Lab*:Topic on Git

Yasuyuki Sawada, Yaolang Zhong

University of Tokyo
yaolang.zhong@e.u-tokyo.ac.jp

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Git install

- macos: first, install Homebrew

Why version control for research?

- Replication and transparency: journals increasingly ask for clean replication packages.
- Collaboration without chaos: avoid `final_final_with_comments.tex`.
- One canonical folder; full history lives inside `.git`.
- Reproducible snapshots (commits) with messages; easy rollback and branching.
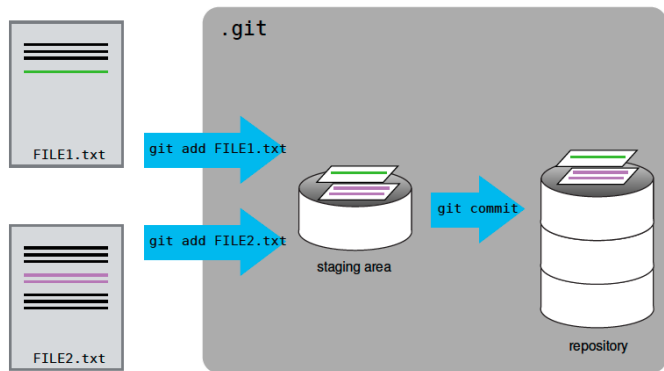
Git structure

Figure 1: Git structure. Reference: Jesús Fernández-Villaverde, Courses on Computation, chapter on Git; Ⓒ Software Carpentry, license.

A minimal collaboration loop

1. `git pull` to start from the latest remote state.
2. Edit, `git add`, `git commit -m "..."`.
3. `git push` to share.
4. Repeat; handle conflicts when they arise.

References & Further Reading

- Jesús Fernández-Villaverde, Courses on Computation, chapter on Git (PDF).
- Using Git with Visual Studio Code, Official Beginner Tutorial (Youtube video)
- Using Git with Visual Studio Code, Official Beginner Tutorial (Webpage)
- Git Tutorials by Corey Schafer (Youtube playlist)