DigiTeLL
Digital Teaching and Learning Lab

Stiftung Innovation in der Hochschullehre

GOETHE UNIVERSITÄT FRANKFURT AM MAIN

LIFOS

Local Infrastructure for Open Science

FB 05 | Psychological methods with interdisciplinary focus

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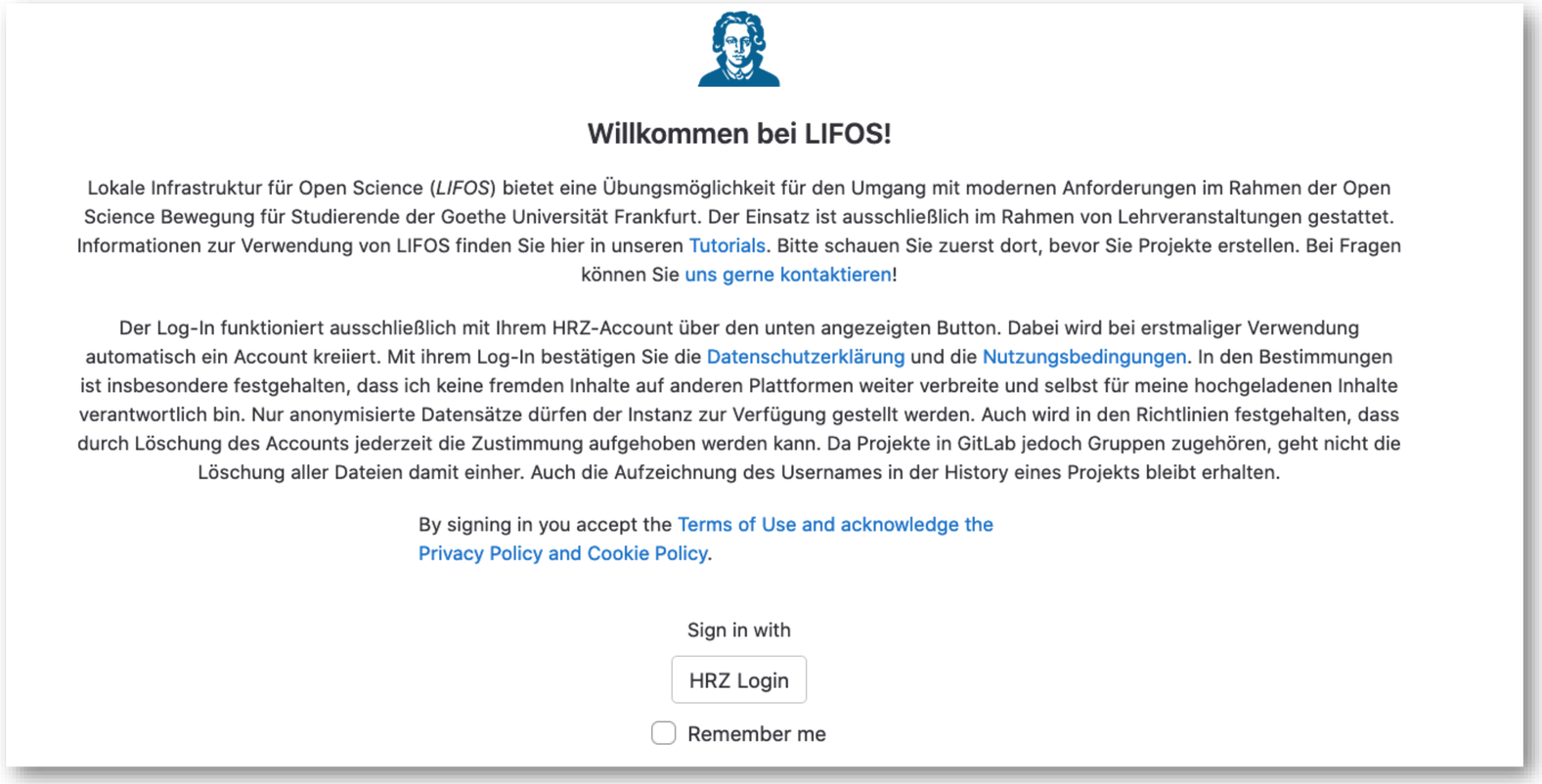
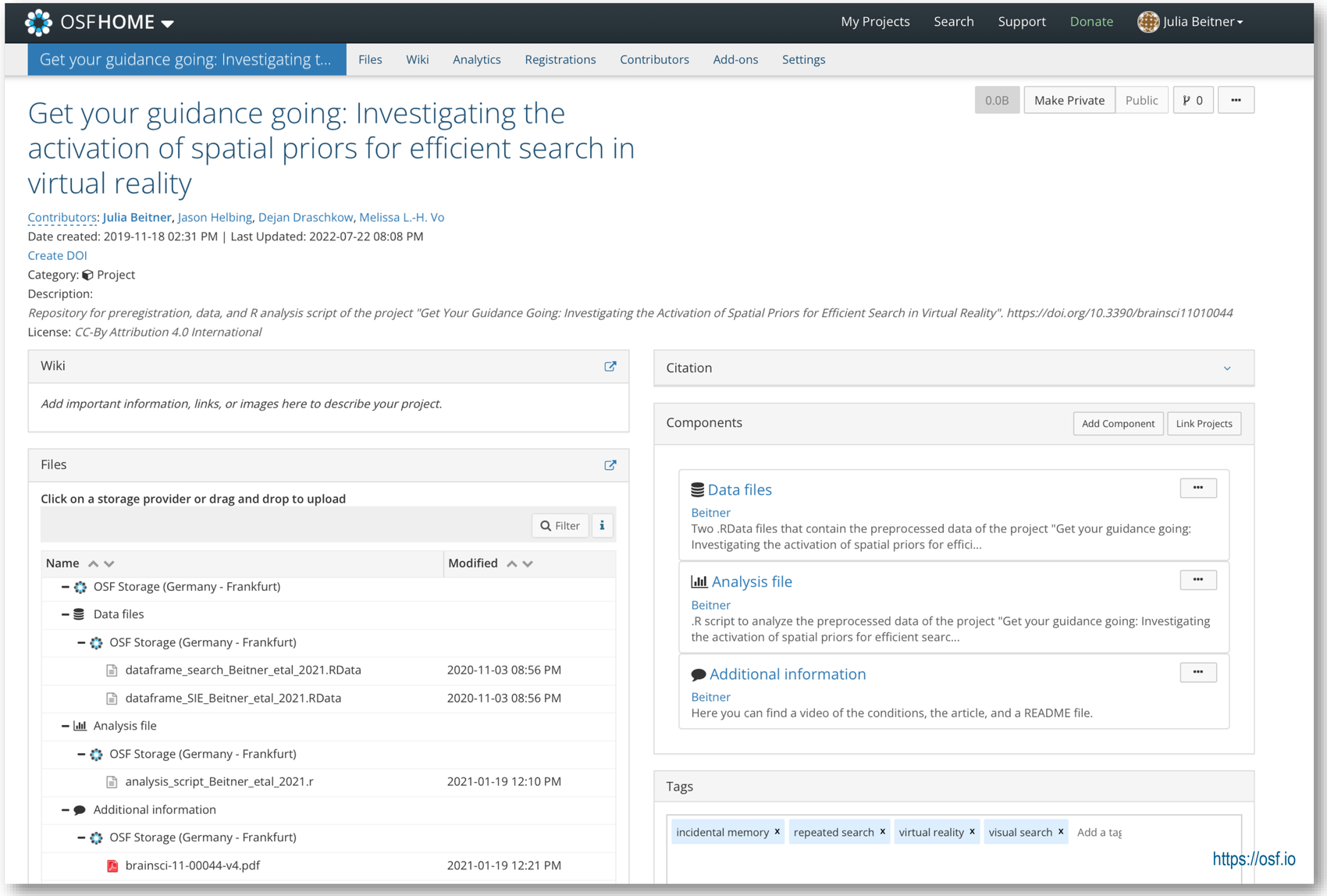


Open Science Framework



https://osf.io

What is LIFOS?

- University-internal practice platform based on GitLab
- Practicing and implementing open research practices in your own student research projects
- Safe practice environment - Open within the university, closed to the public
- Supporting content, such as templates for different study types that directly provide a repository structure (pre-registration, data, code, materials, final report)
- Accessible, sustainable archive for students' studies and theses

What do we offer?

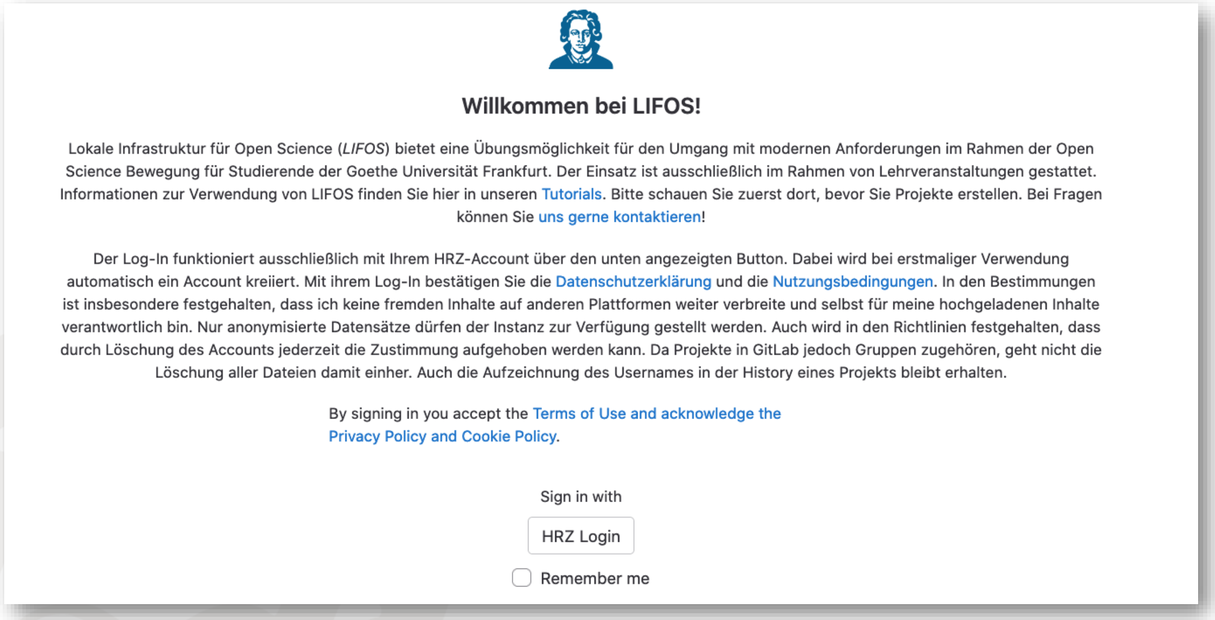
Helpful for now:

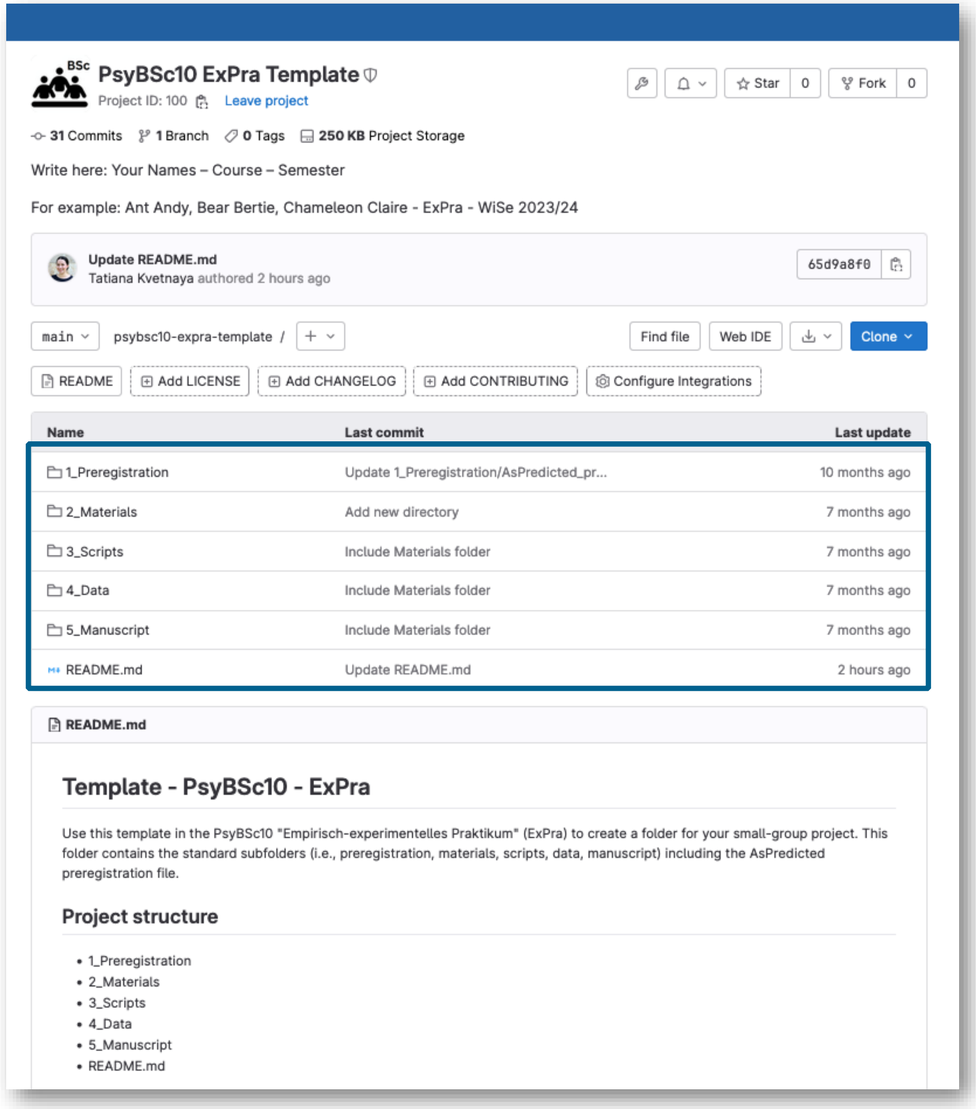
- Tutorials on pandar https://pandar.netlify.app/lifos/
- Tutorials and ToDo-List in every README

Helpful for later (e.g., for your thesis):

- Templates for different types of student research projects
- Decision tree for choosing the right template
- Best practice example (Master thesis)

LIFOS





Folder structure is provided

for an easy start

LIFOS

README.md

README – Best practice example

What can you find here?

This project is considered to be a best practice example, meaning that you can get idea here of how your final project may look. It contains the actual master thesis *Development and Initial Validation of an Altruistic Behavior Scale using Ant Colony Optimization* and all its related materials, conducted by Lucie Binder in the General Psychology II Lab under supervision by Sabine Windmann and Martin Schultze in 2019.

There are four subfolders located in this project: **1_Preregistration**, **2_Scripts**, **3_Data**, **4_Manuscript**. These are the typical subfolders that you may also probably need. If you have more you would like to include in your project (e.g., stimulus material), it is perfectly fine to change the folder structure and include another folder. There is no right or wrong. Most importantly, it should be organized in such a way, that readers not familiar with your project know where to find what.

We hope this best practice example helps you in structuring, filling and organizing your own project! Next, we will explain each folder and lastly, how you can reproduce the analyses.

Project folders

Folder 1_Preregistration

Here you'll find the preregistration form regarding study 2 as a .pdf file. This project used the AsPredicted form, which you can also find in the AsPredicted-Template. It contains questions such as "Have any data been collected for this study already?" or "What's the main question being asked or hypothesis being tested in this study?". In this specific case, how good the general applicability of the Frankfurt Altruistic Behavior Scale (FABS) is.

Folder 2_Scripts

This folder contains two R-Scripts, both of which have been used in this study. `code1.R` contains the analyses of study 1, while `code2.R` contains the analyses for study 2. Sometimes it is clearer to have several scripts, as in this case.

Folder 3_data

In this folder you can see the data, which has been collected and used in this study. There are two subfolders, that is, **Data Study 1** and **Data Study 2**. Both folders have the same structure and contain three .csv files (`alldata.csv` , `codebook.csv` , and `dataset.csv`).

Folder 4_Manuscript

This folder simply contains the final master thesis as a .pdf file.

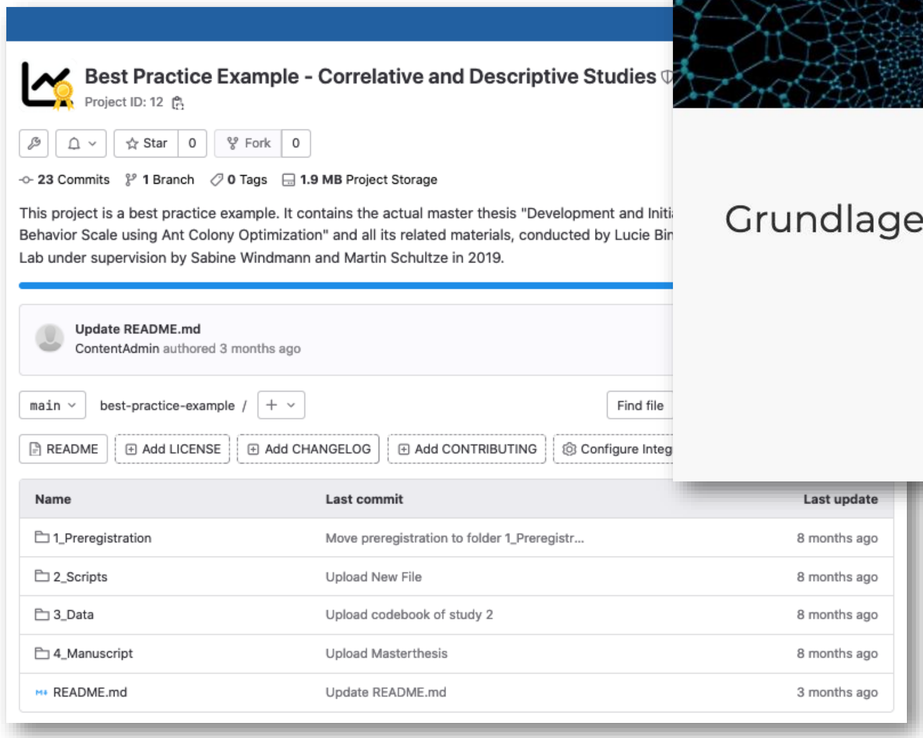
Reproducibility of the analysis

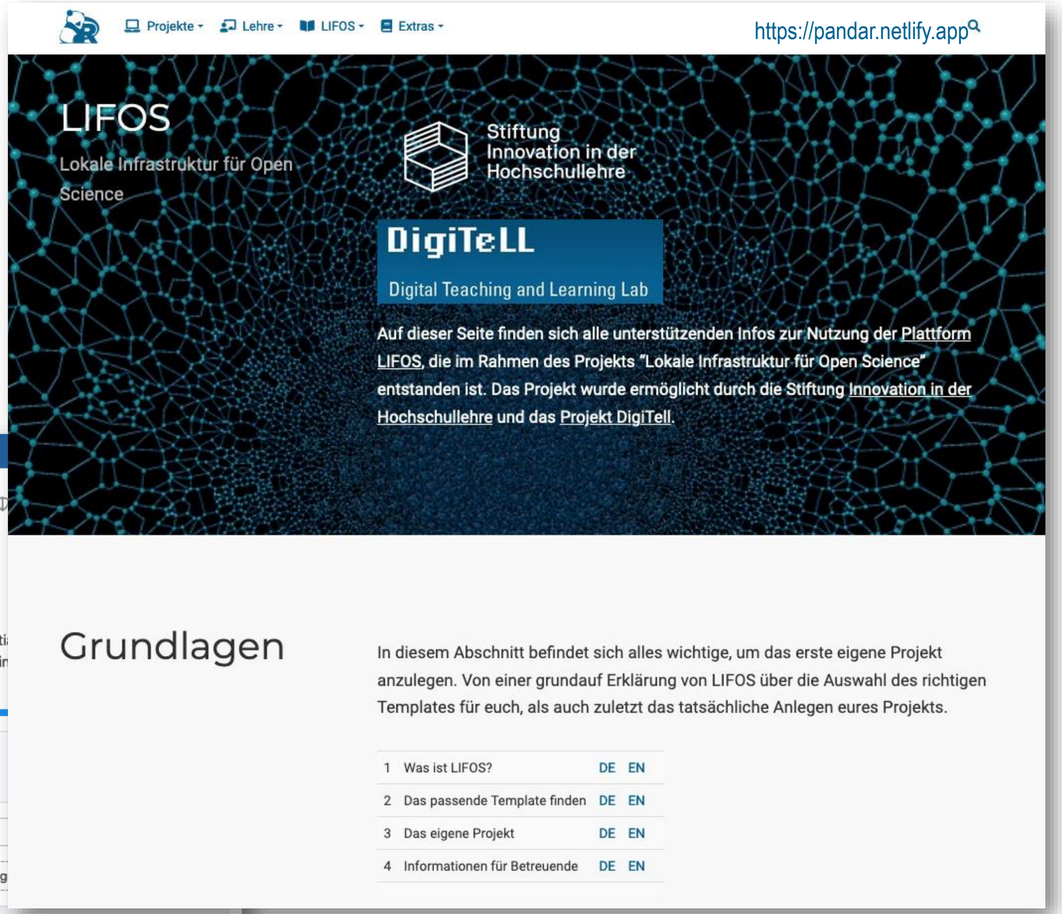
To run the analysis on your laptop or PC, execute the following steps:

- Download all files from folders **2_Scripts** and **3_Data**
- Organize the files in the same folder structure as in the project presented here
- Change the file path in the `read.csv()` commands
  - Here is how you do it:
  - Before: `codebook <- read.csv("codebook1.csv", sep = ";")`
  - After: `Before: codebook <- read.csv("codebook1.csv", sep = ";")`
  - Tip: To find your file path, click right on the file, copy file path, and just insert is as shown above. MacOS users click right and press alt, to get to the file path.
- And execute!

Best practice example

of a master thesis





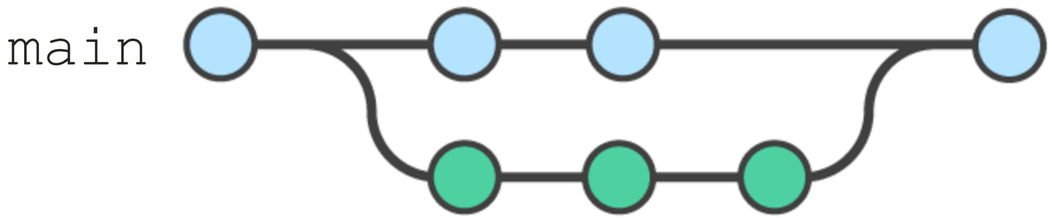
Tutorials on pandar in German and English

LIFOS and Git

- LIFOS is a GitLab instance and is therefore based on Git (version control software)
- Version control helps to transparently document and track changes in documents (especially code).

- As a result, some things also have different names ...

- **Commit changes** (to main branch) = “save”



What do we expect?

As a group:

- Create a project
- Preregistration
- Upload project data

Individually:

- Upload data analysis script
- Voluntary: Upload final project report (anonymized, if you wish)

Thank you for your attention! ☺
Questions so far?

If you have any questions about LIFOS, feel free to contact Tatiana Kvetnaya kvetnaya@psych.uni-frankfurt.de

or LIFOS@uni-frankfurt.de at any time.

What happens now?

- Create an account on LIFOS by logging in with your HRZ account data
- Join your ExPra group
- Create a project for your small group / project team (one person per team)

- And then you are all set to use LIFOS, so let's go! ☺

- https://lifos.uni-frankfurt.de