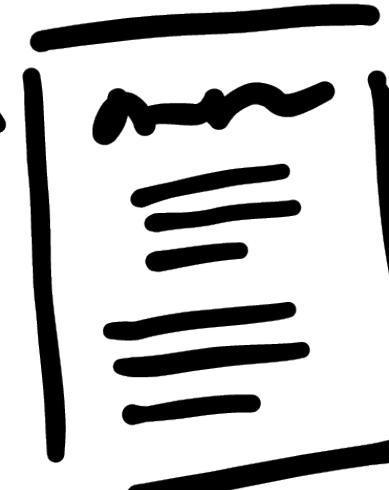
Fun



START  
cynthiajy.com  
WEBSITES



SLIDERS



MANUSCRIPTS



# Quarto for Knowledge Management



Cynthia A. Huang

# Quarto for Managing Cynthia's Brain

  
Cynthia A. Huang

# Let's take a tour...

## Websites

PhD

Reminders

Inbox

Meetings

Logs

About

Misc.

Key Dates

Show upcoming dates only

Search

When ↑ year

All

Proposed UBC visit dates

Jul 15 (Mon) - Oct 18 (Fri) 2024

Deadline for CHI25 Author Metadata Submission

Aug 01 (Thu) - Sep 05 (Thu) 2024

posit::conf(2024) Seattle

Aug 12 (Mon) - Aug 15 (Thu) 2024

```
## Images
▷ Run Cell
```{r}
#| output: asis
#| echo: false
dirs <- fs::dir_ls(type = "directory")

catImages <- function(folder){
  img_files <- fs::dir_ls(folder) |> sort()
  cat(glue::glue("{img_files}\n\n\n!{img_files}\n{img_files}\n\n\n"))
}

for (folder in dirs){
  cat("## ", stringr::str_to_title(folder),
  "\n\n\n", sep = "")
  catImages(folder)
}
```

```

## Extensions

localhost

Private

Cynthia Huang

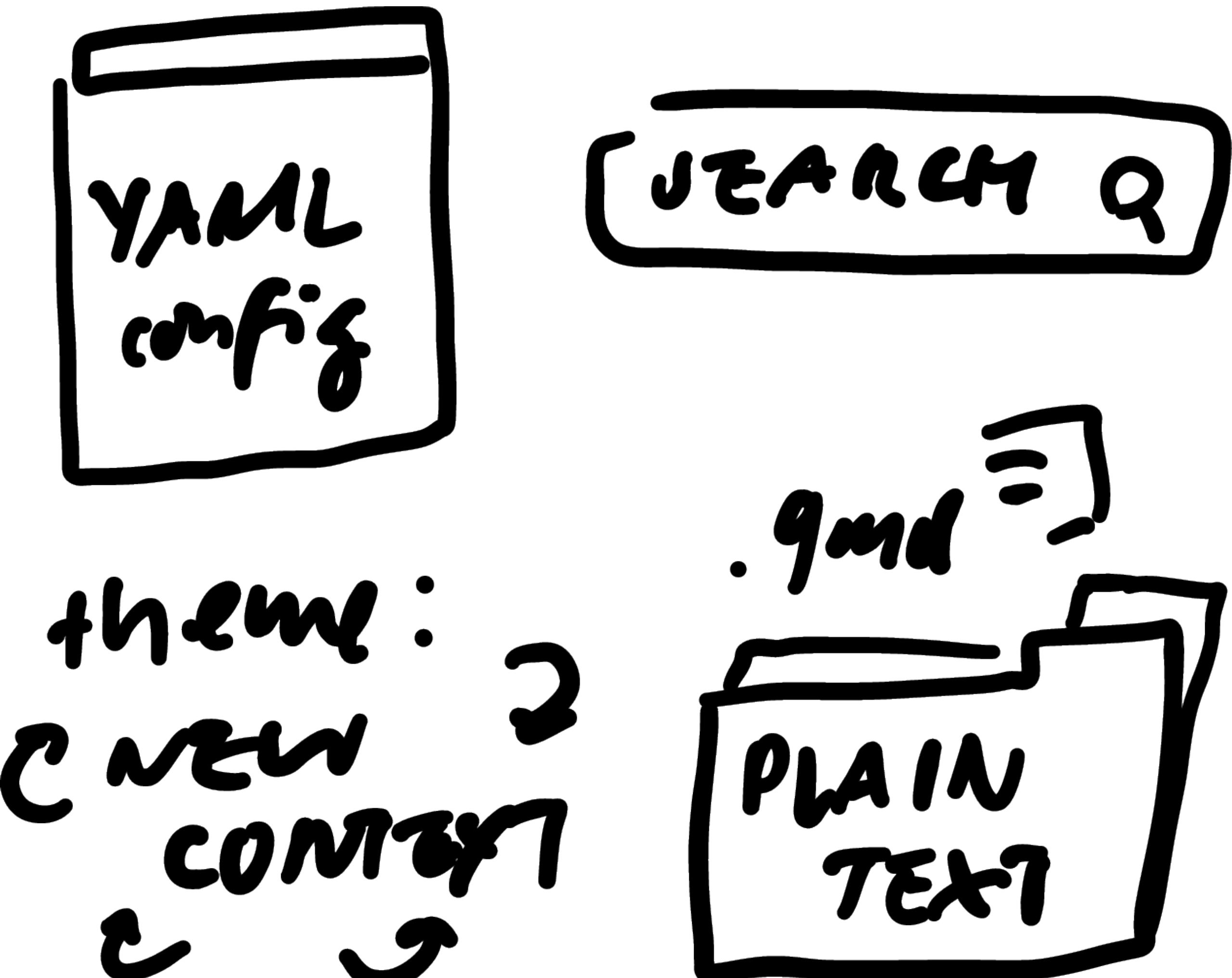
Now Blog Gallery Research Curriculum Vitae

Sketchbook

Europe Research Trip Jun-Jul 2024

Sketched while travelling Germany, Austria, Switzerland & France.

## Computations



## Quarto Websites

provide  
structure and variety  
for minimal effort

```

_quarto.yml — quarto-conf-scrapbook
! _quarto.yml X  inc ⌂ ⌂ ⌂ ⌂ ⌂ ... 
! _quarto.yml > {} project > abc type
You, 10 minutes ago | 1 author (You)
1 project:
2   type: website You, 6 months ago
3
4 website:
5   title: "posit::conf(2023)"
6   page-navigation: true
7   navbar:
8     right:
9       - href: index.qmd
10      text: Home
11      - href: workshop.qmd
12      text: Workshop
13      - href: talks.qmd
14      text: Talks
15      - sidebar:misc
16 sidebar:
17   - id: misc
18   title: "Misc"
19   contents:
20     - auto: misc
21     - bibliography.qmd
22
23 bibliography: references.bib
24
25 format:
26   html:
27     theme: sketchy
28     css: styles.css
29     toc: true
30     toc-depth: 4
31     toc-location: left
32     from: markdown+emoji
33     citation-location: margin

```

chua0032 in quarto-conf-scrapbook {posit-conf-2023} > tree -L 2 -I \_site

```

.
├── README.md
├── _publish.yml
├── _quarto.yml
├── about.qmd
├── bibliography.qmd
├── index.qmd
├── references.bib
├── styles.css
└── talks
    ├── _listing.yml
    ├── brianTarran.qmd
    ├── epoxy.qmd
    ├── images
    ├── jdlang.qmd
    └── people-of-posit.qmd

```

3 directories, 15 files

# A dash of YAML for an easy start



```

_quo listing.html -- quarto-conf-scrapbook
Quo Preview < http://localhost:7037/talks.html
Zoom: (Auto) ...
posit::conf(2023) Home Workshop Talks Misc ...
On this page
Other Talks
Becoming an R Package Author (or How I Got Rich Responding to GitHub Issues)
Quickly get your Quarto HTML theme in order
Talk Notes
Title Presenter
From Journalist to Coder: Creating a Web Publication with Quarto Brian Tarran
It's Abstractions All the Way Down... JD Long
The People of Posit: Bringing Personality to R Packages
epoxy: Super Glue for Data-driven Reports and Shiny Apps Garrick Aden-Buie
Other Talks
Becoming an R Package Author (or How I Got Rich Responding to GitHub Issues)
author: Matt Herman


- https://www.youtube.com/watch?v=18vfcf46ozE&list=PL9HYL-VRX0oRFZs1RGHwHuwea7SvAATHp&index=56
- going from user to co-author of {tidycensus}
- tips:
  - answer GitHub issues;
  - fix bugs;
  - contribute domain knowledge (as vignettes)


Quickly get your Quarto HTML theme in order
author: Greg Swinehart


- https://www.youtube.com/watch?v=i2mdxfvm\_VY&list=PL9HYL-VRX0oRFZs1RGHwHuwea7SvAATHp&index=30
- use {bslib} to look up SCSS variables

```

\_listing.yml

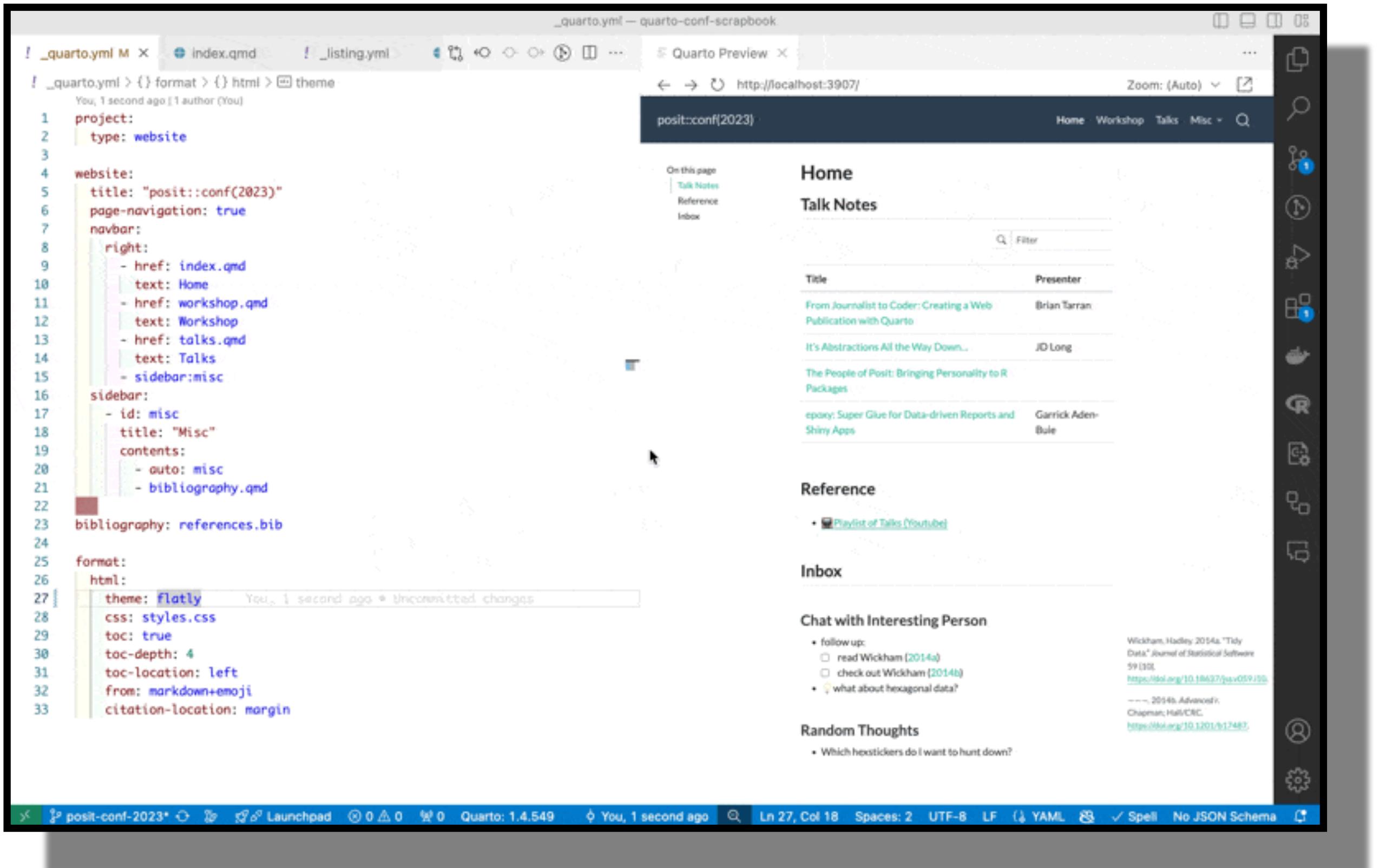
```

! _listing.yml > {} listing > id
talks > ! _listing.yml > {} listing > id
You, 4 hours ago | 1 author (You)
1 listing:
2   id: talk-listing You, 4 hours ago
3   contents: talks
4   type: table
5   sort-ui: false
6   categories: false
7   field-display-names:
8     author: "Presenter"

```

# Listings, TOCs with just a bit more YAML

# Themes & Custom CSS offer visual variety 😊



The screenshot shows the Quarto development environment. On the left, the code editor displays `_quarto.yml` with configuration for a website named "posit::conf(2023)". It includes sections for project, website, sidebar, sidebar, contents, bibliography, format, and html. The html section specifies a theme of "flatly" and a CSS file "styles.css". On the right, a browser window titled "Quarto Preview" shows a dark-themed website with a sidebar containing "Talk Notes", "Reference", and "Inbox" sections. The main content area displays a list of talk notes with titles like "From Journalist to Coder: Creating a Web Publication with Quarto", "It's Abstractions All the Way Down...", and "The People of Posit: Bringing Personality to R Packages". Below the talk notes is a "Reference" section with a link to "Playlist of Talks (Youtube)" and an "Inbox" section with a "Chat with Interesting Person" entry about hexagonal data.

```
_quarto.yml — quarto-conf-scrapbook
You, 1 second ago | 1 author (You)
1 project:
2   type: website
3
4 website:
5   title: "posit::conf(2023)"
6   page-navigation: true
7   navbar:
8     right:
9       - href: index.qmd
10      text: Home
11      - href: workshop.qmd
12      text: Workshop
13      - href: talks.qmd
14      text: Talks
15      - sidebar:misc
16 sidebar:
17   - id: misc
18   title: "Misc"
19   contents:
20     - auto: misc
21     - bibliography.qmd
22 bibliography: references.bib
23
24 format:
25   html:
26     theme: flatly
27     You, 1 second ago * Uncommitted changes
28     css: styles.css
29     toc: true
30     toc-depth: 4
31     toc-location: left
32     from: markdown+emoji
33     citation-location: margin
```

# Search across (almost) everything I've done in my PhD

PhD Reminders Inbox Meetings Logs ▾ About ▾ Misc. ▾ Q

On this page

2024

- Jul ?? / RH
- Jun 20 / RH
- Jun 10 / email update - RH, SG, SA
- Jun 2 / RH, SG
- May 22 / RH, SA
- May 15 / RH, SA
- May 06 / RH, SA
- Apr 29 / SG, SA
- Apr 24 / RH
- Apr 17 / RH
- Apr 15 / SG
- Apr 10 / RH
- Apr 3 / RH
- Mar 25 / RH, SA
- Mar 20 / RH, SA
- Mar 13 / RH, SA
- Mar 6 / RH
- Feb 28 / RH
- Feb 20 / RH**
- Feb 13 / RH, SA, SG
- Feb 6 / RH, SG, SA
- Jan 30 / SA
- Jan 23 / RH, SA
- Jan 16 / RH, SA
- Jan 9 / RH, SA

2023

2022

2021

**Feb 20 / RH**

- Updates
  - Big Data Workshop cancelled due to storm damage to Monash Club
  - very life-admin-y week 😞
  - Thurs-Fri 4/5 April
    - Approval for webscraping presentation for Dept. of Banking and Finance (Silvio)?
  - useR! abstract?
    - 1/3rd academics + 2/3 non-academics;
    - tools to use – visualisation / data structure
    - advertise what the package can do
    - submit to CRAN?
- Paper Progress

The grid contains four icons:

- Concept Sketch:** A small building with a circular courtyard and a tree.
- After meeting with Client:** A larger, more detailed version of the building with a central entrance.
- After Working Drawings:** A 3D perspective view of the building under construction.
- After Construction:** The completed building with surrounding structures.

A small cartoon character icon is positioned between the top-right and bottom-left icons.

- Read-through next week
- If submitted to Monash Working Papers, SOMEONE will

# Listings & Search

help me keep track of  
definitions across disciplines

The screenshot shows a software application window with a blue header bar containing the text "PhD Reminders Inbox Meetings Logs About Misc." and a search icon. Below the header, there are two main sections: "Glossary" and "Inbox".

**Glossary**

- How-to Reminders
- Resources
- Bibliography

**Inbox**

- Nomenclature: [Wikipedia](#)
- for interest:
  - <https://books.google.com.au/books?hl=en&lr=&id=R-WQvoHc94C&oi=fnd&pg=RA4-PA1&dq=%22cross+nomenclature%22+data&ots=jn71fuV7Rj&sig=b6PApUcDYjYLQigMfsdkOKf7Cjc#v=onepage&q=%22c>
  - <https://skai.io/blog/data-taxonomy-best-practices/>
- Nomenclature Codes: [Wikipedia](#)
- Taxonomy: [Wikipedia](#)
  - economic taxonomy: [https://en.wikipedia.org/wiki/Economic\\_taxonomy](https://en.wikipedia.org/wiki/Economic_taxonomy)
  - geographic taxonomy: [https://en.wikipedia.org/wiki/Category:Geographic\\_taxonomies](https://en.wikipedia.org/wiki/Category:Geographic_taxonomies)

**2024-05-14: Workflow vs Computational Graphs**

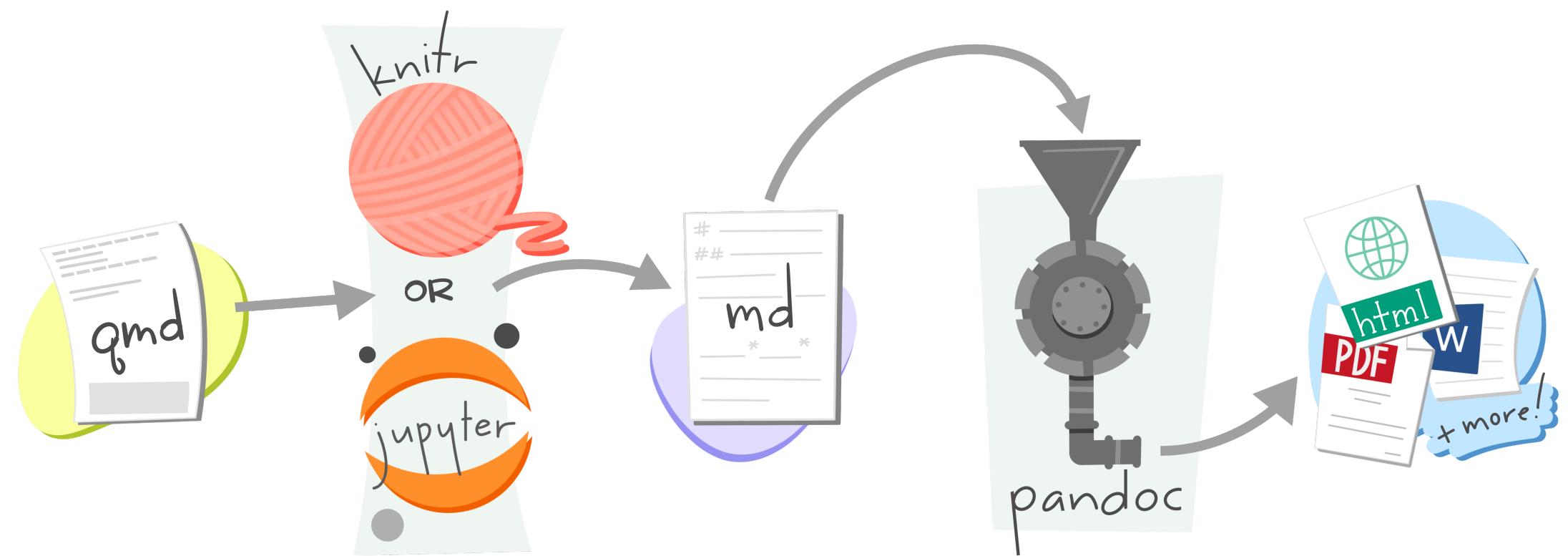
- Computational graph in the “mathematical” computation sense, as opposed to workflow graphs which we use to refer to DAG representations of sequential programming steps

**2024-05-12: Statistical Provenance**

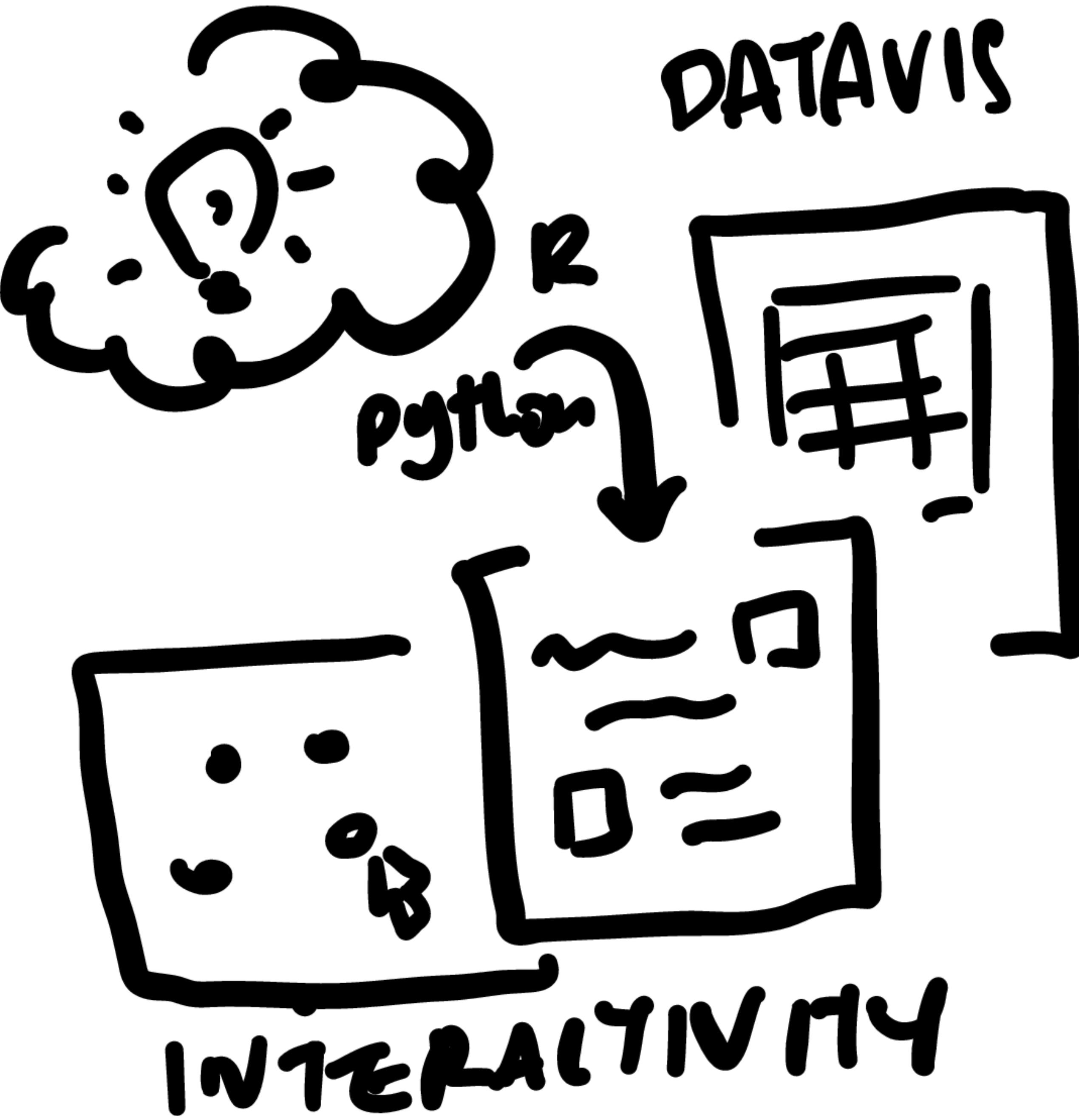
- Terminology need from the paper idea “Computational Graphs for Statistical Provenance”
  - computational graphs captures data prov + forecast reconciliation applications that Mitch & I are working on
  - idea would be to propose it as an alternative approach to existing provenance tools
- “Statistical Provenance” to encompass:
  - “Data Provenance” in the computer science database/systems “facts/bits” sense, and
  - “Model Provenance” in the ML/AI data science sense.
  - “declarative”-ish statistical modelling, preprocessing and/or sampling logic
- scholar “Statistical Provenance” results were mainly from geology describing the use of statistical analysis for tracing/certifying the source/history of minerals/sediment etc.
  - e.g. McManus, C.E.; McMillan, N.J.; Dowe, J.; Bell, J. Diamonds Certify Themselves: Multivariate Statistical Provenance Analysis. Minerals 2020, 10, 916. <https://doi.org/10.3390/min10100916> – uses analysis of spectral traces obtained by LIBS (laser-induced breakdown spectroscopy) for certifying diamond provenance

**Domain Definitions**

| Order By                    | Filter  |                           |
|-----------------------------|---|---------------------------|
| Title                       | Description   | source                    |
| Schema matching and mapping | Schema matching is the process of identifying that two objects are semantically related (scope of this article) while Schema mapping refers to the transformations between the objects. | <a href="#">Wikipedia</a> |
| Schema crosswalk            | A schema crosswalk is a table that shows equivalent elements (or “fields”) in more than one database schema. It maps the elements in one schema to the equivalent elements in another.  | <a href="#">Wikipedia</a> |
| Semantic mapping            | Semantic matching is a technique used in computer science to identify information which is semantically related. Given any two  | <a href="#">Wikipedia</a> |



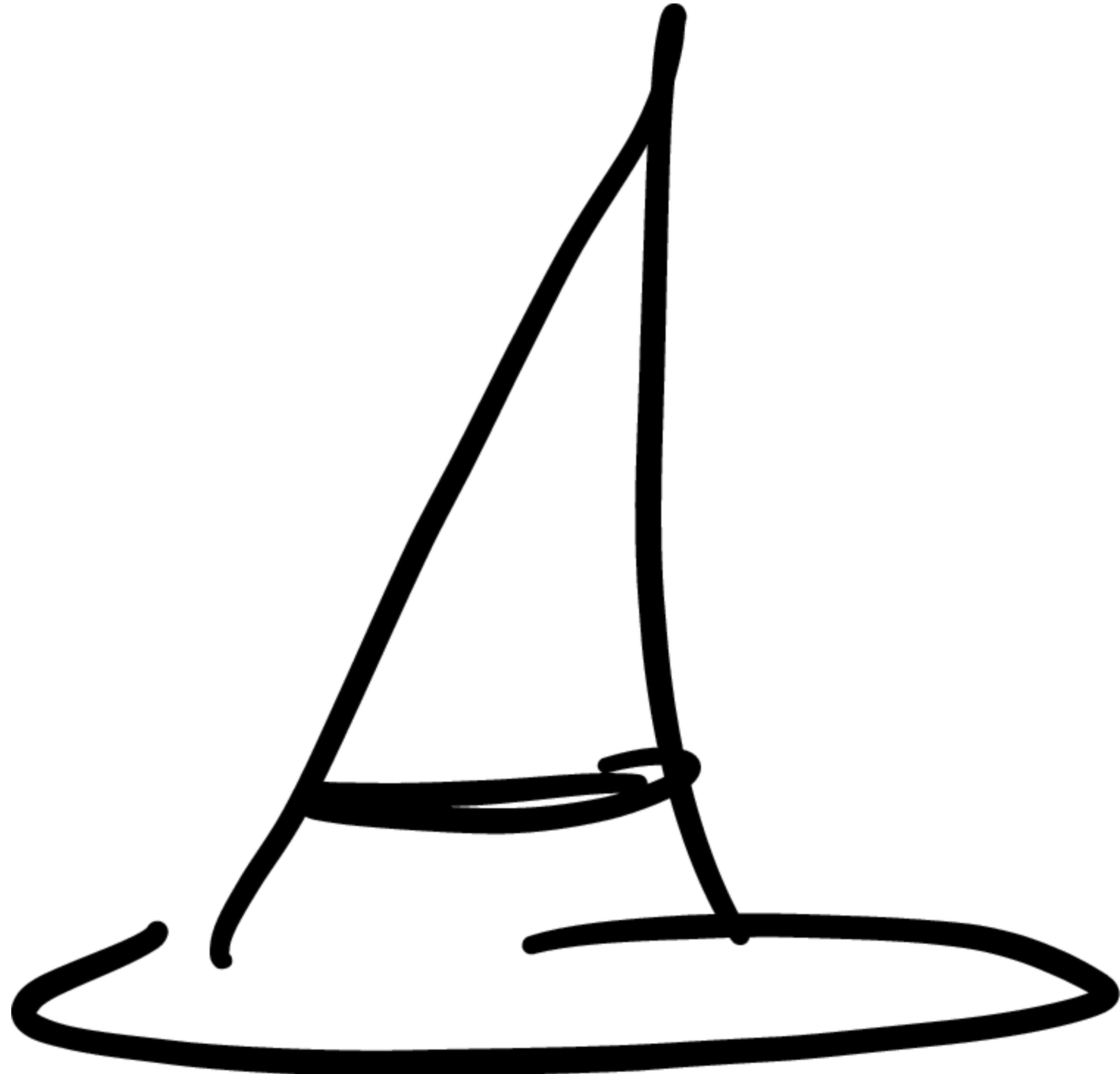
**Plain Text**  
makes reorganising simple!



**Quarto Computations  
& Extensions**  
supercharge  
my coding skills  
to turn ideas into reality!

**I have many hats,  
but...**

**web developer  
is not one of them!**



2024 Europe & North America Research Trip [Home](#) [Trip Logistics](#) [Trip Log](#)

## 2024 Europe & Canada Research Tour

This is my travel planner and diary for a BIG trip across UK & Europe (London, Munich, Dijon, Salzburg, amongst others), and the West Coast of North America (Vancouver, Portland, Seattle) for research visits and conferences.

### Trip Itinerary

| Jun |     |     |     |     |     |     | Jul |     |     |     |     |     |     | Aug |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |    |    |    |    |    |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|
| Mon | Tue | Wed | Thu | Fri | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun |    |    |    |    |    |    |    |    |
| 3   | 4   | 5   | 6   | 7   | 8   | 9   | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 1   | 2   | 3   | 4   | 5   | 6   | 7   |    |    |    |    |    |    |    |    |
| 10  | 11  | 12  | 13  | 14  | 15  | 16  | 15  | 16  | 17  | 18  | 19  | 20  | 21  | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 19  | 20  | 21  | 22  | 23  | 24  | 25  | 26 |    |    |    |    |    |    |    |
| 17  | 18  | 19  | 20  | 21  | 22  | 23  | 22  | 23  | 24  | 25  | 26  | 27  | 28  | 29  | 30  | 29  | 30  | 31  | 26  | 27  | 28  | 29  | 30  | 31  | 26  | 27  | 28  | 29 | 30 | 31 |    |    |    |    |    |
| 24  | 25  | 26  | 27  | 28  | 29  | 30  | 29  | 30  | 31  | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |

| Sep |     |     |     |     |     |     | Oct |     |     |     |     |     |     | Nov |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Mon | Tue | Wed | Thu | Fri | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 2   | 3   | 4   | 5   | 6   | 7   | 8   | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 9   | 10  | 11  | 12  | 13  | 14  | 15  | 14  | 15  | 16  | 17  | 18  | 19  | 20  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 19  | 20  | 21  | 22  | 23  | 24  | 25 | 26 | 27 | 28 | 29 | 30 | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |

### Key Travel Dates

Hosts:

- Dr. Anna-Carolina Haensch @ SoDa Statistics, LMU Munich
- Prof. Tamara Munzner @ Dept. Computer Science, UBC Vancouver

Conferences:

- [UseR!](#)
- [JSM](#)
- [posit::conf](#)
- [IEEE VIS \(TBC\)](#)

### README

### Images

### Illustrations

illustrations/diagram\_crossmap-transform-latex.png

illustrations/diagram\_current-prov.png

Cynthia Huang

Now Blog Gallery Research Curriculum Vitae [G](#) [T](#) [E](#) [Q](#)

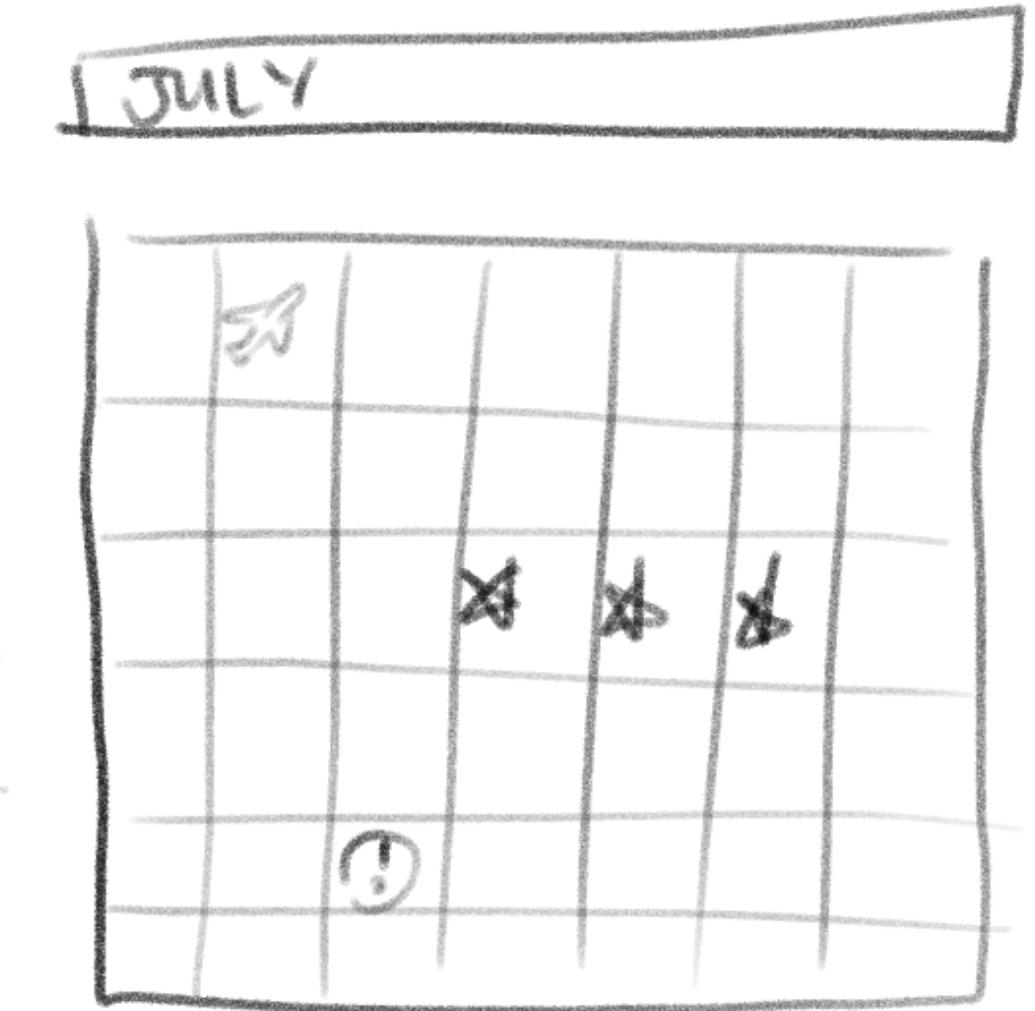
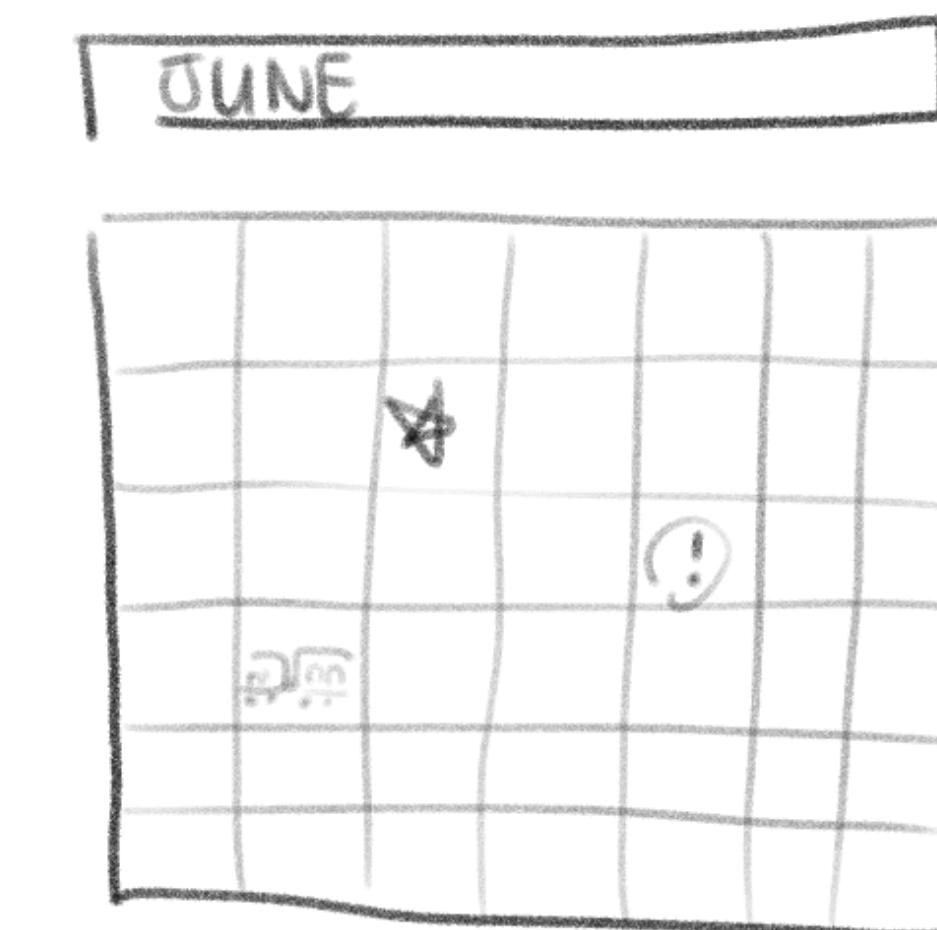
### Sketchbook

#### Europe Research Trip Jun-Jul 2024

Sketched while travelling Germany, Austria, Switzerland & France.

# Code Chunks + **{dplyr}** & **{ggplot2}** Interactive calendar to plan and document my research trip

CALENDAR



# Code Chunks + **{dplyr}** & **{ggplot2}** Interactive calendar to plan and document my research trip

```
## ---- Interactive Calendar ----
p_cal_girafe <- travel_dates |>
  dplyr::mutate(
    duration = difftime(endDate, startDate, unit = "days") + 1,
    event_id = dplyr::row_number()
  ) |>
  ggtilecal::reframe_events(startDate, endDate) |>
  dplyr::mutate(
    country = countrycode::countryname(location, "iso2c"),
    flag = countrycode::countrycode(country, "iso2c", "unicode.symbol")
  ) |>
  dplyr::slice_min(order_by = duration, n = 1, by = unit_date) |>
  dplyr::mutate(emoji = dplyr::case_when(
    stringr::str_detect(details, "en route") ~ "\u2708",
    TRUE ~ flag
  )) |>
  ggtilecal::gg_facet_wrap_months(unit_date) +
  geom_text(aes(label = emoji), nudge_y = -0.25) +
  ggiraph::geom_tile_interactive(
    aes(
      tooltip = paste(details, "@", location),
      data_id = event_id
    ),
    alpha = 0.2,
    fill = "transparent",
    colour = "grey80"
  )
```

# Code Chunks + `{dplyr}` & `{ggplot2}` Interactive calendar to plan and document my research trip

☰ 2024 Europe & North America Research Trip

Q

## 2024 Europe & Canada Research Tour

This is my travel planner and diary for a BIG trip across UK & Europe (London, Munich, Dijon, Salzburg, amongst others), and the West Coast of North America (Vancouver, Portland, Seattle) for research visits and conferences.

On this page

- Trip Itinerary
- Interactive Calendar
- Key Travel Dates

### Trip Itinerary

### Interactive Calendar

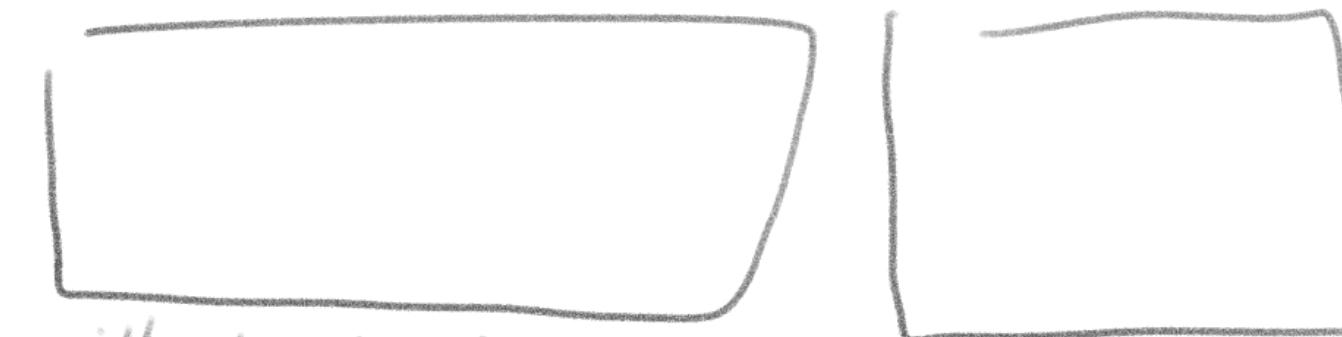
📅 Produced using `ggtilecal!`!

| Jun |     |     |     |     |     |     | Jul |     |     |     |     |     |     | Aug |     |     |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Mon | Tue | Wed | Thu | Fri | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 19  | 20  | 21  | 1  | 2  | 3  | 4  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 19  | 20  | 21  | 22  | 23  | 24  | 25  | 26  | 27  | 28  | 29  | 30  | 1  | 2  | 3  | 4  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 24  | 25  | 26  | 27  | 28  | 29  | 30  | 29  | 30  | 31  | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12 | 13 | 14 | 15 | 16 | 17 | 18 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 19  | 20  | 21  | 22  | 23  | 24  | 25  | 26  | 27  | 28  | 29  | 30  | 31  | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 26  | 27  | 28  | 29  | 30  | 31  | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Sep |     |     |     |     |     |     | Oct |     |     |     |     |     |     | Nov |     |     |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Mon | Tue | Wed | Thu | Fri | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 19  | 20  | 21  | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 1  | 2  | 3  | 4  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 19  | 20  | 21  | 22  | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 1  | 2  | 3  | 4  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 19  | 20  | 21  | 22  | 23  | 24  | 25  | 26  | 27  | 28  | 29  | 30 | 31 | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |    |    |    |    |    |    |    |    |    |
| 16  | 17  | 18  | 19  | 20  | 21  | 22  | 23  | 24  | 25  | 26  | 27  | 28  | 29  | 28  | 29  | 30  | 31  | 1   | 2   | 3   | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 23  | 24  | 25  | 26  | 27  | 28  | 29  | 30  | 31  | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 1  | 2  | 3  | 4  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 30  | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 19  | 20  | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |

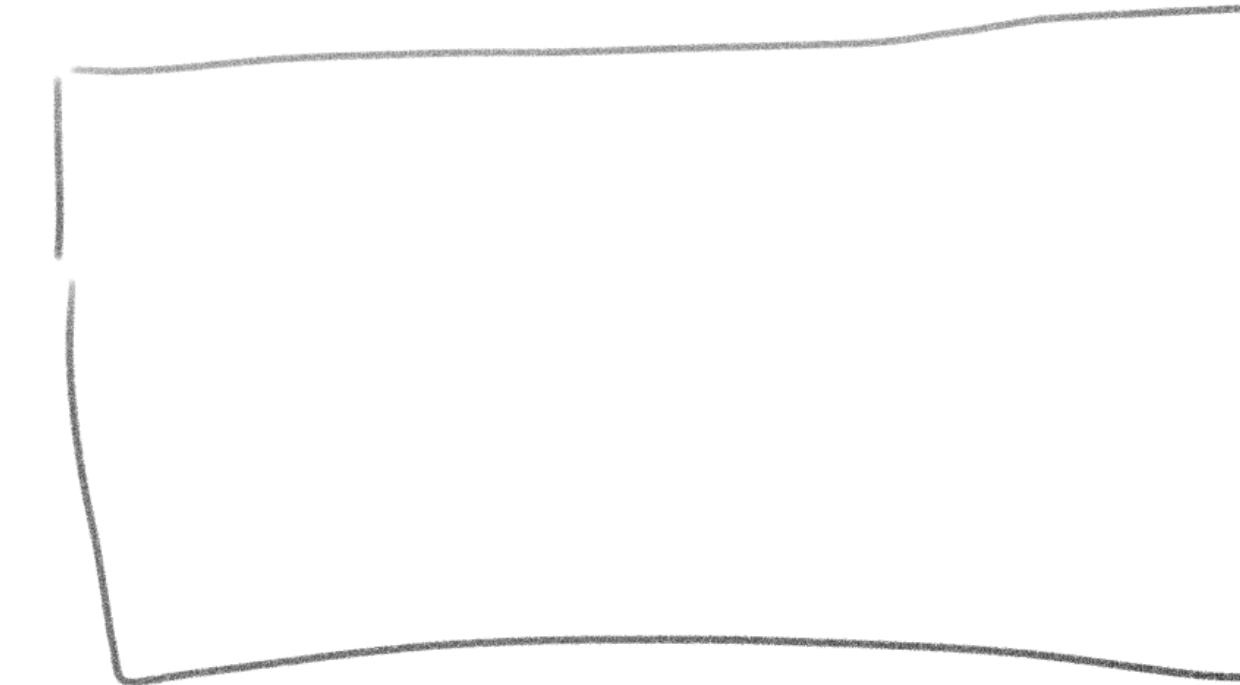
# Code Chunks + {glue}

## README for organising my research graphics

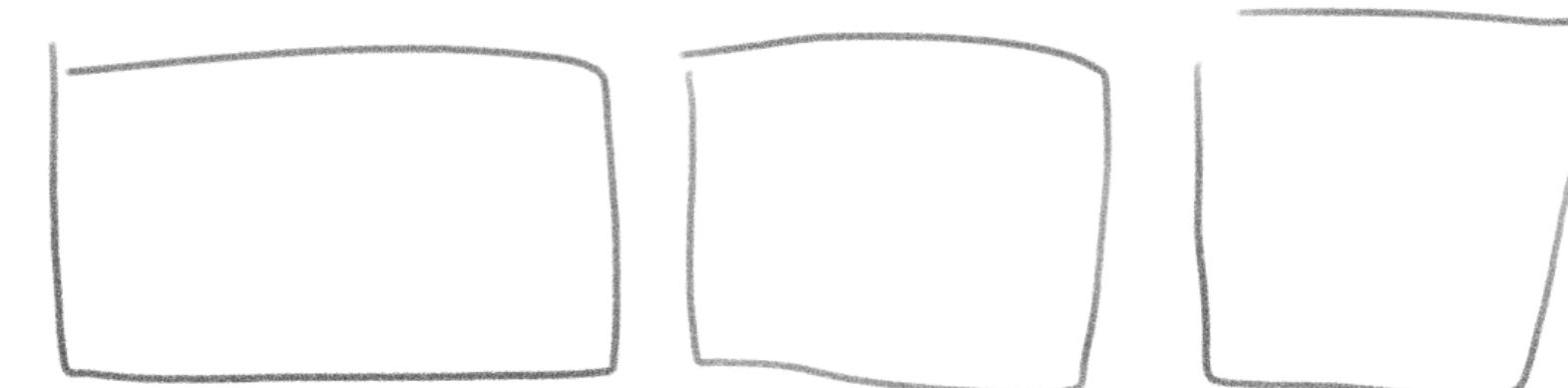
IMAGES



illustration/ ...



plots/ ...



screenshots/

# Code Chunks + {glue}

## README for organising my research graphics

```
README.qmd

---
title: Images for Crossmaps Project
format: gfm
---

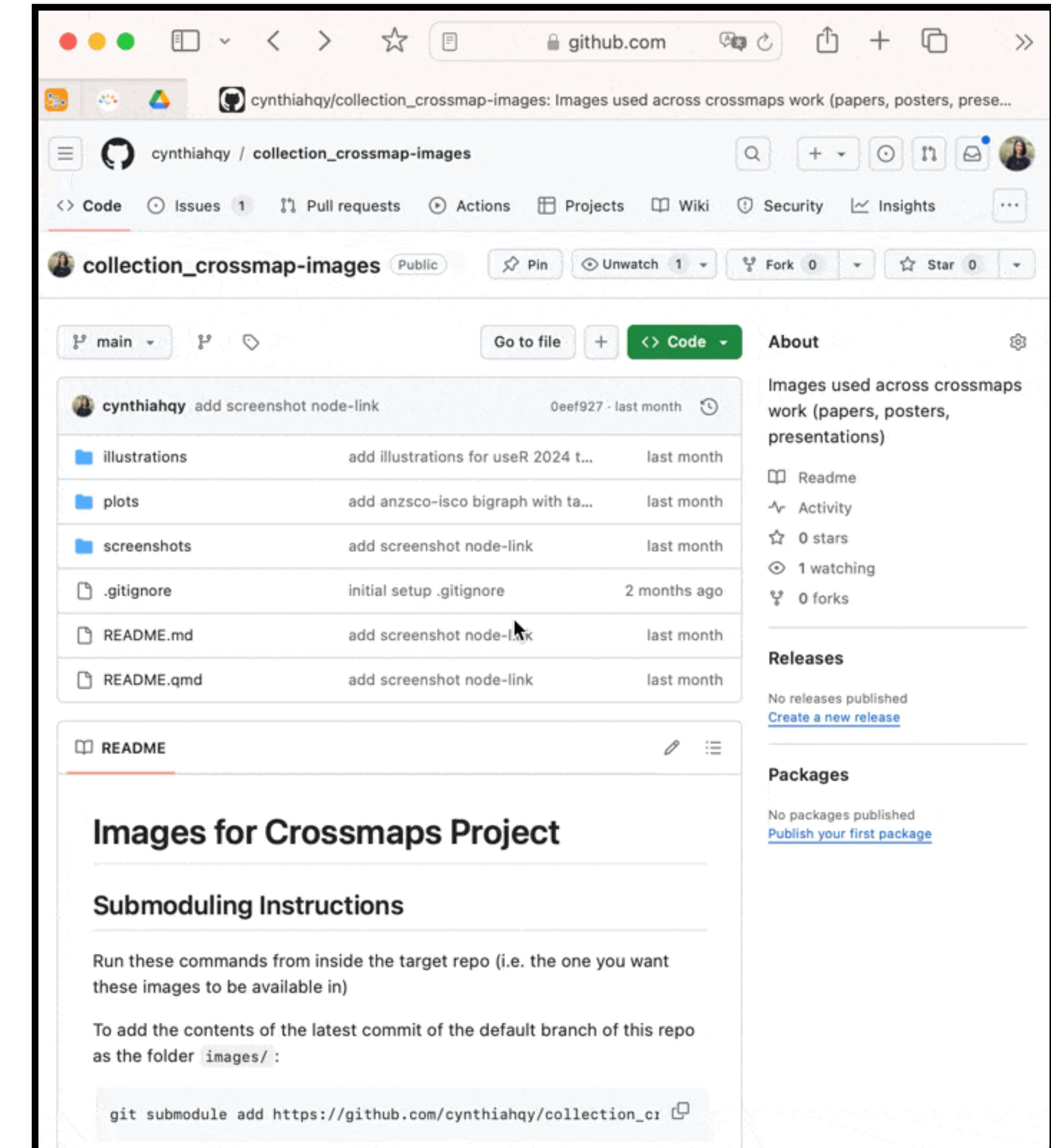
```{r}
#| output: asis
#| echo: false
dirs <- fs::dir_ls(type = "directory")
catImages <- function(folder){
  img_files <- fs::dir_ls(folder) |> sort()
  cat(glue::glue("{img_files}\n\n\n! [{img_files}]({img_files})\n\n\n"))
}

for (folder in dirs){
  cat("## ", stringr::str_to_title(folder), "\n\n\n", sep = "")
  catImages(folder)
}
```

```

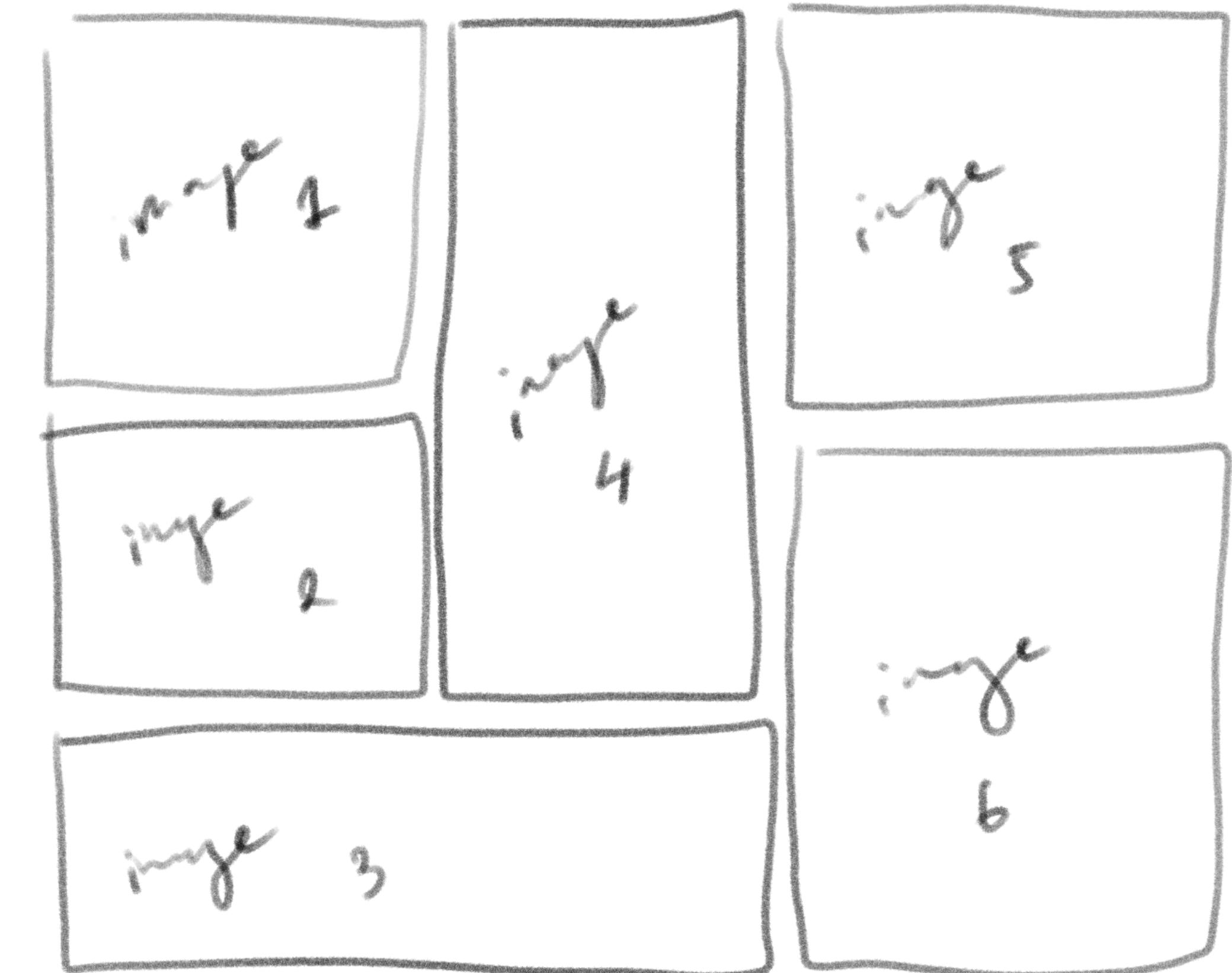
# Code Chunks + {glue}

## README for organising my research graphics



# Extensions + Javascript

Interactive image gallery  
using Masonry.js &  
Lightbox.js



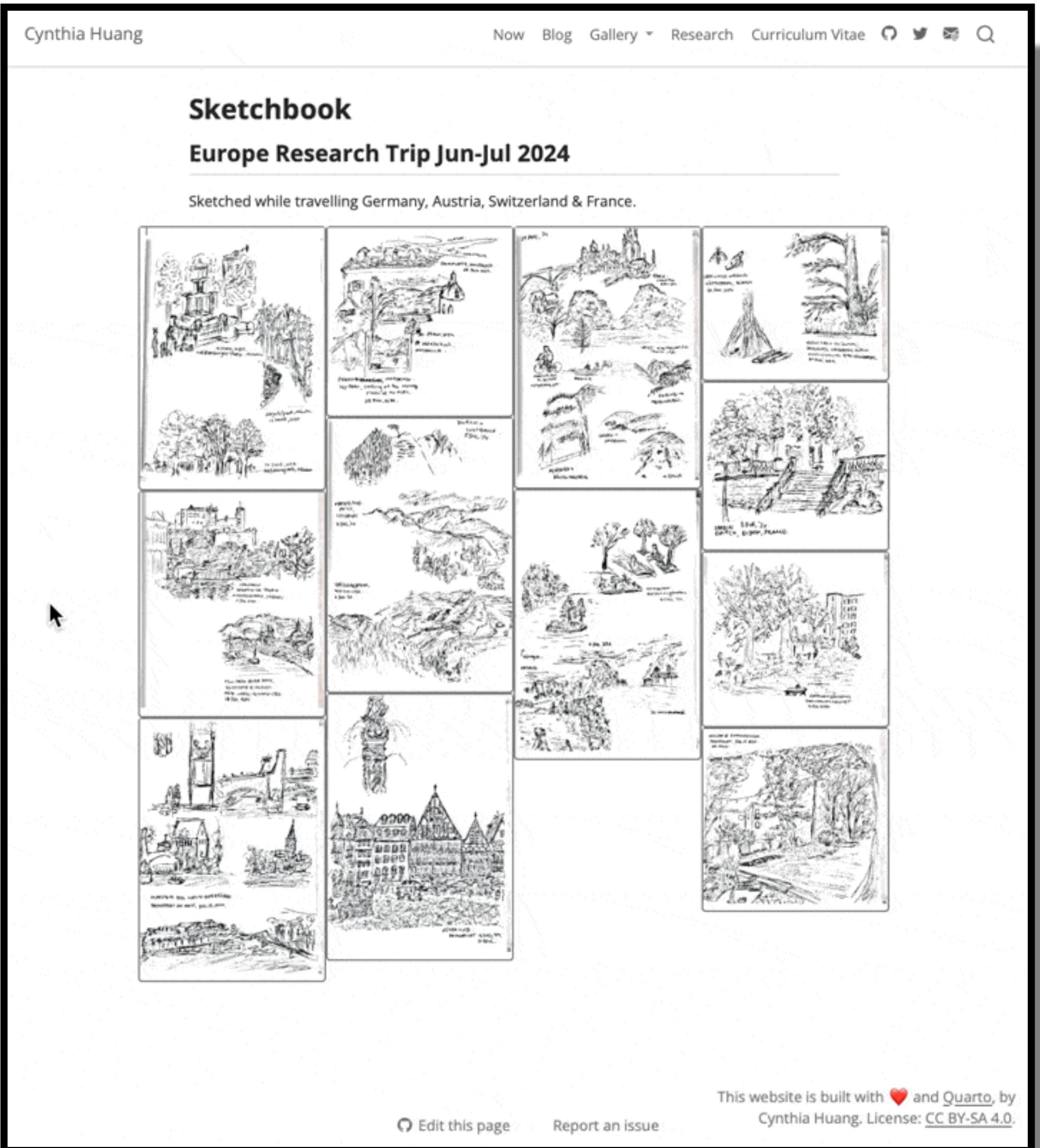
# Extensions + Javascript

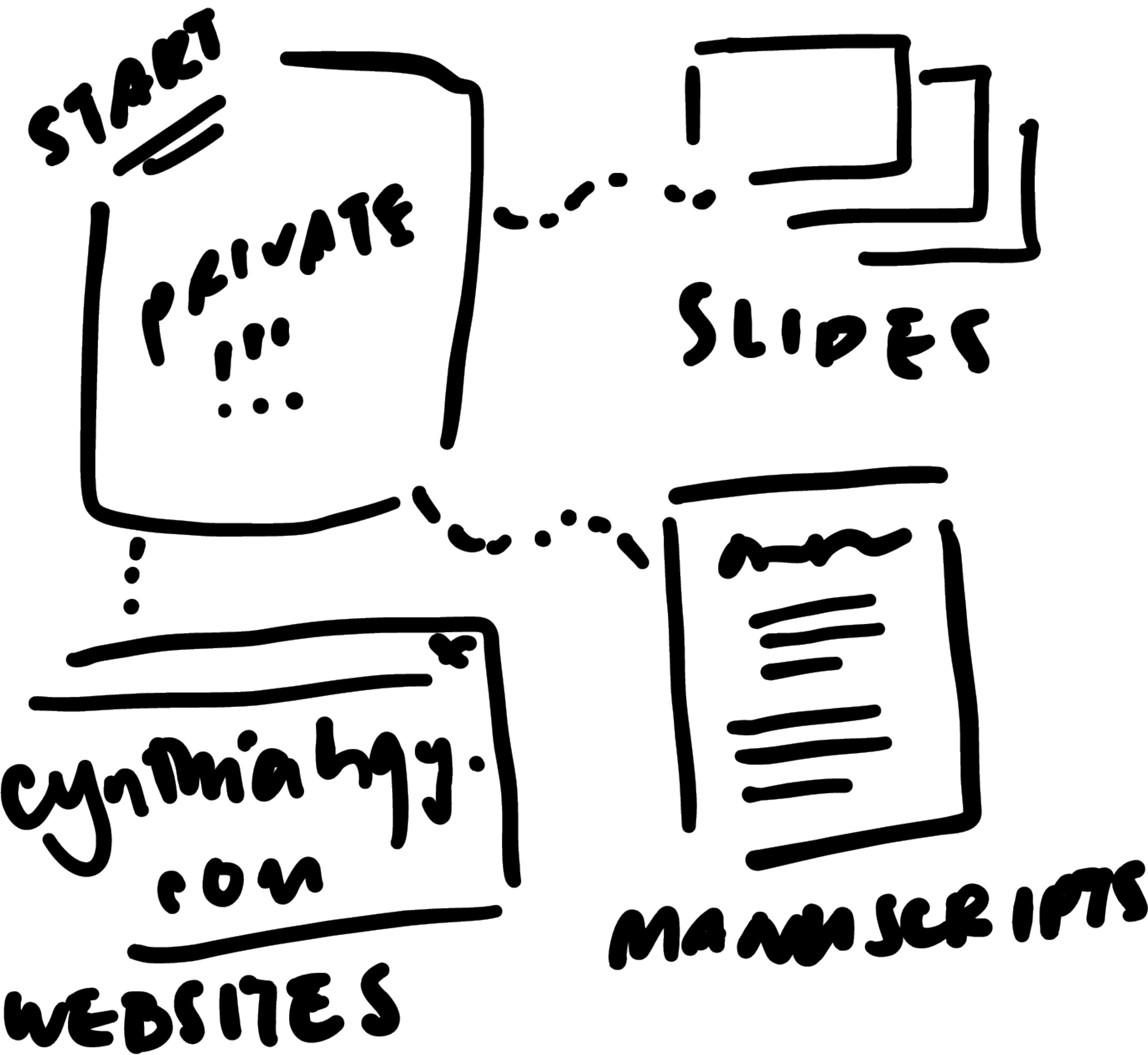
## Interactive image gallery using Masonry.js & Lightbox.js

```
---  
title: "My Cascading Gallery"  
lightbox: true  
filters:  
  - masonry  
include-in-header:  
  - text: |  
    <style>  
      .grid-item {  
        width: 200px;  
        height: 160px;  
        float: left;  
        background: #D26;  
        border: 2px solid #333;  
        border-color: hsla(0, 0%, 0%, 0.5);  
        border-radius: 5px;  
      }  
    </style>  
---  
:::: .grid data-masonry='{ "itemSelector": ".grid-item", "gutter": 0 }'  
:::{.grid-item}  
! [example-caption-01] (image-01.png)  
:::  
:::{.grid-item}  
! [example-caption-02] (image-02.png)  
:::  
:::{.grid-item}  
! [example-caption-03] (image-03.png)  
:::  
:::{.grid-item}  
! [example-caption-04] (image-04.png)  
:::  
:::{.grid-item}  
! [example-caption-05] (image-05.png)  
:::  
::::
```

# Extensions + Javascript

## Interactive image gallery using Masonry.js & Lightbox.js





Private  
Experiments  
level up my Quarto skills

# Multi-format CV

## In both HTML & PDF

The screenshot shows a web browser displaying a curriculum vitae (CV) for Cynthia Huang. The page has a header with the name "Cynthia Huang" and navigation links for "Blog", "Gallery", "Curriculum Vitae", and search functions. A sidebar on the right lists "On this page" sections: EDUCATION, WORK EXPERIENCE, PRESENTATIONS AND WORKSHOPS, and REFERENCES. Below this, there are links for "Other Formats" and a "PDF" button, which is highlighted with a blue rounded rectangle.

HTML webpage

The screenshot shows the same CV as above, but this time it is displayed as an HTML webpage. The layout is identical, featuring a header, sidebar, and main content area with detailed sections for education, work experience, and research assistant roles, along with a list of skills and achievements.

# Research Notes

## Shared with collaborators

Back to Article Data Structure Design Download Source

Table of contents Example: University Rankings

Messy Data:

In [3]:

|    | Rank | Name      | Location   | Total Score |
|----|------|-----------|--|-------------|
| 1  | 1    | Tsinghua  | Beijing  | 992.6       |
| 2  | NA   | Level     | Resources  | Education   |
| 3  | NA   | 36.1      | 50.0   | 324.2       |
| 4  | NA   | Research  | Elite  | Global      |
| 5  | NA   | 104.9     | 88.4   | 92.1        |
| 6  | 2    | Peking    | Beijing  | 898.6       |
| 7  | NA   | Resources | Level  | Education   |
| 8  | NA   | 34.9      | 30.5   | 308.3       |
| 9  | NA   | Research  | Elite  | Global      |
| 10 | NA   | 101.8     | 92.4   | 71.4        |
| 11 | 3    | Zhejiang  | Zhejiang   | 793.8       |
| 12 | NA   | Level     | Resources  | Education   |
| 13 | NA   | 34.9      | 28.4   | 284.7       |
| 14 | NA   | Research  | NA   | Global      |
| 15 | NA   | 92.6      | NA   | 53.7        |
| 16 | NA   | Notation  | The above are the top three universities in the rankings | NA          |
| 17 | 4    | Shangjiao | Shanghai   | 776.3       |
| 18 | NA   | Level     | Resources  | Education   |
| 19 | NA   | 35.6      | 26.4   | 267.2       |
| 20 | NA   | Research  | Elite  | Global      |
| 21 | NA   | 106.5     | 64.6   | 39.6        |
| 22 | 5    | Fudan     | Shanghai   | 697.0       |
| 23 | NA   | Level     | Resources  | Education   |
| 24 | NA   | 36.6      | 21.3   | 252.6       |
| 25 | NA   | Research  | Elite  | Global      |
| 26 | NA   | 79.3      | 62.6   | 44.1        |
| 27 | 6    | Nanjing   | Jiangsu  | 656.1       |
| 28 | NA   | Level     | Education  | Resources   |
| 29 | NA   | 37.1      | 266.6  | 9.2         |
| 30 | NA   | Research  | Elite  | Global      |
| 31 | NA   | 70.4      | 58.3   | 29.2        |

GPT-transformed "clean" Data:

Position-Based script output:

In [4]:

|   | Rank | Name      | Location | Total Score | Level | Resources | Education | Research | Elite | Global |
|---|------|-----------|----------|-------------|-------|-----------|-----------|----------|-------|--------|
| 1 | 1    | Tsinghua  | Beijing  | 992.6       | 36.1  | 50.0      | 324.2     | 104.9    | 88.4  | 92.1   |
| 2 | 2    | Peking    | Beijing  | 898.6       | 34.9  | 30.5      | 308.3     | 101.8    | 92.4  | 71.4   |
| 3 | 3    | Zhejiang  | Zhejiang | 793.8       | 34.9  | 28.4      | 284.7     | 92.6     | NA    | 53.7   |
| 4 | 4    | Shangjiao | Shanghai | 776.3       | 35.6  | 26.4      | 267.2     | 106.5    | 64.6  | 39.6   |
| 5 | 5    | Fudan     | Shanghai | 697.0       | 36.6  | 21.3      | 252.6     | 79.3     | 62.6  | 44.1   |
| 6 | 6    | Nanjing   | Jiangsu  | 656.1       | 37.1  | 266.6     | 9.2       | 70.4     | 58.3  | 29.2   |

# {ggtilecal}

## from private experiment to standalone package

The screenshot shows a web browser window with the URL [cynthiahqy.github.io/ggtilecal](https://cynthiahqy.github.io/ggtilecal). The page title is "ggtilecal 0.1.0". The main content area features the title "ggtilecal" and a brief description: "The goal of `ggtilecal` is to easily produce calendar layouts using `ggplot2` tile and text geoms, while retaining some customisation." Below this is a "Installation" section with the text "You can install the development version of ggtilecal like so:" followed by a code block:

```
# install.packages("remotes")
remotes::install_github("cynthiahqy/ggtilecal")
```

On the right side of the page, there are several sidebar sections: "Links" (with "Browse source code" and "Report a bug" links), "License" (with "Full license" and "GPL (>= 3)" links), "Citation" (with "Citing ggtilecal" link), "Developers" (listing "Cynthia A. Huang" as the "Author, maintainer" with a green ID icon), and "Dev status" (showing "CRAN not published").

The bottom half of the page displays four calendar grids for January, February, March, and April 2024, showing the days of the week from Monday to Sunday.

# Templates & Blog Posts

## helped me get to my first posit::conf!

Cynthia Huang

Now Blog Gallery Research Curriculum Vitae

Categories

- All (17)
- NUMBATs (1)
- cli (1)
- code style (1)
- css (1)
- data-viz (1)
- design (1)
- explainer (1)
- generative-ai (1)
- ggplot2 (2)
- git (2)
- hacky hour (1)
- how-to (11)
- imagemagick (1)
- images (2)
- listings (1)
- markdown (8)
- quarto (8)
- r-packages (1)
- slide design (1)
- teaching (2)
- text-editing (1)
- workflow (1)
- workflows (1)

**Blog**

Initialising git repositories with sensible .gitignore files

Aug 3, 2024 3 min

GIT WORKFLOW HOW-TO

How I use git aliases and gitignore.io to always add a .gitignore file to my repositories before committing other files or folders

.gitignore.io

Creating a Pinterest-style image gallery with Quarto

Jul 23, 2024 4 min

HOW-TO IMAGES QUARTO

How I used masonry.js via Quarto extensions to create a cascading grid layout for a set of images without any Javascript skills.

Managing and reusing research graphics with git

Jun 20, 2024 5 min

MARKDOWN IMAGES GIT HOW-TO WORKFLOWS QUARTO

Notes on using git and git submodules to version control and share images across multiple research papers and presentations

Design Principles for Plot Helper Functions

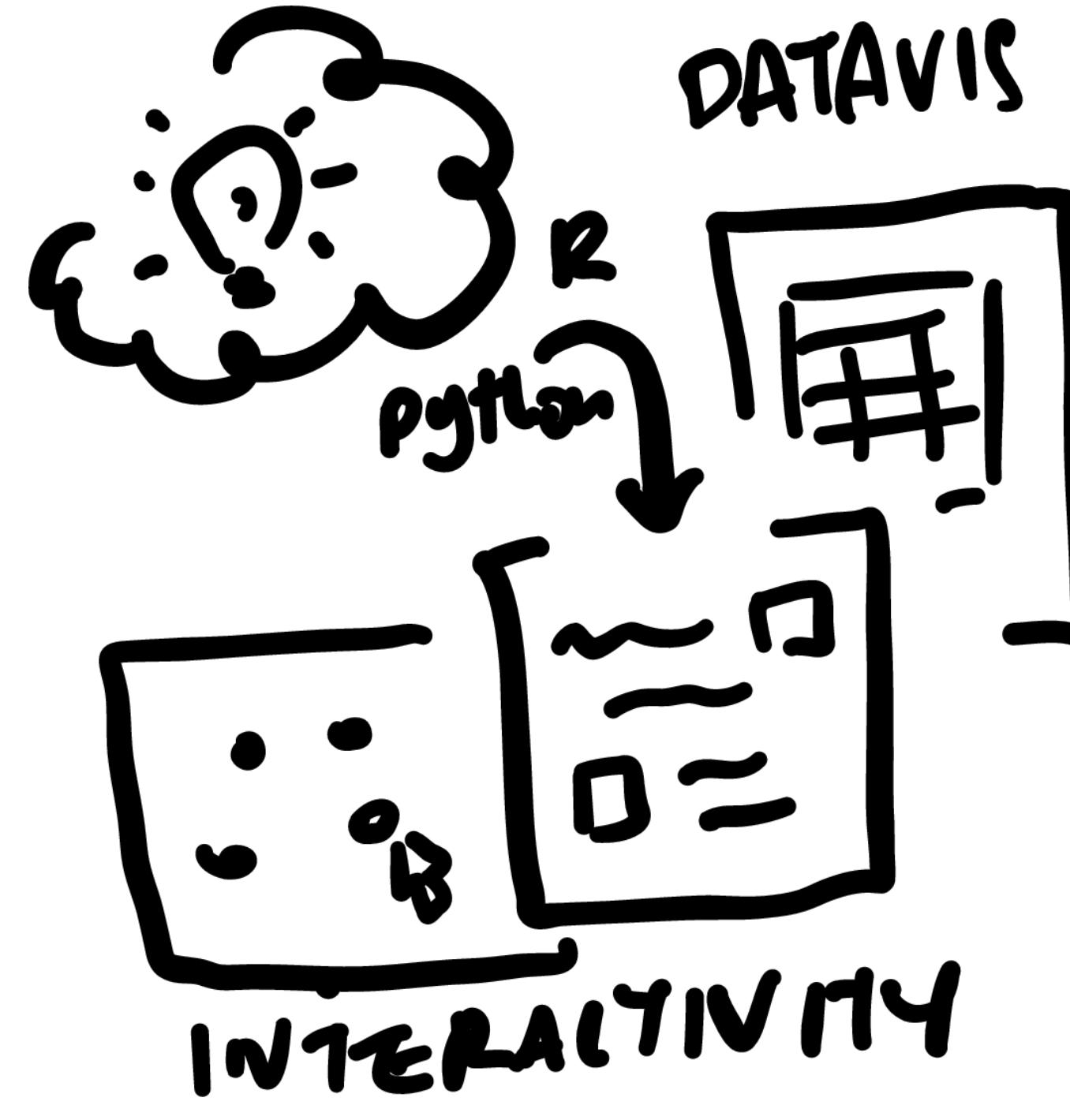
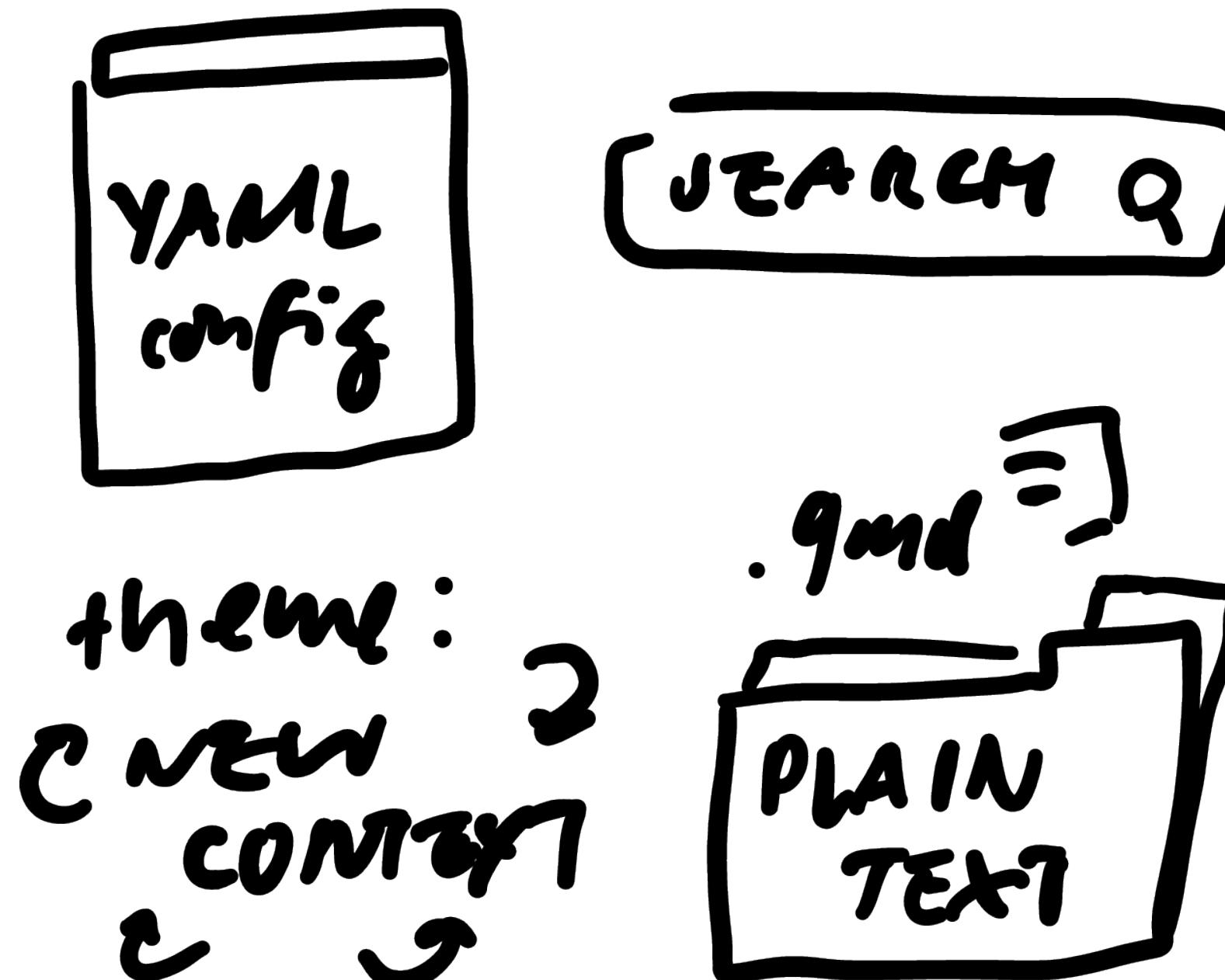
May 25, 2024 14 min

GGPLOT2 CODE STYLE DESIGN

An opinionated take on writing better ggplot2 helper functions with calendar plots as a design case study

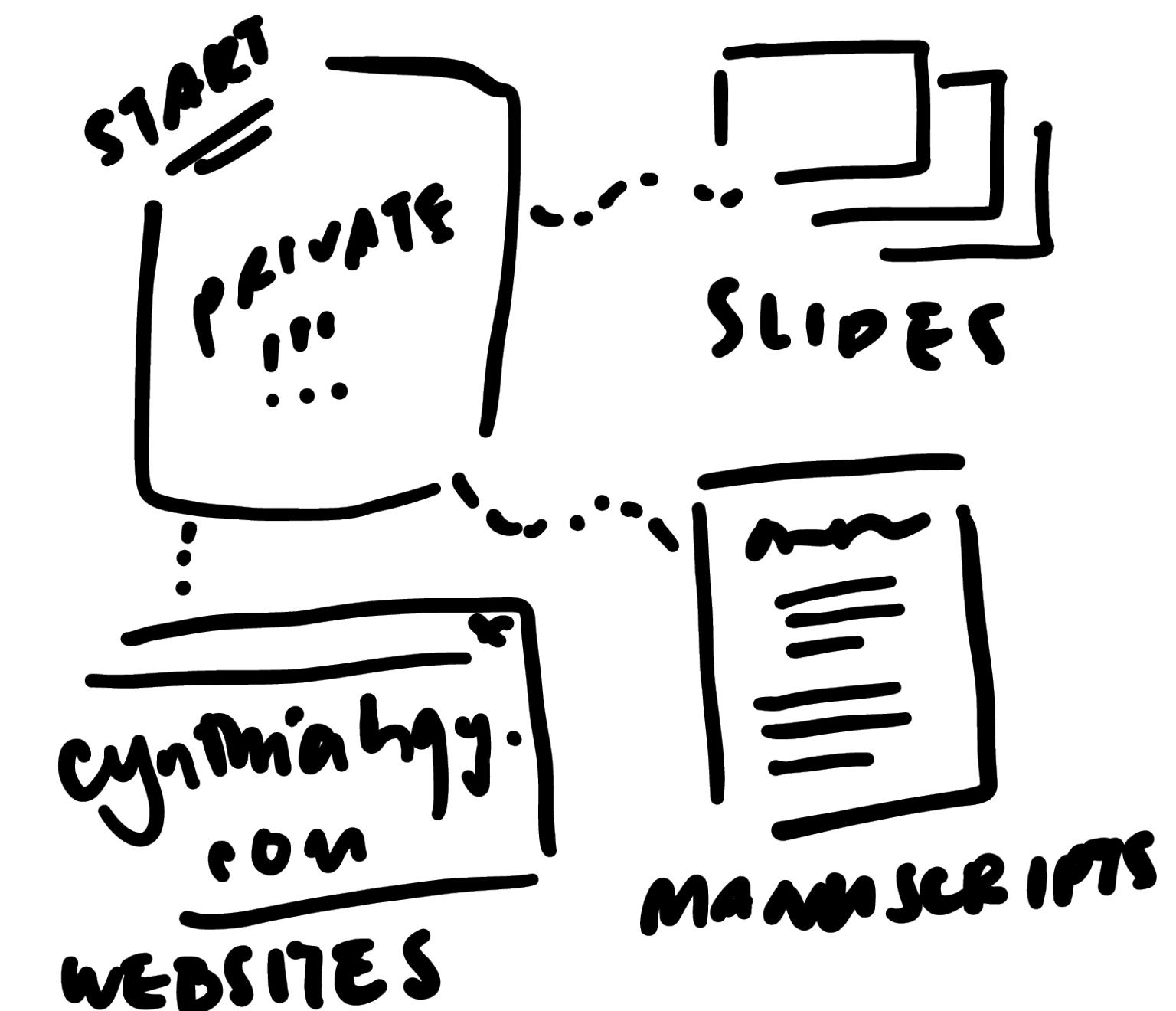
# Quarto for Knowledge Management

Simple

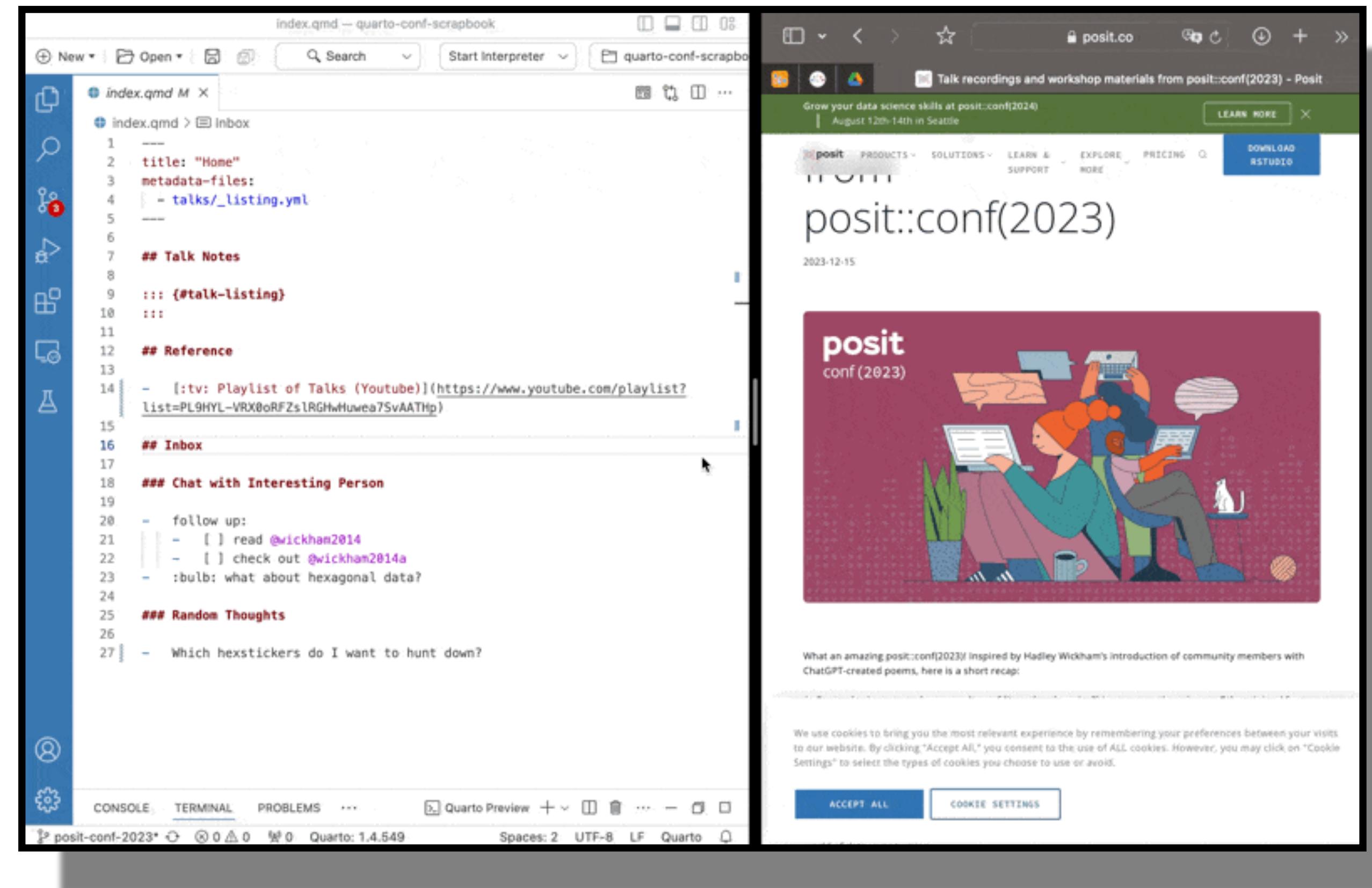


Powerful

Fun



# Visual Mode for pasting in images or attachments



# Quarto for (your) Knowledge Management?

Find templates and more: [github.com./cynthiahqy/positconf2024](https://github.com/cynthiahqy/positconf2024)