



CORRELAID

GOOD CAUSES. BETTER EFFECTS.

Git(hub) für Newbies

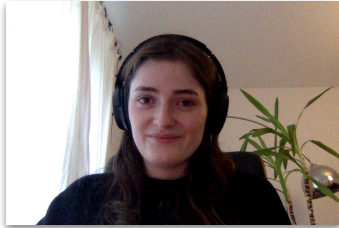
CorrelAid | Git(hub) für Newbies

Agenda

- ❑ **Über uns** | Wir & CorrelAid
- ❑ **Motivation** | Wofür brauchen wir Git?
- ❑ **Git Setup** | Git & Github
- ❑ **Git Workflow** | Pull, Commit, Push etc.
- ❑ **Hands On** | Übungs-Repository



Über uns



Friederike

Data Scientist @ &effect
Volunteer CorrelAid
Stuttgart



Zoé

M.Sc. Social & Economic Data Science
Bildung & Data Literacy @CorrelAid
Konstanz

Über uns | CorrelAid e.V.

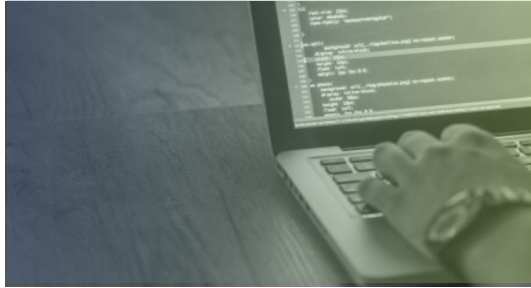


#MetaWeltretter

Wir sind ein europaweites Netzwerk von mehr als 2,300 Datenenthusiast*innen, die die Welt mit Data Science besser machen wollen.



Unsere Mission



PROJEKTE

Wir führen pro-bono Datenanalyseprojekte für gemeinnützige Organisationen durch und ermöglichen so, dass auch die Zivilgesellschaft evidenzbasiert und effizient arbeiten kann.



BILDUNG

Wir bieten sozial engagierten Datenanalytist:innen und dateninteressierten gemeinnützigen Organisationen, Möglichkeiten ihr Wissen über Daten zu verbessern.



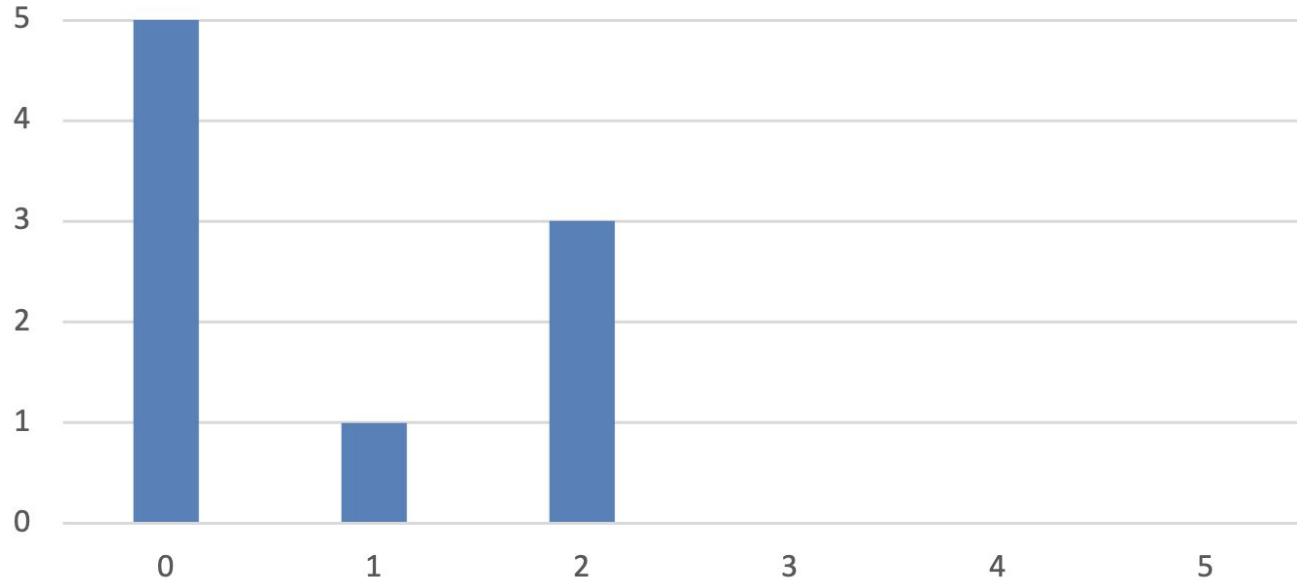
COMMUNITY

Wir vernetzen sozial engagierte Datenenthusiast:innen und treten in den Dialog über den Wert und Nutzen von Daten und Datenanalysen für das Gemeinwohl.



Über euch

Wie viel Erfahrung hast du bereits mit Git?





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Motivation

Wofür brauchen wir Git?



plots	01Kurzexposé_BA_Wolter.Zoé.pdf
plots-final	draft_exposé-BA.pdf
plots-final2	draft_exposé-BA_Wolter.pdf
draft-2021-01-06	draft_presentation_BA.pdf
draft-2021-02-19	draft01Exposé_BA_Wolter.Zoé.pdf
draft-2021-02-20	draft02_presentation_BA.pdf
draft-2021-03-05	draft02Exposé_BA_Wolter.Zoé.pdf
draft-2021-03-06	draft03Exposé_BA_Wolter.Zoé.pdf
draft-2021-03-07	draft03-presentation.pdf
draft-2021-03-08	draft04Exposé_BA_Wolter.Zoé.pdf
draft-2021-03-09	Exposé_BA_Wolter.Zoé.pdf
draft-2021-03-11	
draft-2021-03-13	
draft-2021-03-24	



– Version Control –



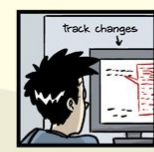
...und viele mehr!

"FINAL".doc



FINAL_rev.6.COMMENTS.doc

FINAL_rev.8.comments5.
CORRECTIONS.doc



FINAL_rev.18.comments7.
corrections9.MORE.30.doc

FINAL_rev.22.comments49.
corrections.10.#@\$%WHYDID
ICOMETOGRADSCHOOL?????.doc

WWW.PHDCOMICS.COM

https://mixmastamyk.bitbucket.io/pro_soft_dev/vcs.html



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Git Setup

Git & Github



Linux

```
$ sudo dnf install git-all  
$ sudo apt install git-all
```

macOS

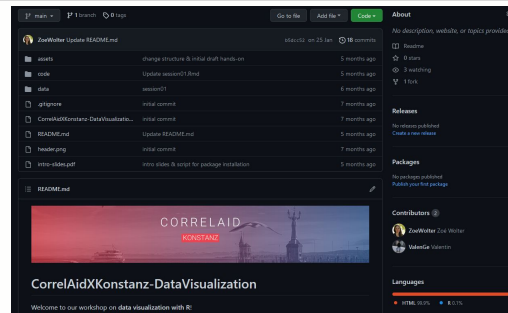
```
$ git --version
```

Windows

```
http://git-scm.com/download/win
```



```
https://github.com
```





```
MINGW64:/c/Users/schnecke/Documents/correl-aid/lc-konstanz/hackatho...
schnecke@LAPTOP-MOCAJH9A MINGW64 ~/Documents/correl-aid/lc-konstanz/hackathons/hack-and-harvest
$ cd ..

schnecke@LAPTOP-MOCAJH9A MINGW64 ~/Documents/correl-aid/lc-konstanz/hackathons
$ cd hack-and-harvest/

schnecke@LAPTOP-MOCAJH9A MINGW64 ~/Documents/correl-aid/lc-konstanz/hackathons/hack-and-harvest
$

orrelaid@CorrelAids-MBP WS22_FirstWave_StudentSurvey % git status
On branch main
Your branch is up to date with 'origin/main'.

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   conjoint/templates/conjoint/StudentInteractions.html
        modified:   db.sqlite3

no changes added to commit (use "git add" and/or "git commit -a")
correlaid@CorrelAids-MBP WS22_FirstWave_StudentSurvey % git add .
correlaid@CorrelAids-MBP WS22_FirstWave_StudentSurvey % git commit -m "fix StudentInteractions.html"
[main d4dbf26] fix StudentInteractions.html
 2 files changed, 121 insertions(+), 72 deletions(-)
correlaid@CorrelAids-MBP WS22_FirstWave_StudentSurvey % git push
Username for 'https://github.com': ZoeWolter
Password for 'https://ZoeWolter@github.com':
Enumerating objects: 13, done.
Counting objects: 100% (13/13), done.
Delta compression using up to 10 threads
Compressing objects: 100% (7/7), done.
Writing objects: 100% (7/7), 6.41 KiB | 3.21 MiB/s, done.
Total 7 (delta 5), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (5/5), completed with 5 local objects.
To https://github.com/LS-Shikano/WS22_FirstWave_StudentSurvey.git
   dc642bc..d4dbf26  main -> main
```

cd .. / cd Documents/

git clone

[‘https://github.com/{github_username}/{git-newbie-hack_and_harvest}’](https://github.com/{github_username}/{git-newbie-hack_and_harvest})

git add .

git commit -m ‘{commit-message}’

git push

git pull

Access Codes statt Passwort

Signed in as **ZoeWolter**

Set status

Your profile

Your repositories

Your codespaces

Your organizations

Your projects

Your stars

Your gists

Upgrade

Try Enterprise

Feature preview

Help

Settings

Sign out

Access

- Billing and plans
- Emails
- Password and authentication
- SSH and GPG keys
- Organizations
- Moderation

Code, planning, and automation

- Repositories
- Packages
- GitHub Copilot
- Pages
- Saved replies

Security

- Code security and analysis

Integrations

- Applications
- Scheduled reminders

Archives

- Security log
- Sponsorship log
- <> Developer settings**

GitHub Apps

OAuth Apps

Personal access tokens

Fine-grained tokens **Beta**

Tokens (classic)

Personal access tokens (classic) **Generate new token** **Revoke all**

Tokens you have generated that can be used to access the [GitHub API](#).

Github Desktop

Desktop Interface als Alternative für das Terminal / Kommandozeile. Unterstützt alle Funktionen und gibt auch einen Einblick, was sich in den Dateien geändert hat.

repository / branch →

changes →

commit message →

← fetch/ push

← file preview

The screenshot shows the Github Desktop application interface. At the top, the repository is 'master-thesis' and the current branch is 'main'. A 'Fetch origin' button is visible, indicating the last fetch was 15 minutes ago. Below this, the 'Changes' tab is selected, showing a list of 7 changed files. The file 'src/models/k-cross.ipynb' is highlighted. To the right of the file list, the 'file preview' pane shows the content of 'src/models/k-cross.ipynb', which is a JSON file containing a 'cells' array. The 'Commit to main' button is visible at the bottom of the interface.



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Git Workflow

Pull, Commit, Push etc.

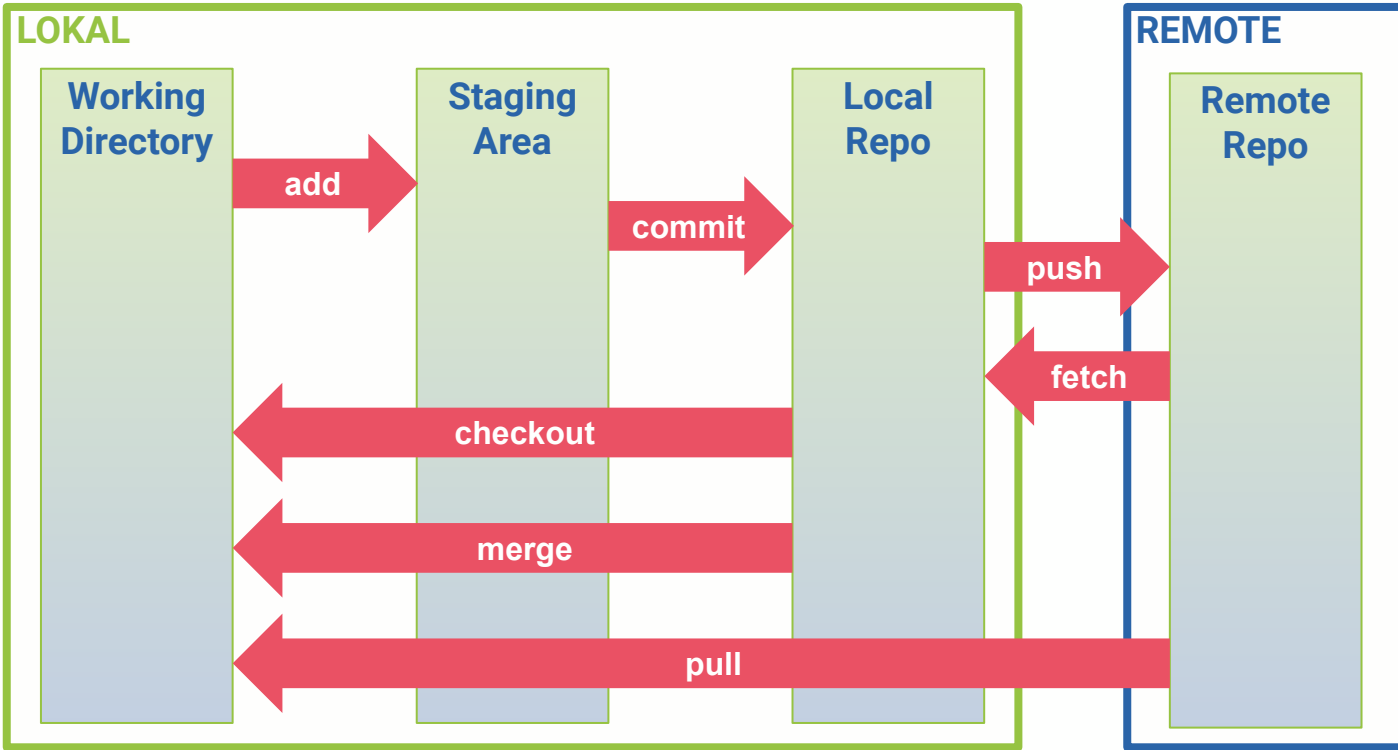
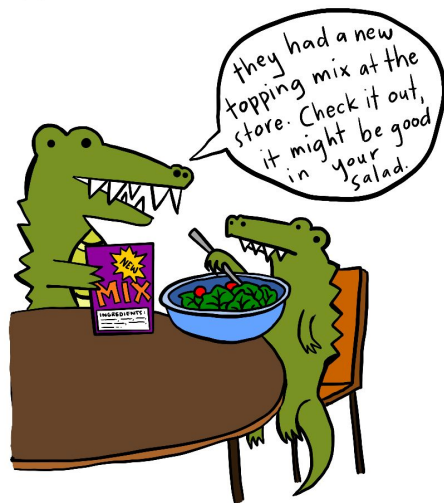




Illustration by Allison Horst (https://twitter.com/allison_horst)

Fetch vs Pull

git fetch: bring stuff home



git pull: bring stuff home AND merge it in



check what you're getting before merging it in with git fetch

@allison-horst

Git fork

Forking = erstellt ein neues Repository mit dem Repository von dem man forked als Grundlage. An diesem kann man dann weiterarbeiten, ohne das ursprüngliche Projekt "kaputt" zu machen.

The screenshot shows a GitHub repository page for 'CorrelAid / git-newbie-hack_and_harvest'. The repository is public and was forked from 'CorrelAid/git-newbie-playground'. The page includes navigation tabs for Code, Pull requests, Projects, Security, and Insights. A dropdown menu for 'Your existing forks' is open, showing 'You don't have any forks of this repository.' and a '+ Create a new fork' button. The repository is currently on the 'main' branch, which is 6 commits ahead of the parent repository. The commit history shows a recent update to 'README.md' by 'philbosch' on July 7. The file list includes 'images' and '.gitignore'. The right sidebar shows repository statistics: 1 star, 1 watching, and 14 forks.

CorrelAid / **git-newbie-hack_and_harvest** Public
forked from CorrelAid/git-newbie-playground

<> Code Pull requests Projects Security Insights

main 1 branch 0 tags

This branch is 6 commits ahead of CorrelAid:main.

philbosch Update README.md 821a28b on Jul 7 51 commits

images Add files via upload 4 months ago

.gitignore gitignore 7 months ago

Go to file Add file Code About

Your existing forks
You don't have any forks of this repository.
+ Create a new fork

This is a repository for Git newbies to fork and play with.

Readme MIT license 1 star 1 watching 14 forks

Commits helfen uns und anderen!

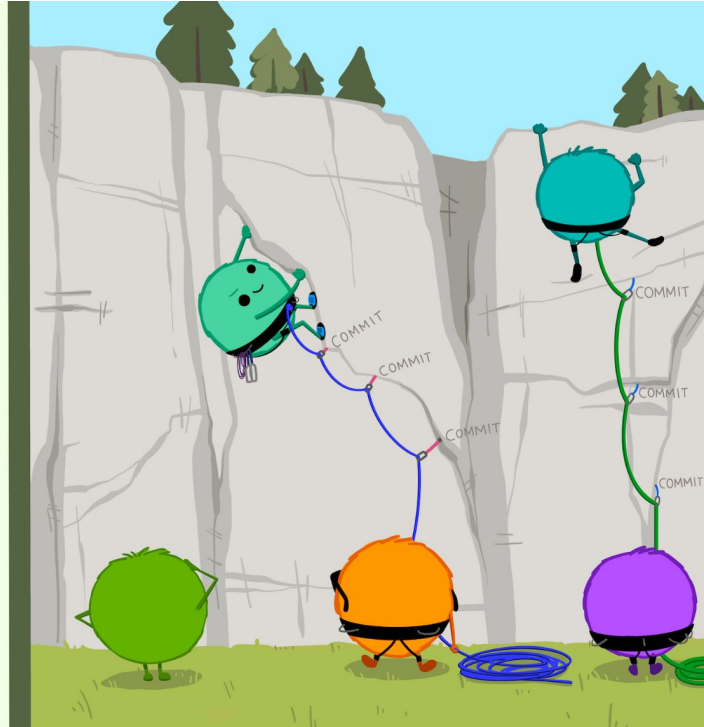


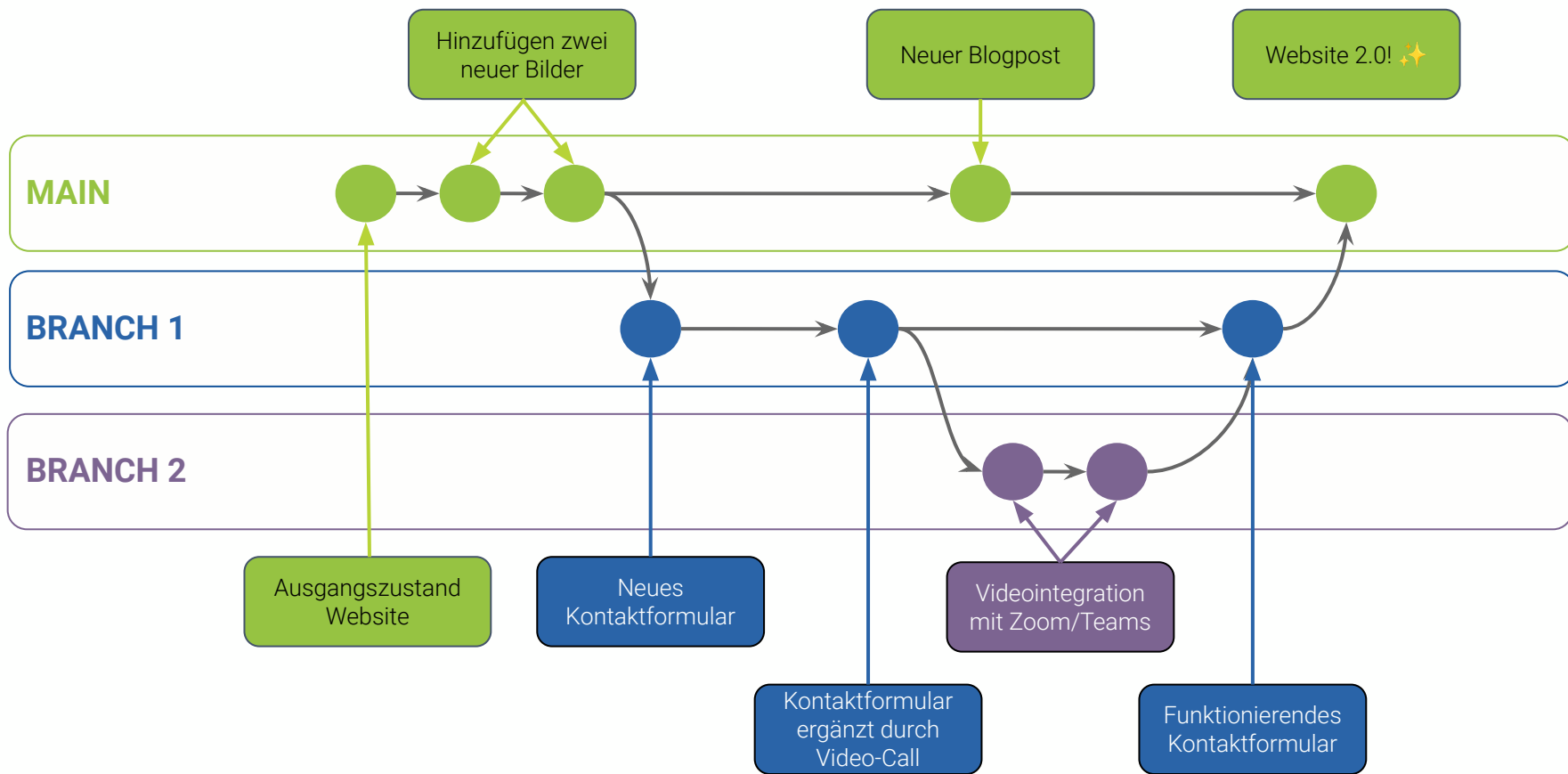
Using a Git commit is like using anchors and other protection when climbing...**if you make a mistake, you can't fall past the previous commit.**

Commits are also helpful to others, because **they show your journey, not just the destination.**

— HADLEY WICKHAM & JENNY BRYAN

Wickham & Bryan, RPackages (<https://r-packages.org/preface.html>)

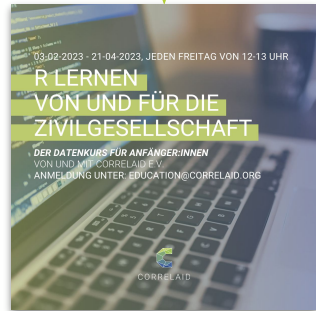




Ihr bei CorrelAid e.V.

Datenkurs
"R Lernen"

education@correlaid.org



WORKSHOPS



Workshops mit / für
andere Non-Profits
zoe.w@correlaid.org

Newsletter

<https://correlaid.org/volunteer/>



CORRELTALK



Machtpotential von Wähler*innen
mit Migrationshintergrund

AB 27. MAI 2022 AUF:



Data4Good-Podcast:
CorrelTalk
linktr.ee/correltalk

Local Chapter

konstanz@correlaid.org



CORRELAID

KONSTANZ

Link zum Podcast: linktr.ee/correltalk



CORRELAID

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Hands On

Übungs-Repository