EPFL

Bibliothèque

EPFL Data Champions

Love Data Week 2022

8th General Meeting

EPFL
2022.02.18

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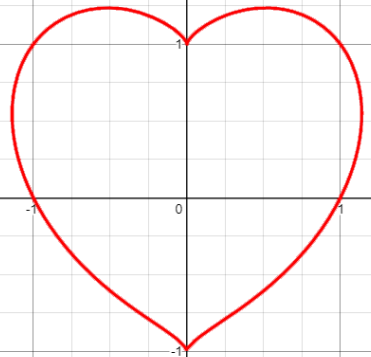
Love Data Week

EPFL 2♡22 edition



go.epfl.ch/quiz

Tue. Feb.15 | 11:30-12:00
Webinar "*Discover the new EPFL Data Management Plan template*"

Wed. Feb.16 | 11:30-12:00
Webinar "*Data Storage vs. Backup vs. Archive: EPFL services*"

Thu. Feb. 17 | 11:00-11:45
Online training "*Which platforms to publish my research data/code?*"

go.epfl.ch/ldw22

LDW22

Bibliothèque

Today

Images: digitalbevaring.dk

All – Speed-dating ☺

Brian – thot-data

Francesco – Next steps

F. Varrato

Zoom-tiquette

6 simple tips

We don’t see the **chat**

Unmute anytime you want to speak

Switch-on your **camera**

Feel free to eat & drink ;)

Limit **distractions**, please

No recording

Thank you

Where

EPFL Data Champions

go.epfl.ch/**datachampions**

F. Varrato

Who

EPFL Data Champions

Local advocates for good data practices

Interdisciplinary community

Both researchers & staff

Images: digitalbevaring.dk

F. Varrato

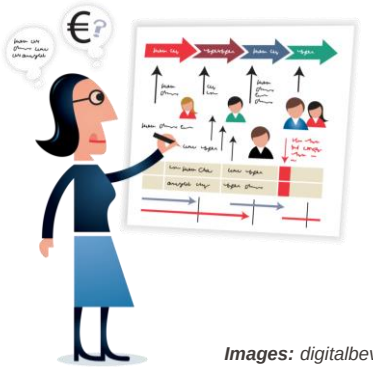
Mission(s)

EPFL Data Champions

Advise the research community

Promote good data management

Advocate for the FAIR data principles



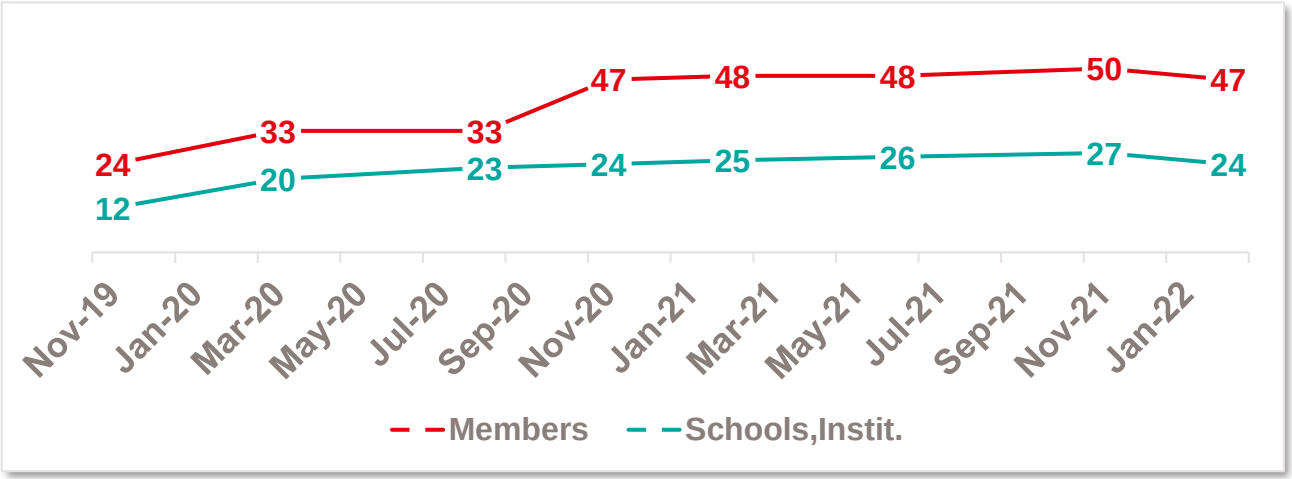
Images: digitalbevaring.dk

EPFL DCs

Some numbers

go.epfl.ch/datachampions

F. Varrato



4 Head / Prof / Teacher
13 Doctoral student / assistant
16 Scientist / Postdoc / Lecturer
1 Student
13 Technician / Staff / Admin

8 main general meetings
7 DCbreaks
5 DCs in **3** training courses
A couple of Coffees/Biers
DC webpage **~1k** unique visits / year

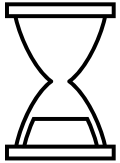
Channels: LinkedIn, GitHub, Slack, DCdrive, email group

Speed dating

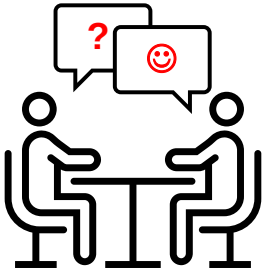
Rules & Go [~30 min]

- Each 3', all participants are assigned to random rooms, in couples!
- Same couplings might happen (probability … odds … fate? ☺)
- Make "embarrassing" questions or comments on data/code
- At the end, all participants go back to the main room…

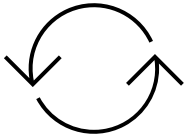
… and you'll see



3 min



2 random people



reshuffle

…

Speed dating

Rules & Go

- Each 3', all participants are assigned to random rooms, in couples!
- Same couplings might happen (probability … odds … fate? ☺)
- Make "embarrassing" questions or comments on data/code
- At the end, all participants go back to the main room…

  … and vote!

POLL

*Who is **my** Data Champion?*

Talk + Q&A

~30 min

brian.carlsen@epfl.ch

PhD student
in Physics

PhD assistant
@ LSPM laboratory

Photomolecular Science

+

thot-data.com

Data mgmt. & analysis tool

Wrap-up

Next steps

- Thanks to **Brian Irving** and **all of you!**
- Complete your affiliation info
- *Linkedin / Github / Slack / group email*

- Next dates
  - **16.03** DCBrake hopefully in-person! ☺
  - **13.04** Coffee/Bier in-person! …
  - **17.05** DCBrake
  - **13.06** General Meeting

DCdrive → Organiz.→ 2022 themes

Who	What	Where
Giovanna Ambrosini	**Senior Scientist** • Bioinformatics • Genomics • Web development	EPFL LinkedIn ORCID GitHub
Nicolas Argento	**Team Leader** • ELN/LIMS services manager • IT/Life sciences communication • IT services management	EPFL LinkedIn ORCID
Manos Barmpounakis	**Postdoctoral Researcher** • Data in Transportation • Data science • Intelligent Transportation Systems	EPFL LinkedIn Twitter ORCID
Kirell Benzi	**Scientist** • Data visualization • Data mining • Software engineering	EPFL LinkedIn Twitter ORCID GitHub
Luc Sébastian Bondaz	**Doctoral Assistant** • Business Analytics • Machine learning • Chemical Process simulation	EPFL LinkedIn
Maroun Bou Sleiman	**Scientist** • Bioinformatics • Genetics • Omics	EPFL LinkedIn ORCID Renku
Philipp Bucher	**Group Leader** • Genomics • Bioinformatics • Epigenetics	EPFL LinkedIn ORCID
Olivier Burri	**Engineer** • Light Microscopy • Image Analysis • Deep Learning	EPFL LinkedIn Twitter ORCID GitHub
Roberto Castello	**Data Scientist** • Urban data • Machine Learning	EPFL LinkedIn Twitter ORCID

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go.epfl.ch/datachampions

Thank you!

datachampions
@epfl.ch

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École
polytechnique
fédérale
de Lausanne

Thot

Data Management and Analysis

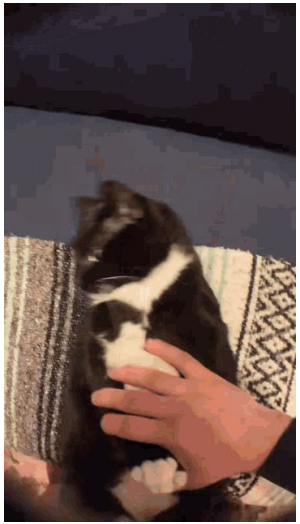
Yes, I know 😉

What is Thot?

What is Thot?

Framework

Wraps existing projects



What is Thot?

Data Mgmt

Automatically organize data

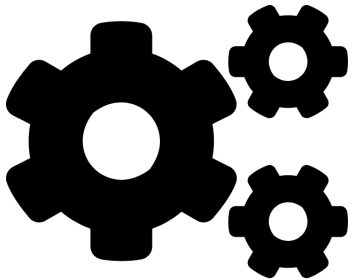
What is Thot?

Automated Analysis

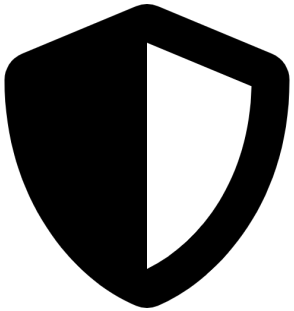
Automatically integrate new data

Principles

Principles

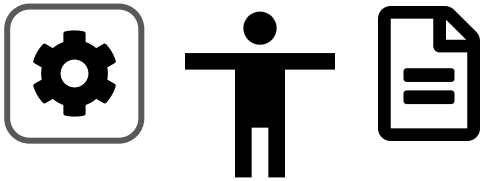


Modular Analysis

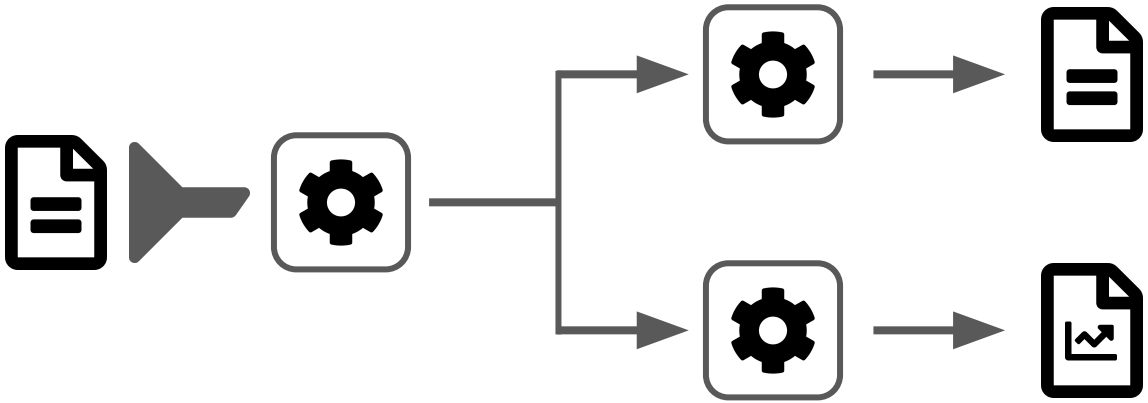


Data Integrity

Modular Analysis

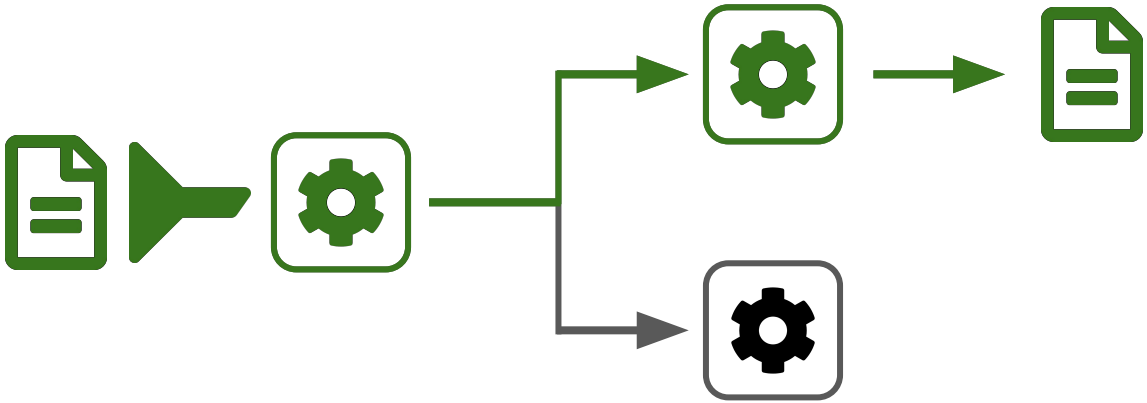


Scripts and data are seperated



Data Integrity

Data is immutable



What is Thot?

Data management and **analysis framework**

allowing **modular analysis** and

ensuring **data integrity**.

Let’s get our hands dirty

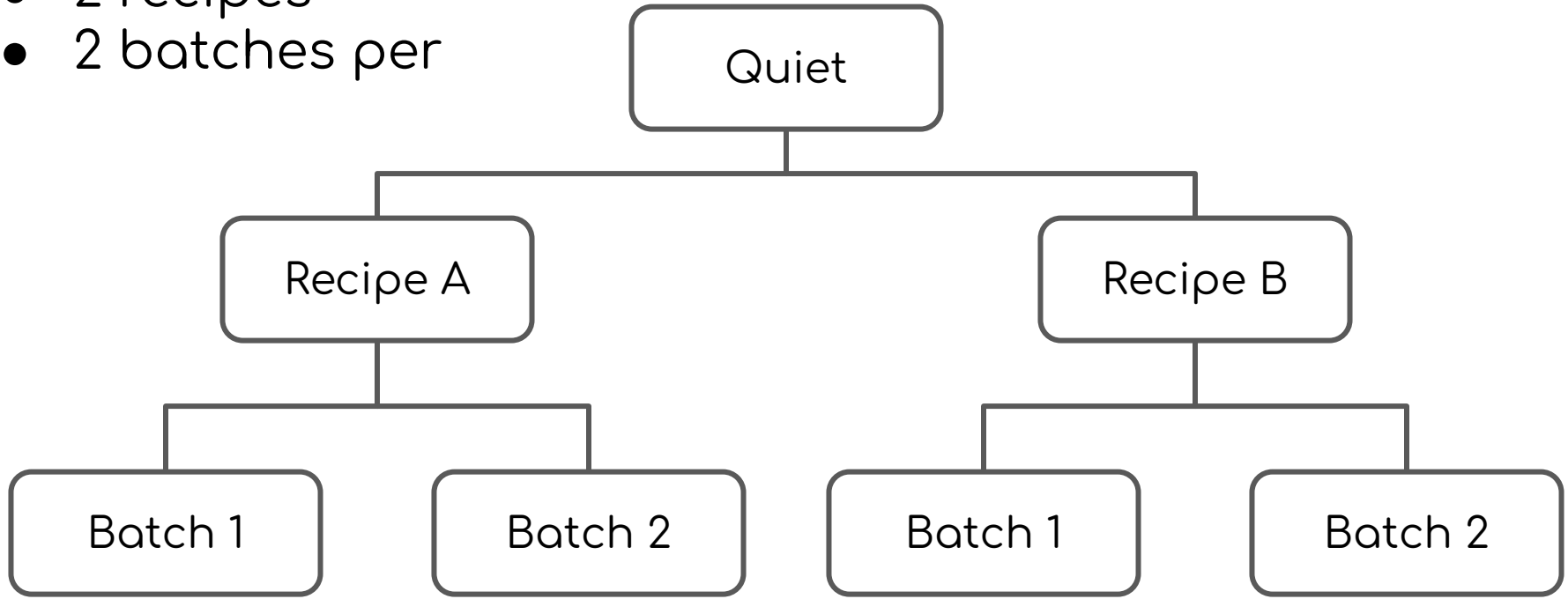
Congratulations!

Demo

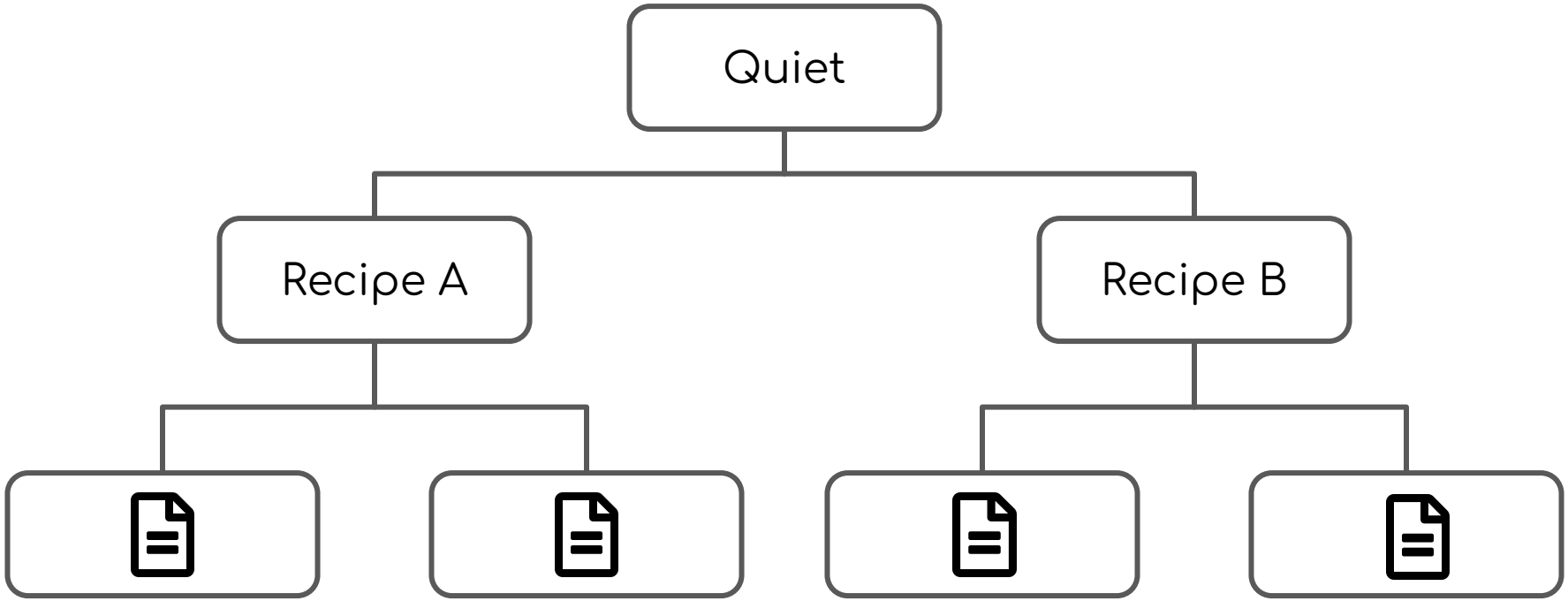
- 2 recipes: A + B
- 2 batches per recipe
- Noise measurements already taken

Structure Project

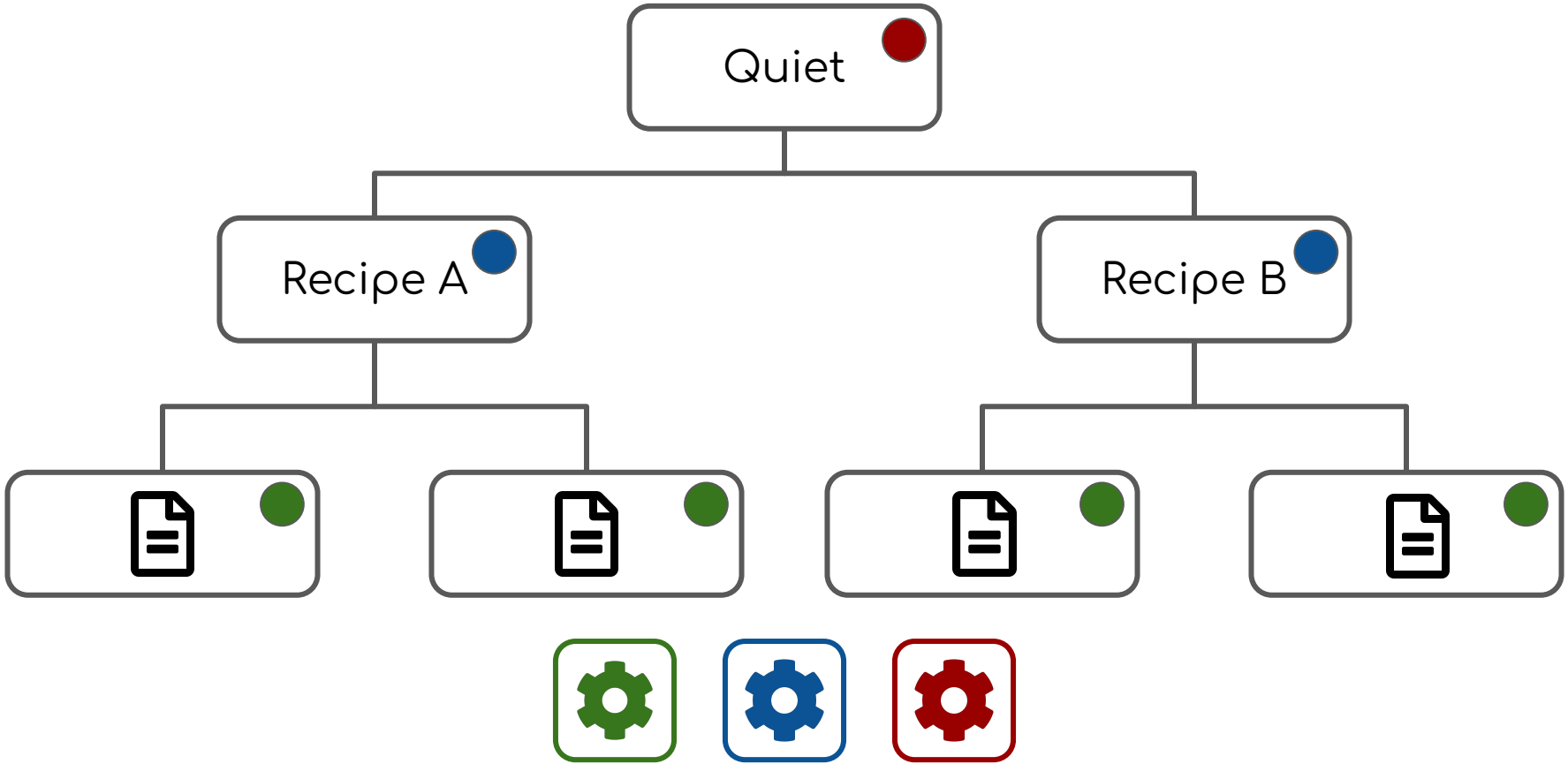
- 2 recipes
- 2 batches per



Add Data

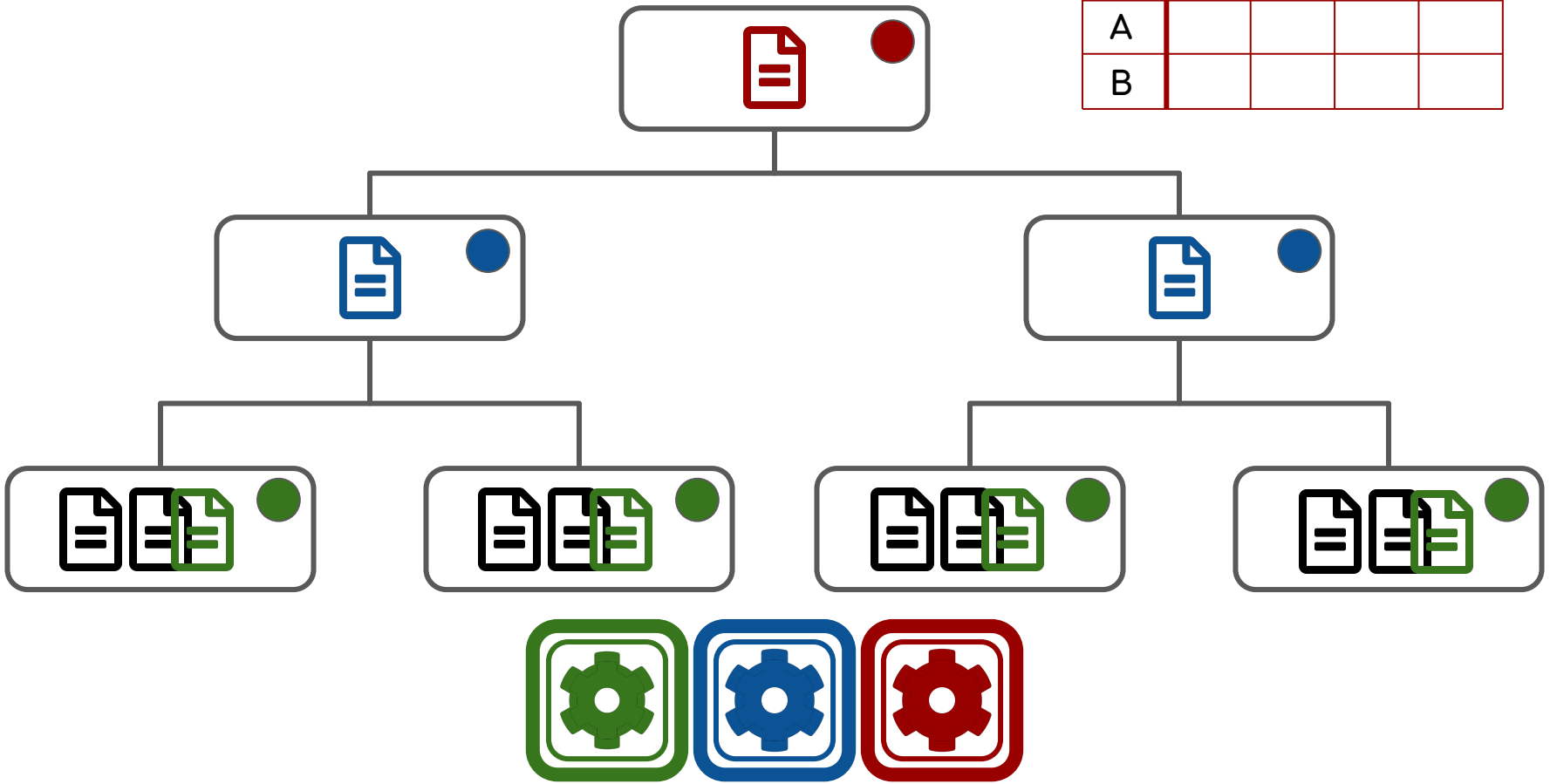


Assign Scripts



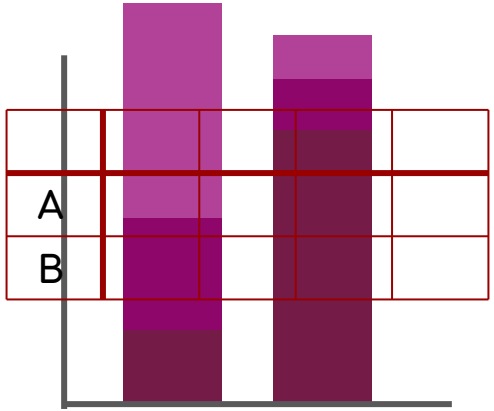
Analyze

A				
B				

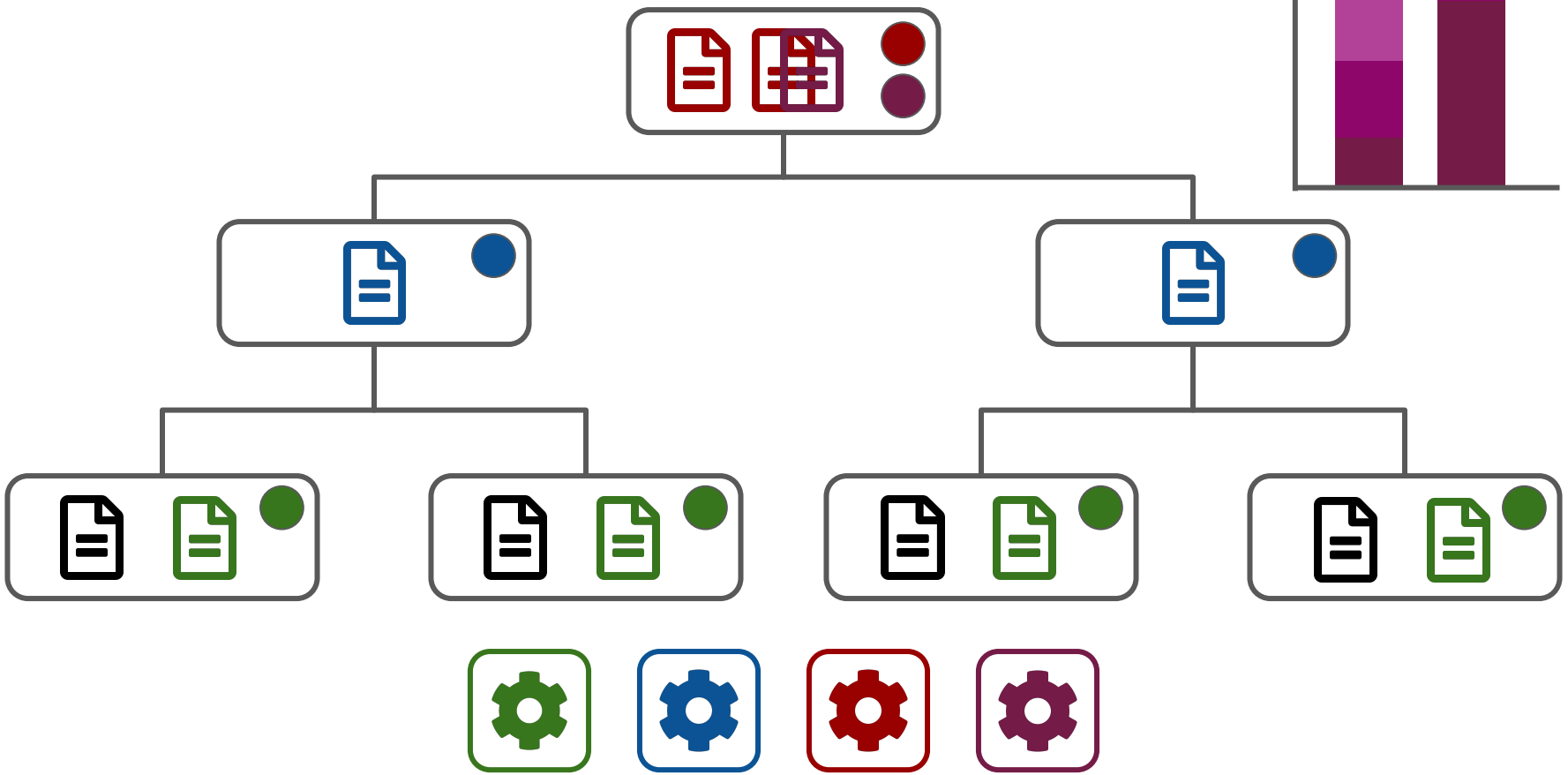


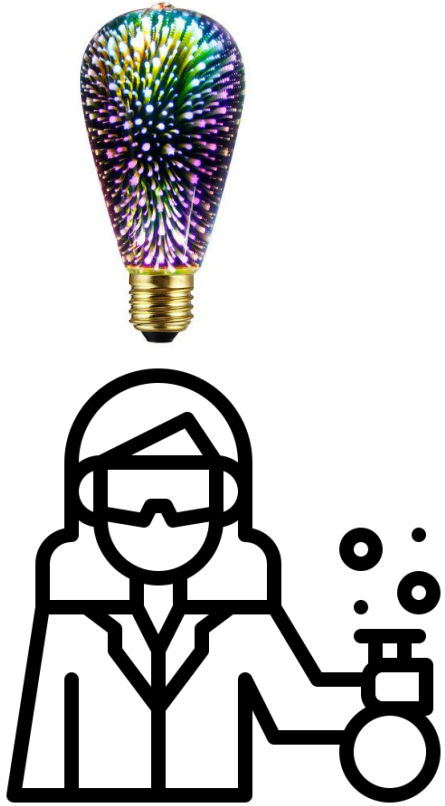
A

B



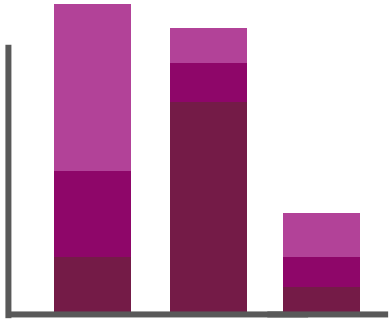
Adding Analyses

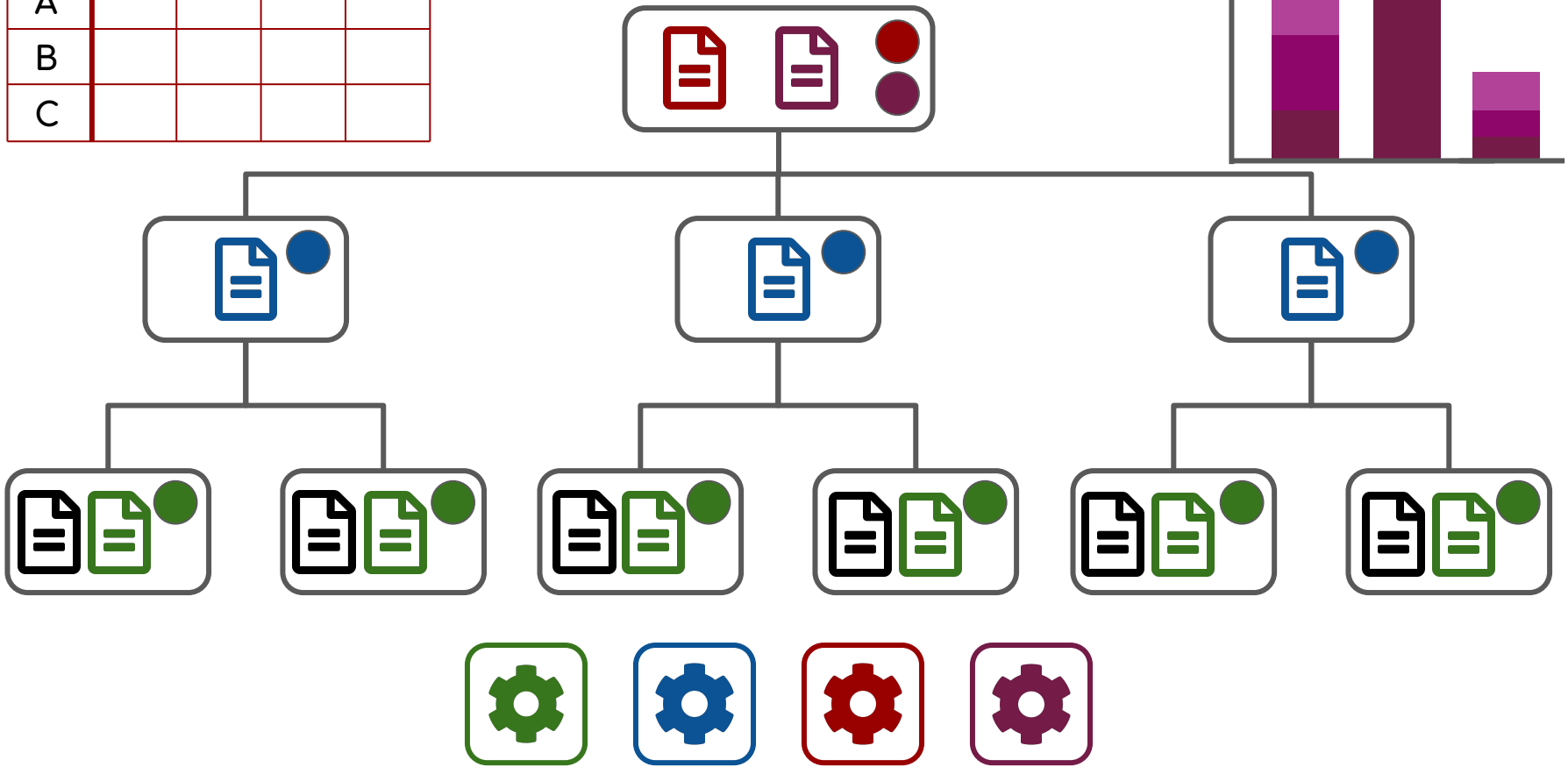




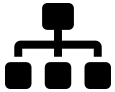
Adding Data

A				
B				
C				





How to use Thot

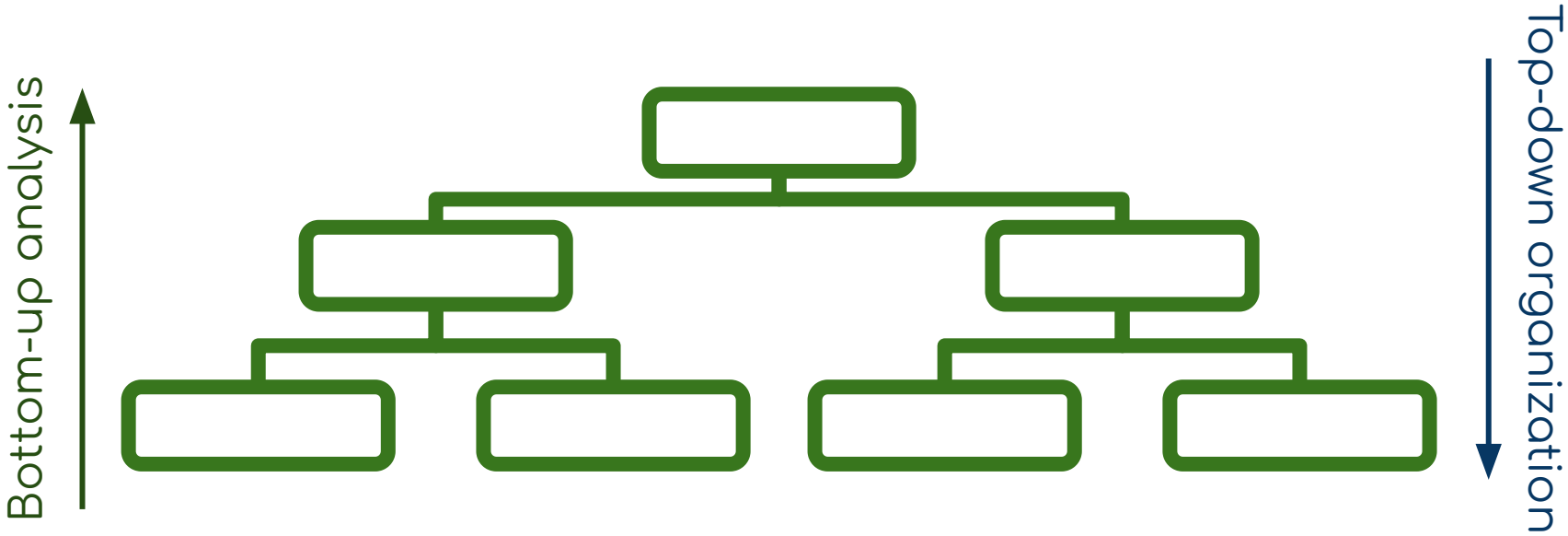
1.  Build project
2. Add data
3. Assign scripts

Analyze!

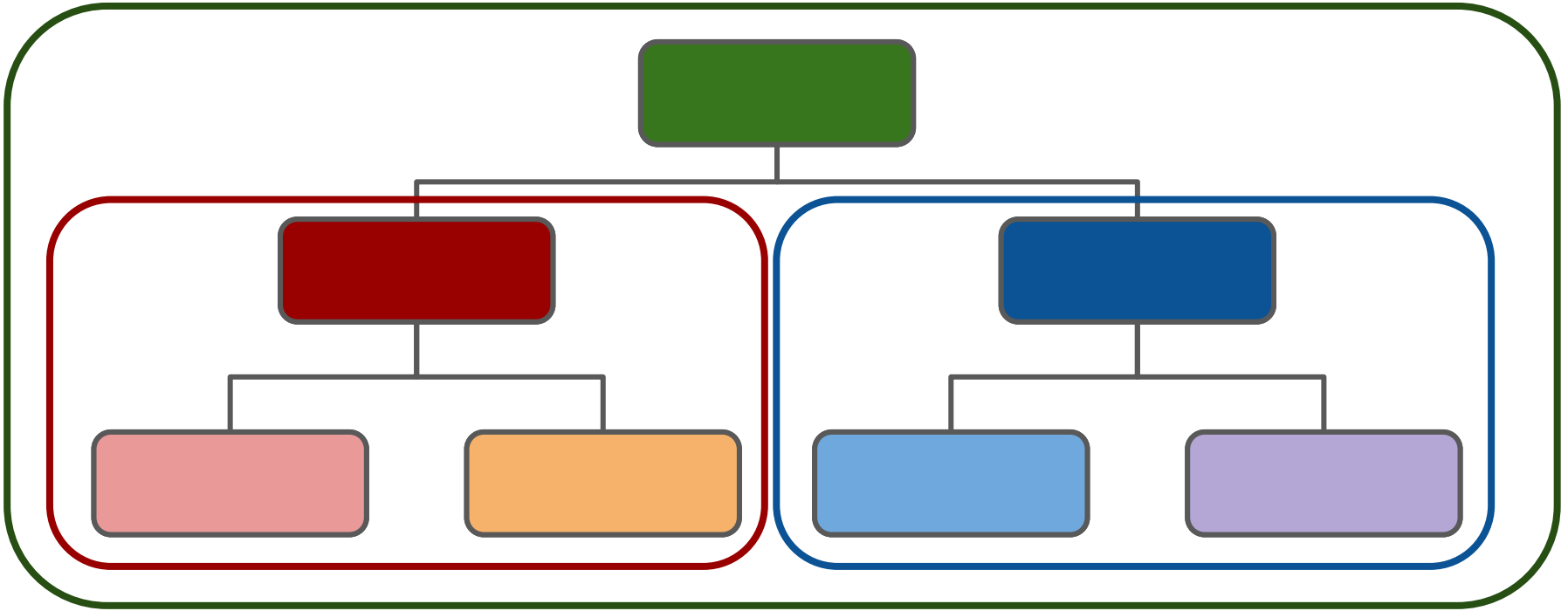
Add new data or analysis any time

thot-data.com

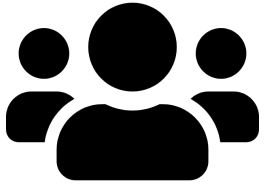
Structure



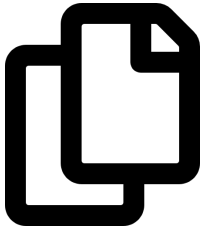
Structured Database



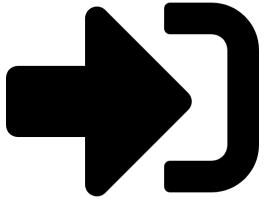
Additional Features



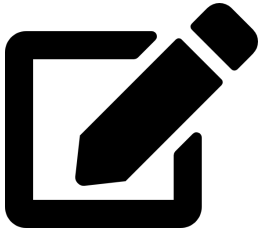
Collaboration



Metadata

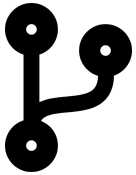


Attribution



Data annotations

Future Features

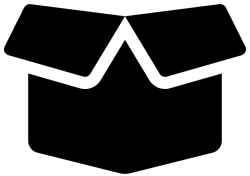


Version tracking

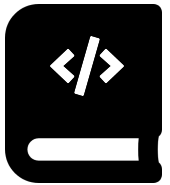
Smart run

Project management

Cloud storage + compute



Repositories



Analysis libraries