

What is Git and Why is it Awesome?

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https://github.com/Denubis/GitPresentationRUsers/main.pdf

Outline

Concepts to untangle

Scenarios for Awesomeness

Activities





Concepts to untangle

These things are different

- Git
- Repository
- a DVCS
- A Remote Repository (Service)
- Extra Stuff

Git

- Invented by Torvalds in 2005
- A response to prior version control systems that didn't scale
- Very counterintiutive terminology
- Looks scary

Repository

- A self-contained "light-cone" of code
- Able to talk to other repositories by exchanging "commits"
- Every repository is master of its own fate
- · Very different from a centralised version control system
- Complete opposite of Dropbox

Remote repositories

- Github
- Gitlab
- Bitbucket

Extra Stuff

- Git(hub/lab) Pages.io
- Large file store
- Continuous Integration

Why do we care?

- · Able to track changes,
- · On sets of files over time,
- With descriptive summaries!





Scenarios for Awesomeness

Thesis Work

- https://github.com/Denubis/AskingAboutData
- https://github.com/petrajanouchova/dis_context
 - · Reverting my bad changes:
 - https://github.com/petrajanouchova/dis_context/ commit/3618ccc89149b6188fdeb4281c8da3a8df627ace

Papers and Presentations

- https://github.com/FAIMS/OpenDataSympathetic-Presentation/blob/master/presentation.pdf
- https://github.com/FAIMS/FAIMS-Mobile-Flexible-open-source-software-for-field-research
- Journal based uses:
 - Open peer review: https://github.com/OpenScienceMOOC/Module-7-Open-Evaluation
 - An entire journal: https://github.com/sx-archipelagos/sxa

Code and Experiments

- https://github.com/FAIMS
 - This code at this point in time: https://github.com/FAIMS/faims-web/releases/tag/ElsevierSOFTX-124
 - Supports this paper: https://www.sciencedirect.com/science/article/pii/S2352711017300869
- https://github.com/Alveo

Static Websites

- https://github.com/orgs/BeniHassanResearchGroup/dashboard
 - -> www.benihassan.com
- https://github.com/orgs/mqTeXUsers/dashboard
 - · -> mqtexusers.github.io
- https://github.com/orgs/MacquarieAustralianHistoryMuseum/dashboard
 - -> objectbasedlearning.com





Activities

Signing up under an education link

- education.github.com
- bitbucket.org with a .mq.edu.au email
- gitlab has all of these services free, we're working on .mq.edu.au support

SSH keyless authentication / GUI setup

- https://help.github.com/articles/connecting-to-github-with-ssh/
- https://desktop.github.com

File sharing with code review

- https://github.com/LibraryCarpentry/lc-webscraping/pull/27
- https://github.com/FAIMS/SoftwareX/commit/ 86355fedb0f7fca5fd6f65916882bf147ba73c63#diff-9e1159339c97548e560d49d979f82b8e
- How would we get supervisors and gradstudents to use this model?

Getting a git pages site up

- https://github.com/mqTeXUsers/mqTeXusers.github.io
- https://pages.github.com/

Osf.io Integration

The open science framework supports a github datasource.

- https://osf.io
- http://help.osf.io/m/addons/l/837075-connect-github-to-a-project
- example: https://osf.io/ncm8s/