

website: vanderbi.lt/github

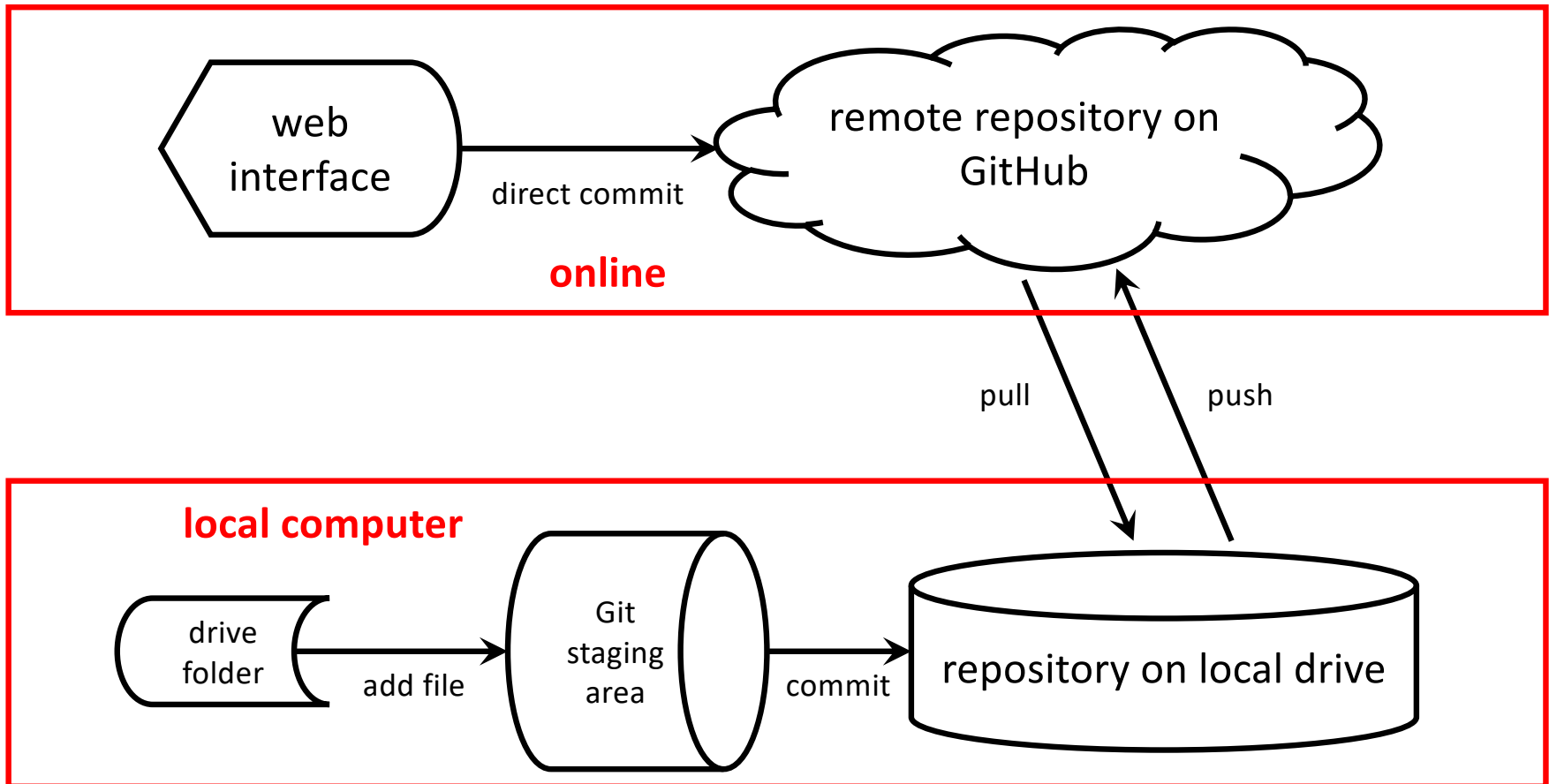
Git and GitHub terms and diagrams

Presenter: Steve Baskauf
steve.baskauf@vanderbilt.edu

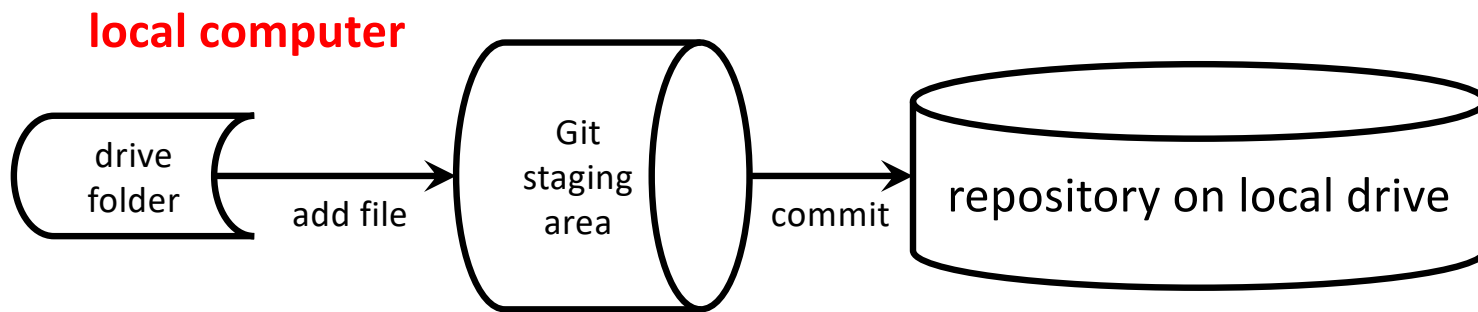


Jean & Alexander Heard
LIBRARIES

The World of Git and GitHub



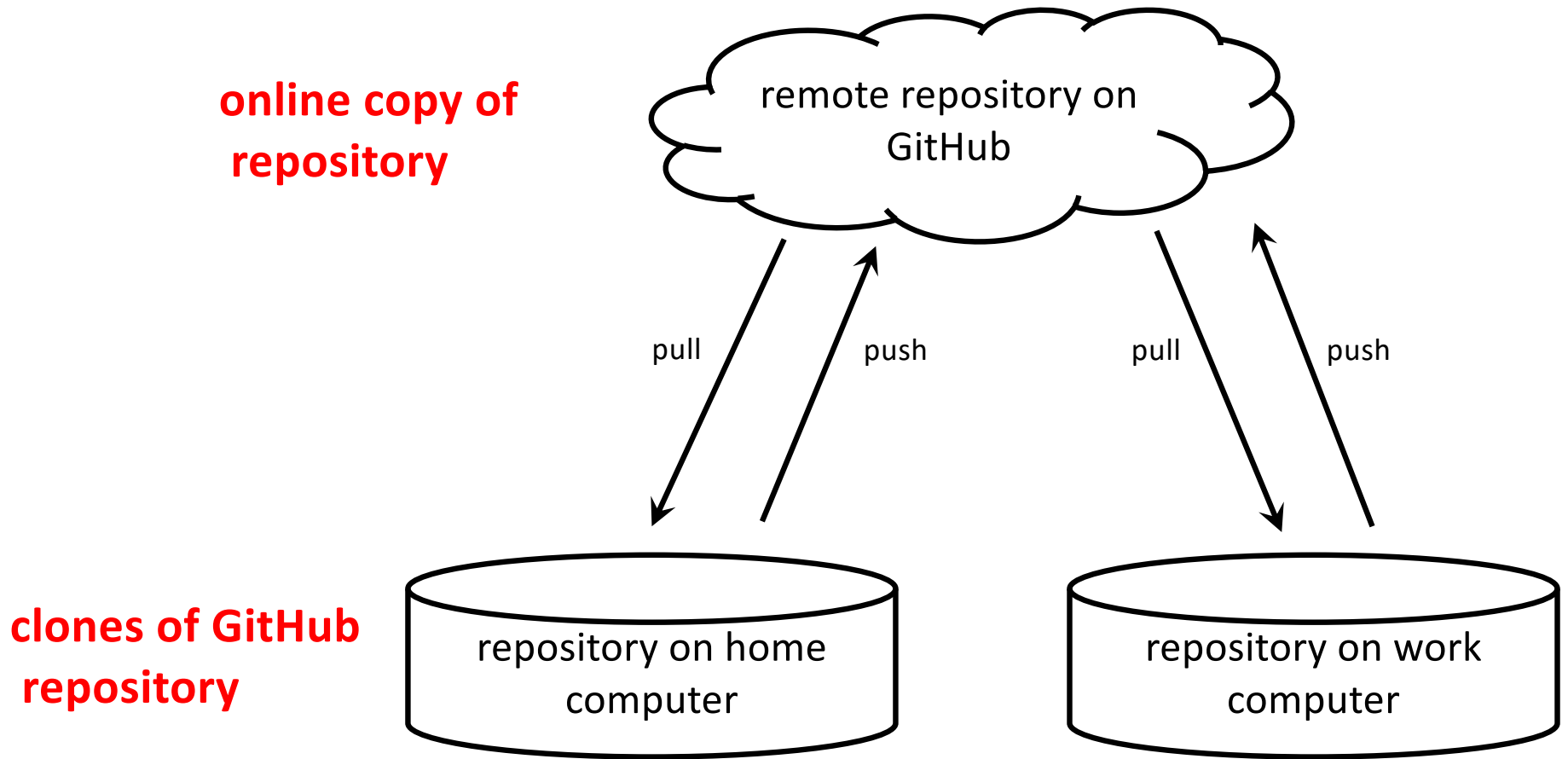
Local version control for disaster prevention



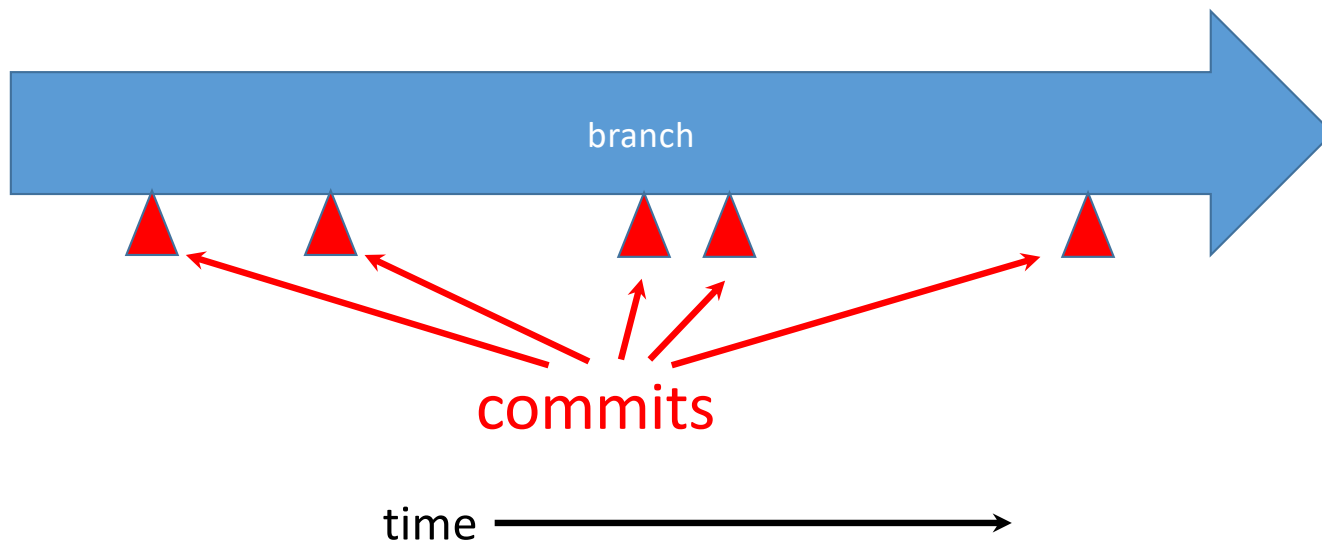
Variation in use of GitHub

- Depends on number of collaborators in the group
- Depends on who has write access to the repository
- Depends on social conventions established by the group

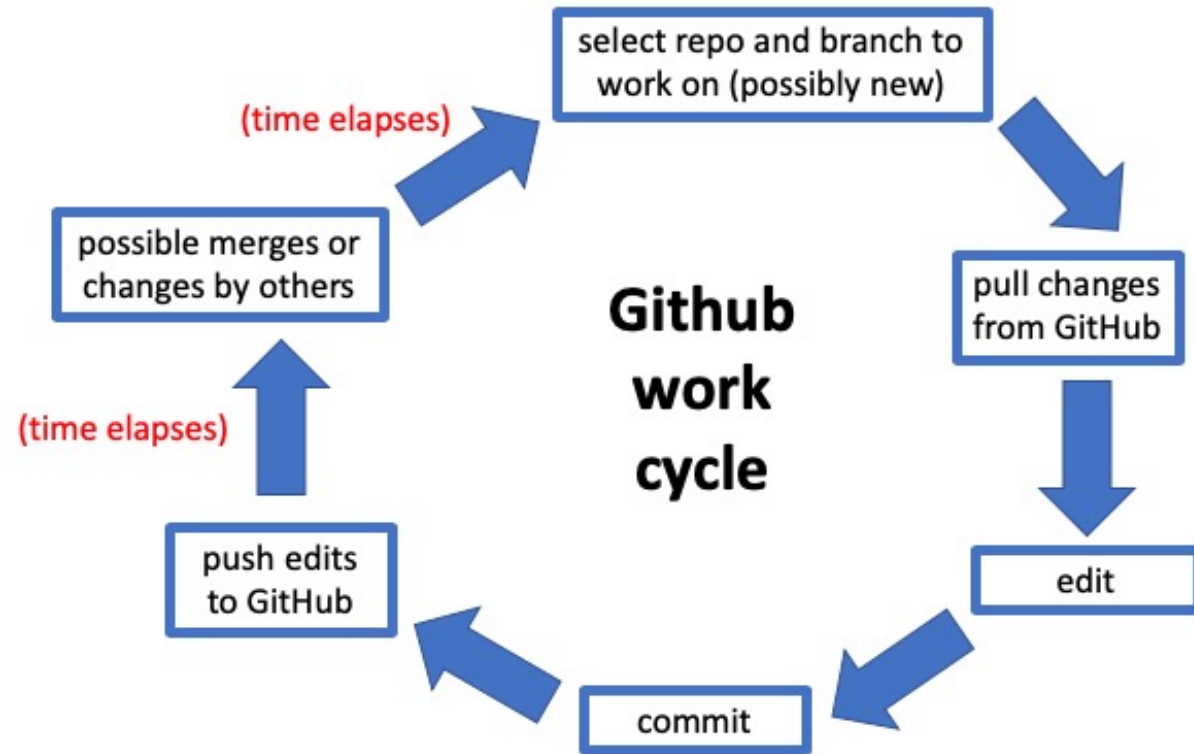
Disaster prevention via synching with GitHub (1 user)



Branches and commits



Work cycle



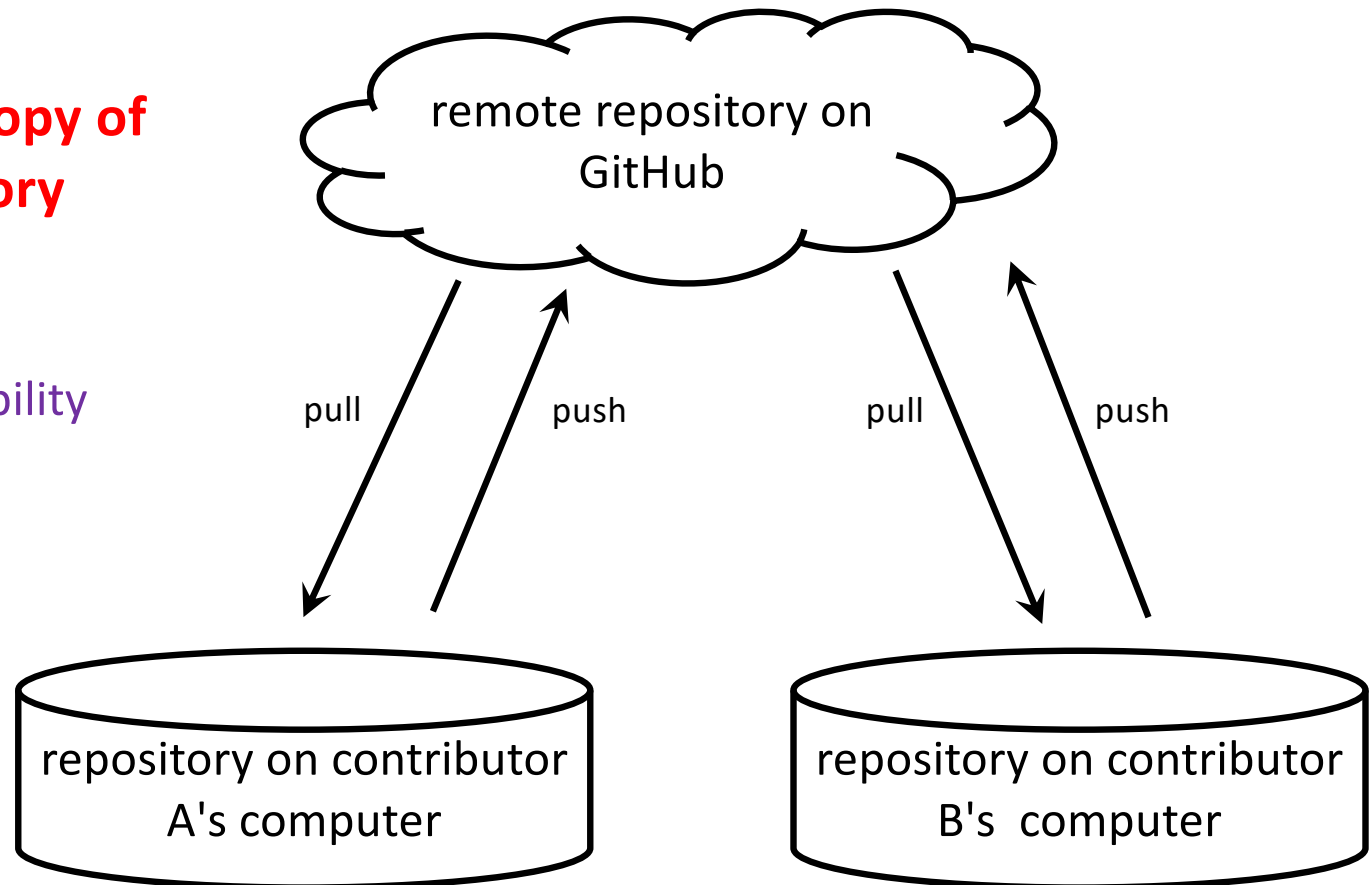
- Always start a work session by pulling changes from GitHub
- Always end a work session by pushing changes to GitHub

Simple collaboration (>1 user)

online copy of repository

Warning! High probability of version conflicts!

clones of GitHub repository

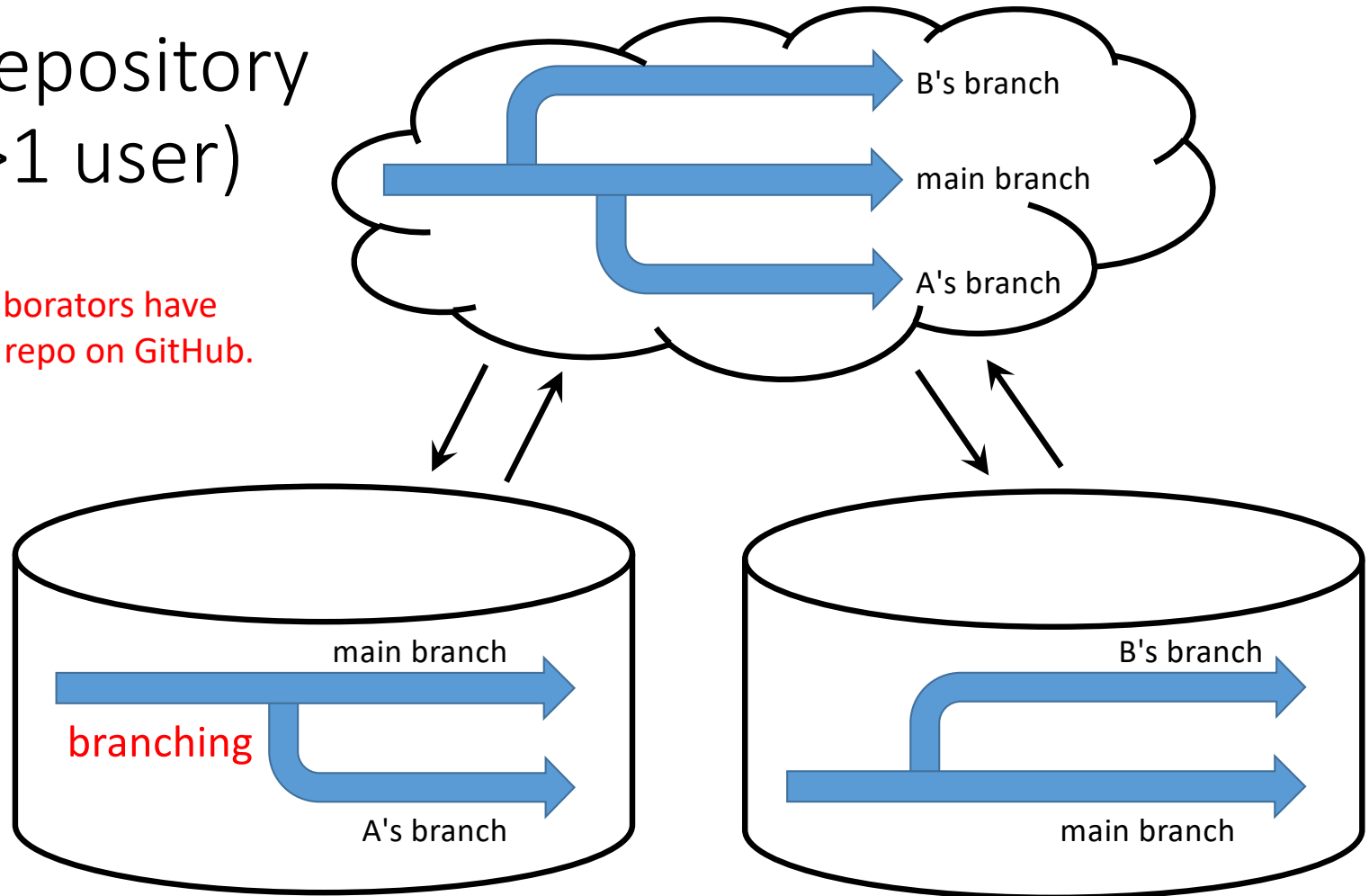


The issues tracker

- **Issues** generally represent problems to be solved to achieve some goal.
- In GitHub, resolution of an issue usually results in at least one **commit**.
- One can think of there being a **direct relationship** between issues and commits.
- The GitHub issues tracker is closely integrated with its system for managing changes.

Shared repository model (>1 user)

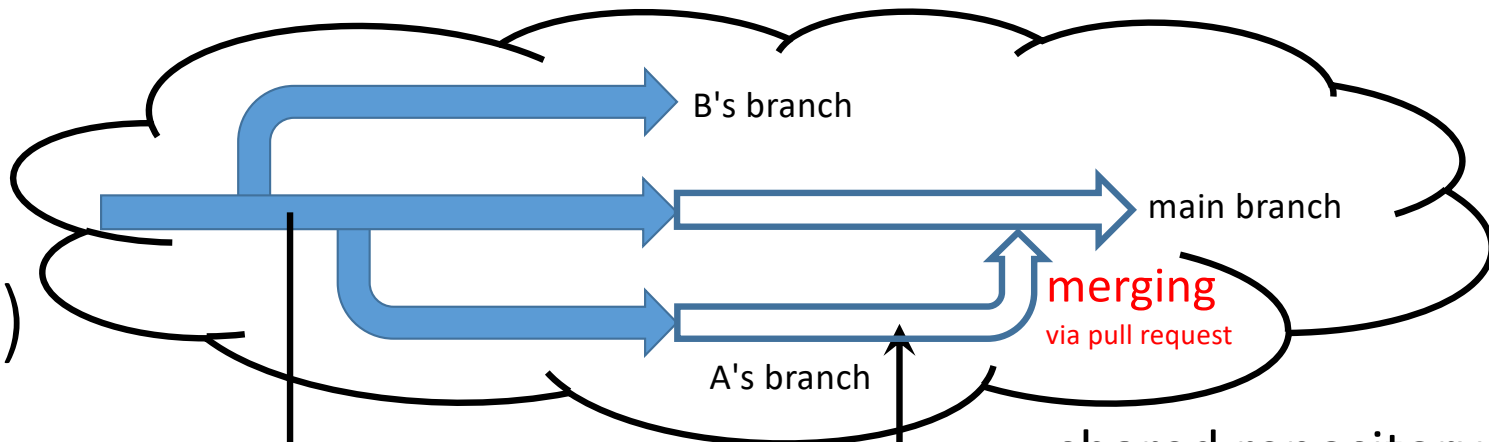
Used when all collaborators have write access to the repo on GitHub.



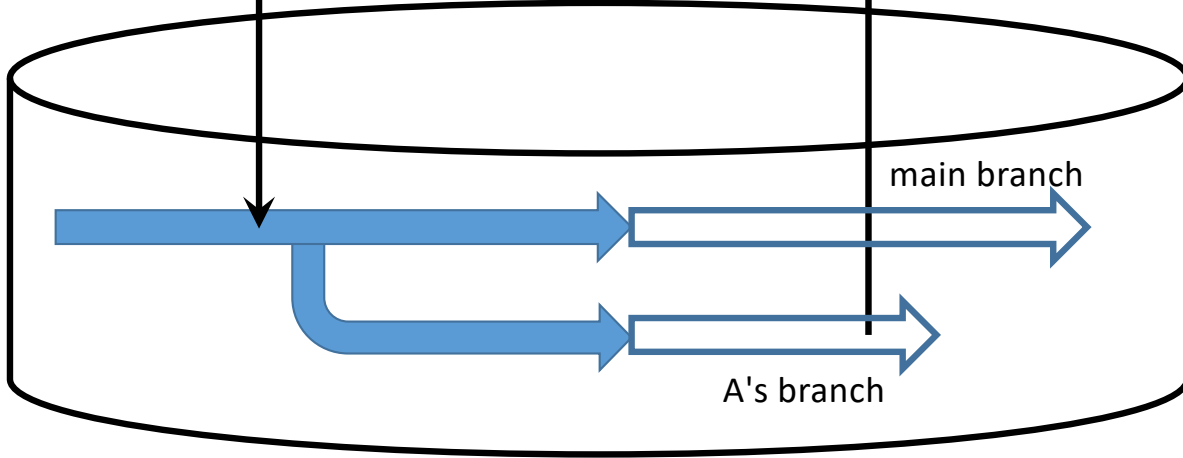
Version conflicts avoided when working on separate branches

GitHub flow (social conventions)

Working branch is merged into main branch via a pull request.



shared repository

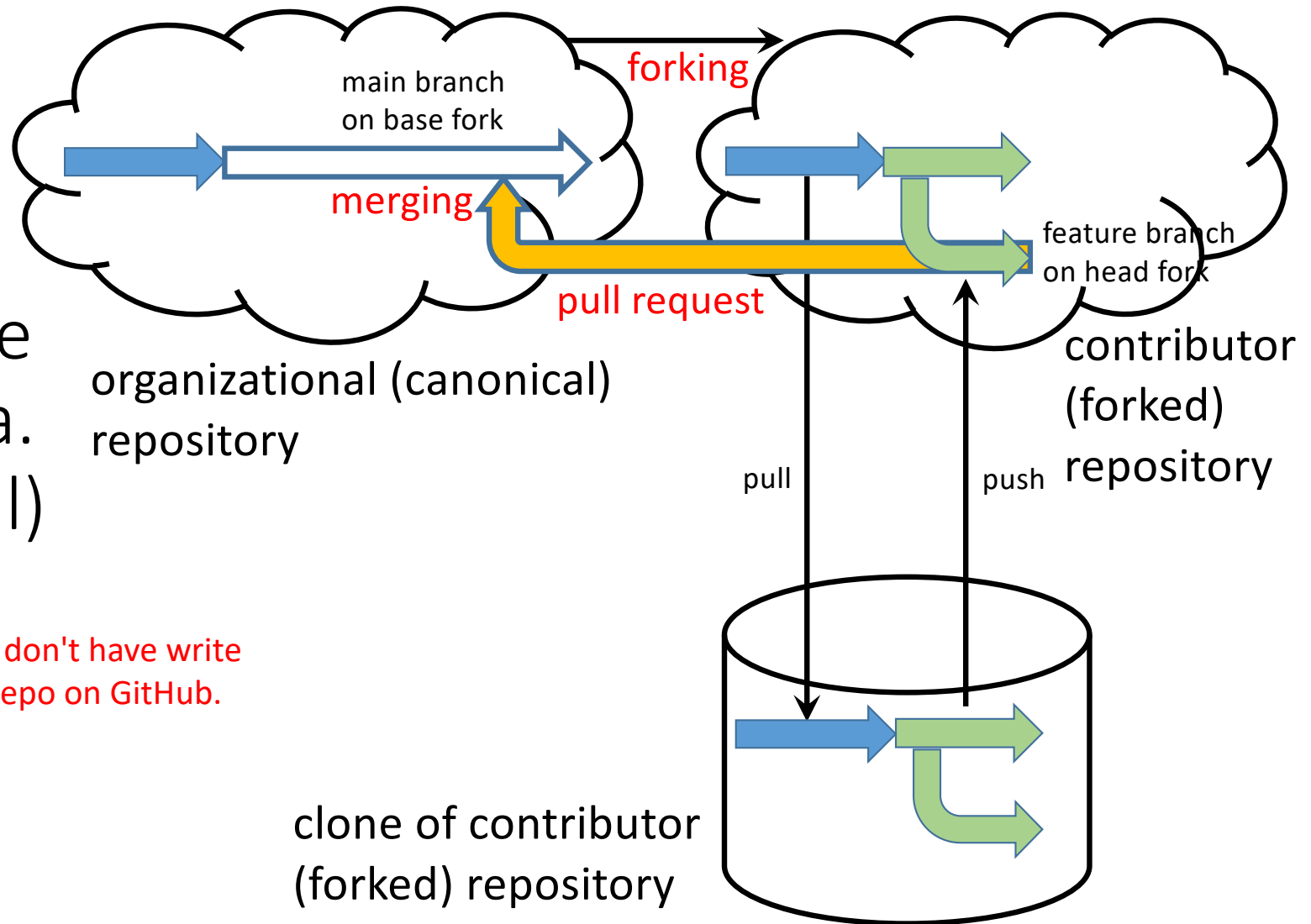


clone of shared repository

pull

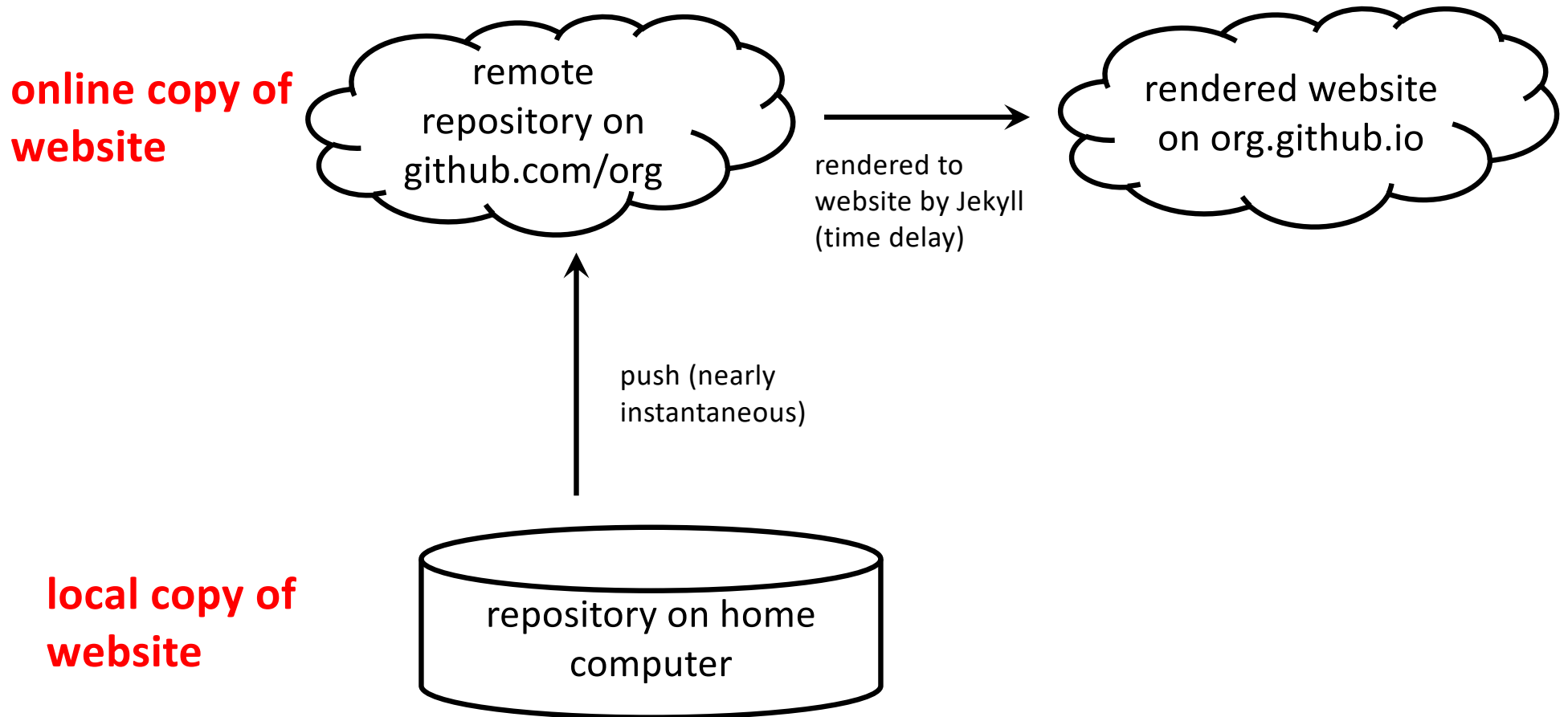
push

Open Source model (a.k.a. fork and pull)



Used when contributors don't have write access to the canonical repo on GitHub.

Managing a website using GitHub Pages (single user)



Cloning a repo to the desktop (initializing)

