GIT FOR RESEARCH

VERSIONS. UNDER CONTROL

WHY VERSIONS?

▸ Things happens!

   ▸ Always go back to the previous state

▸ I want it differently.

   ▸ Collaboration with others

▸ How do you like my work?

   ▸ (Self-)publish your work/code

BACKUP, BACKUP, BACKUP!!!

▸ The grand old days

  ▸ Hard drives + multiple versions of files

▸ The cloud emerges

  ▸ Dropbox, Google Drive, oneDrive, etc.

▸ "Gitting" through the cloud

  ▸ A local repository for personal history
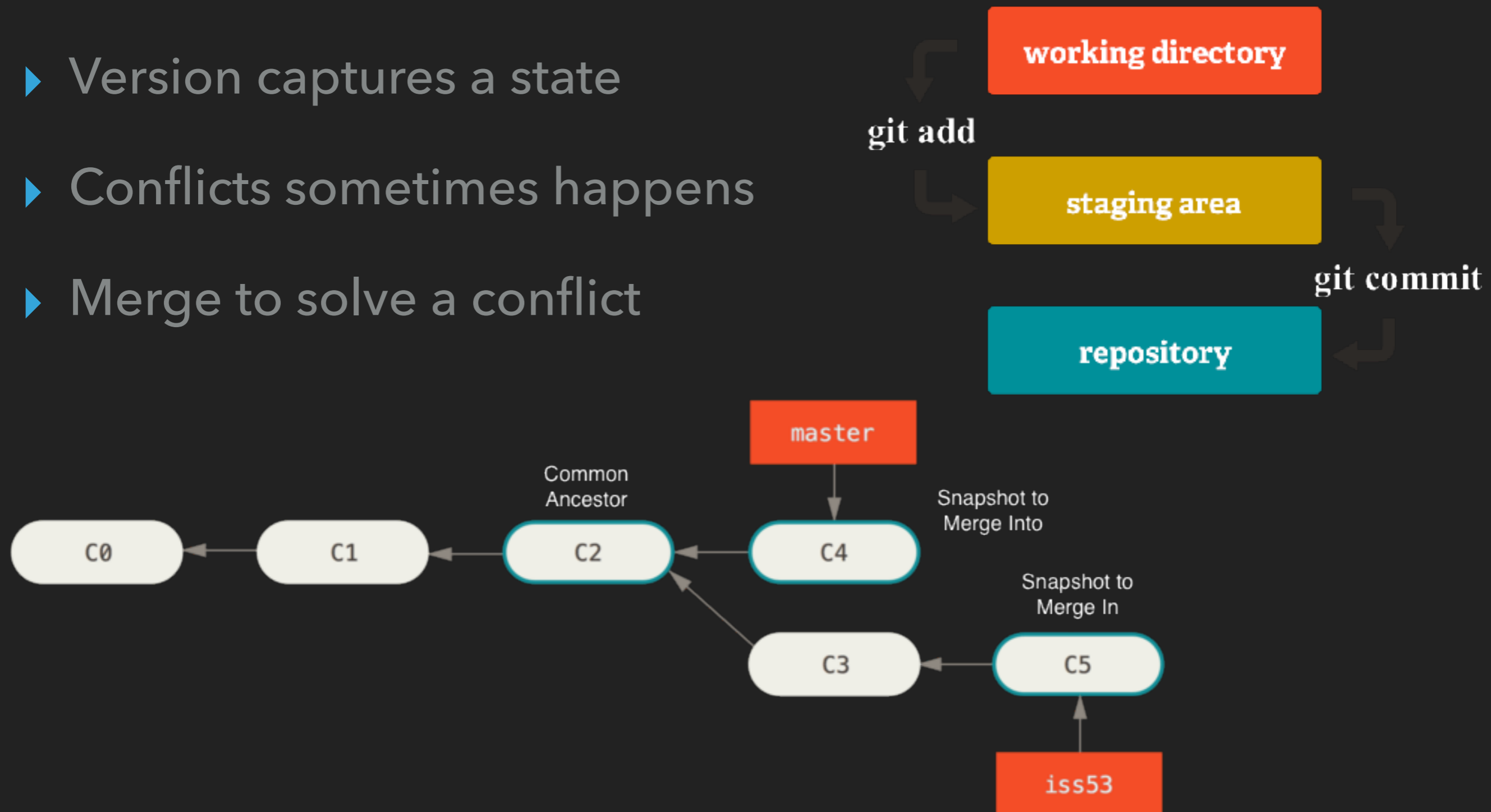
  ▸ A remote repository (cloud) for backup and sharing

BRANCHING AND MERGING

▸ Branches make the differences

   ▸ A branch is a person

   ▸ A branch is a topic

   ▸ A branch is an action

▸ Merges reconcile

   ▸ Solves conflicts

   ▸ Integrate benefits

git

master

develop

topic

WORKFLOW OF GIT

▸ Version captures a state

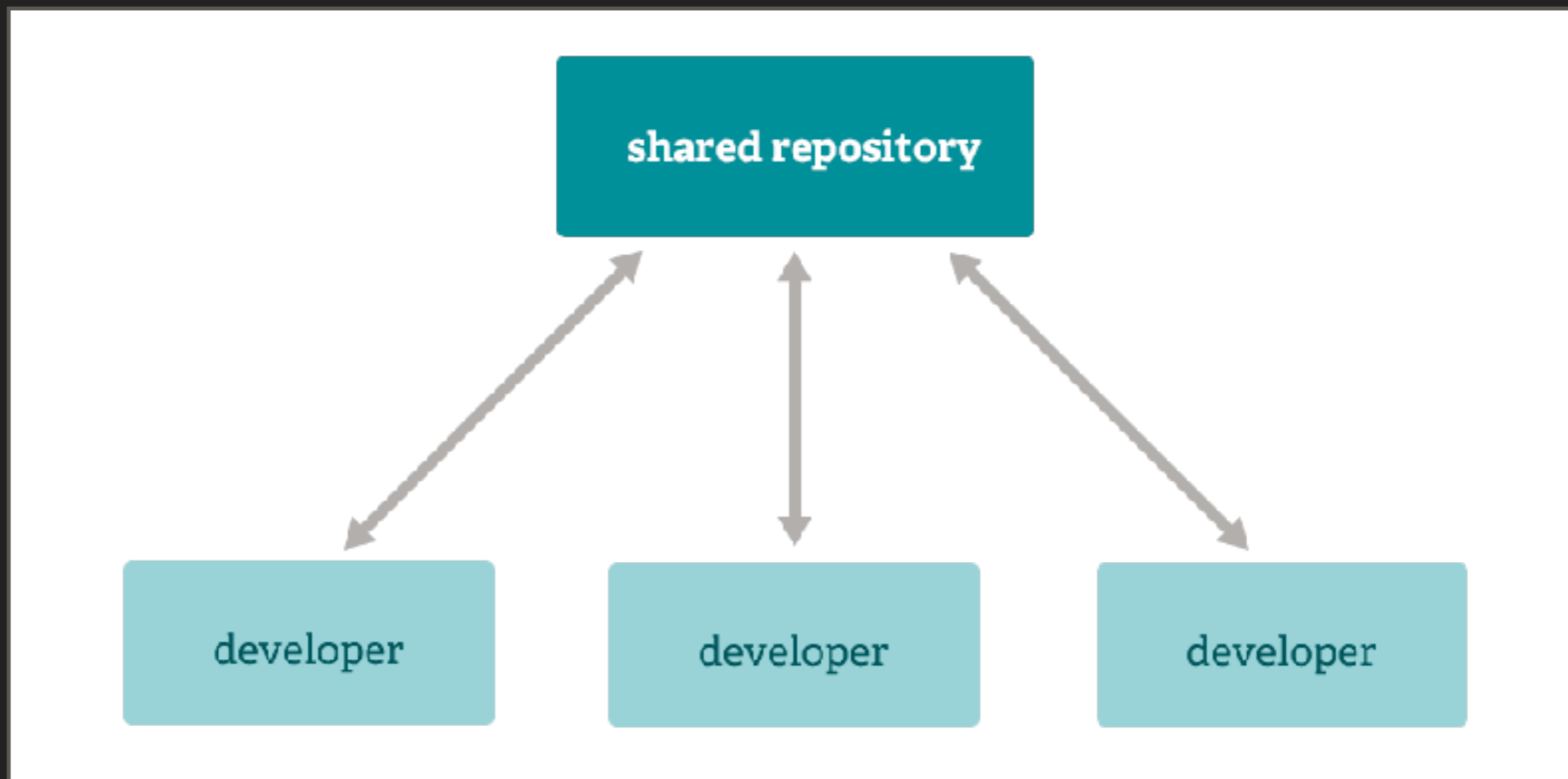▸ Conflicts sometimes happens

▸ Merge to solve a conflict

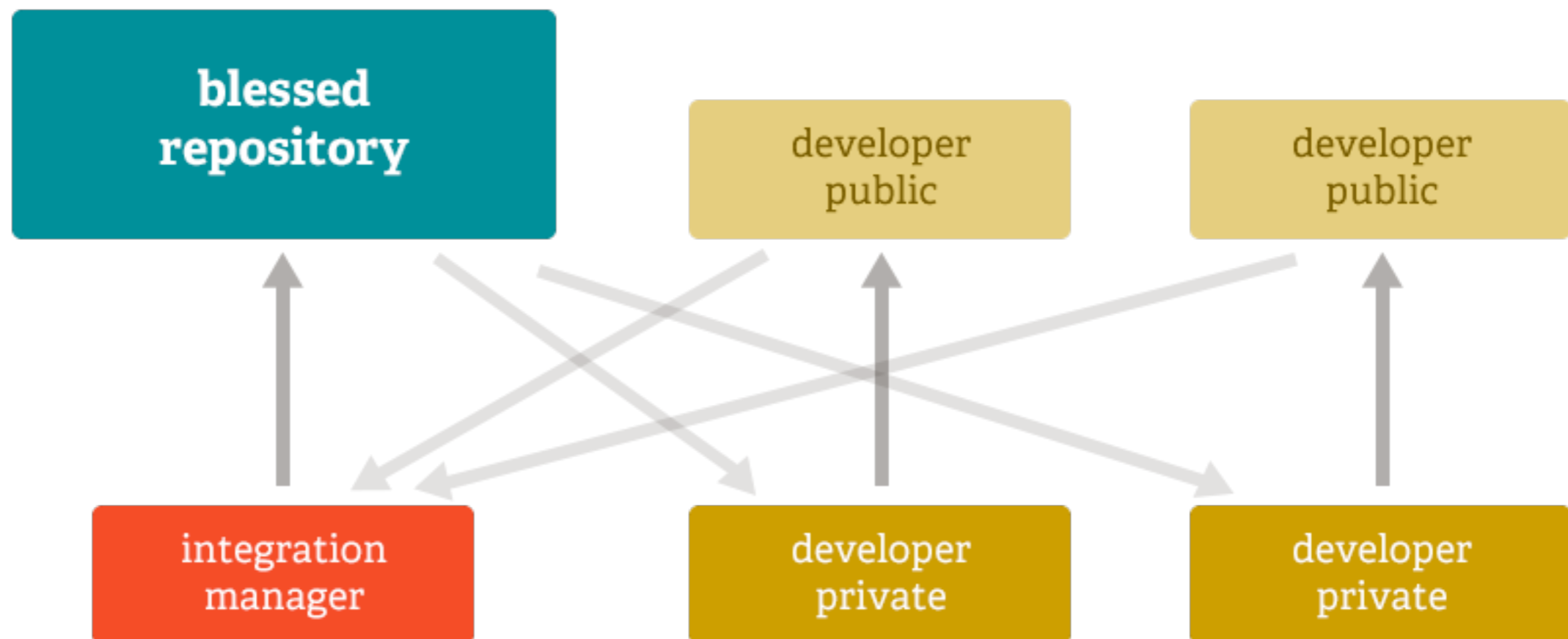# A WORKING EXAMPLE

▸ Lijun's personal reference library

BRANCHES MAKE COLLABORATION SEAMLESS

▸ Everyone has their own repository(ies)

▸ Select what you want to share/contribute

A MANAGER THAT MAKE DECISIONS

▸ Good for paper writing

▸ Usually the first author/advisor make

GITHUB FLOW

▸ Best for large projects

▸ Optimized for synchronized collaboration

A WORKING EXAMPLE

▸ [Obspy](#)

SHOW YOUR WORK

▸ Share your code on GitHub

▸ Create a page for your project/course (CNN course @ Stanford)

▸ Personal website and blog with custom domain

A WORKING EXAMPLE

▸ Lijun's personal website