# CS 186 Section 1: Introductions, Git, and Unix (… and Out-of-Core?)

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# Enrollment

- The class is over-enrolled.
- The course staff is not in charge of enrollment.
  - Michael-David Sasson is — but there is nothing he can do.
- We have no idea how many people will drop.
- The class is being offered both semesters next year

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Office Hours:

Monday 2-3pm (283H Soda)
Wednesday 1:30-2:30pm (283H Soda)

# Bay Area Native

yammer

The Enterprise Social Network

cloudera®

Ask Bigger Questions

amplab

# Get to know 4 of your classmates!

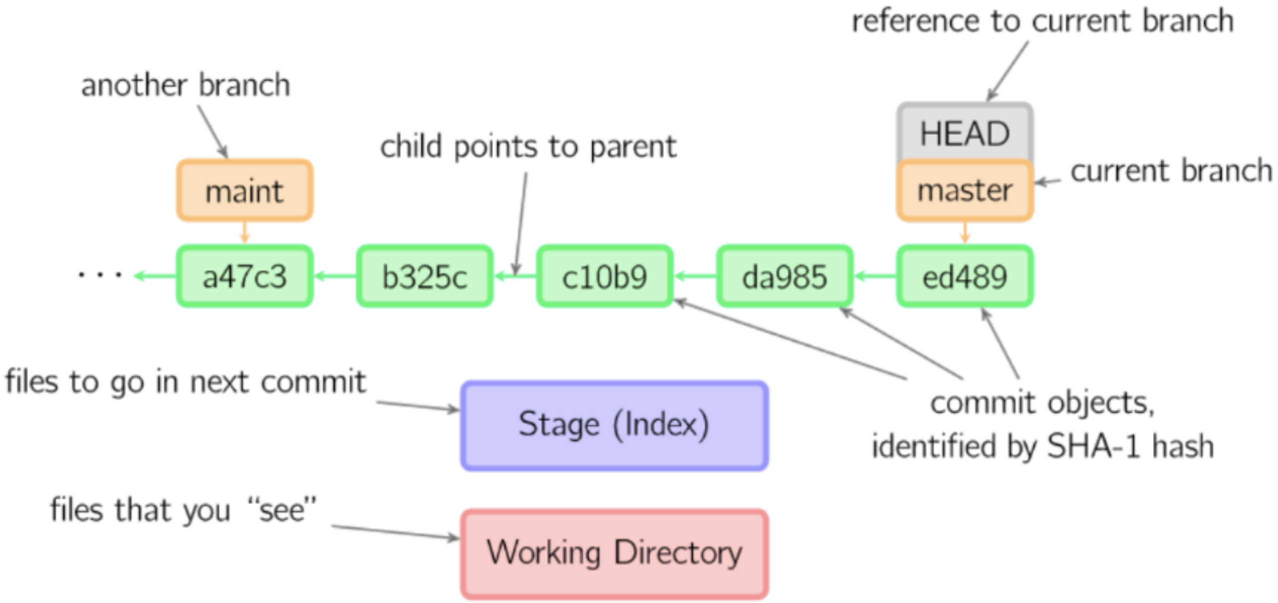
- Name
- Major
- Year
- Most hated software

# Git

History

Staging

Working



reference to current branch

another branch

HEAD

child points to parent

maint

master

current branch

. . .

a47c3

b325c

c10b9

da985

ed489

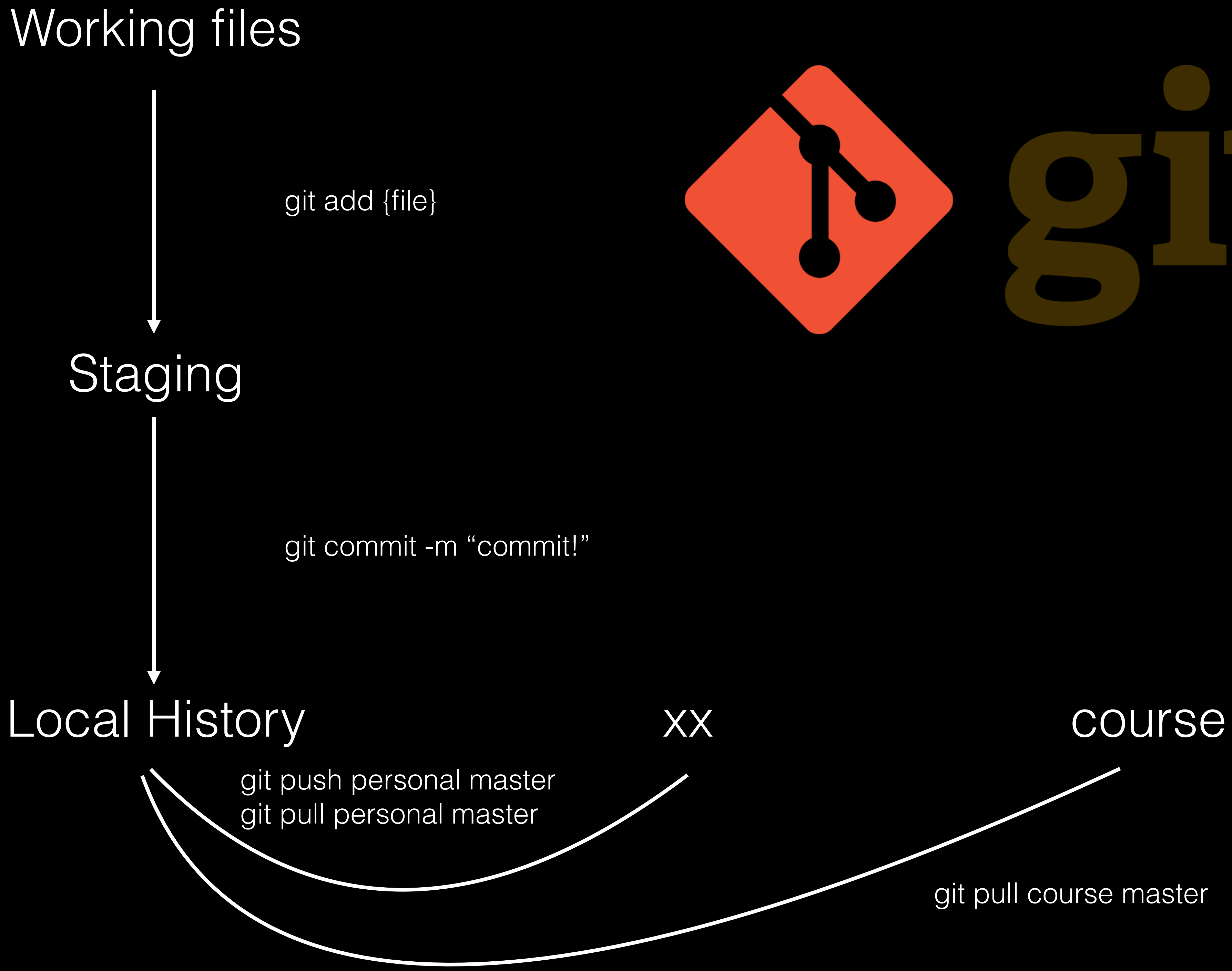
files to go in next commit

Stage (Index)

commit objects, identified by SHA-1 hash

files that you “see”

Working Directory



Working files

git add {file}

Staging

git commit -m “commit!”

Local History

xx

course

git push personal master
git pull personal master

git pull course master

1. Clone your private repo (e.g. `db`)
2. Add the `course` repo as a remote
3. Pull `course` history into your local master
4. Make your changes (e.g., `touch done.txt`)
5. Push to `personal` or `origin`  master
6. Push to submission branch (e.g., `release/hw0`)

# Git as a collaboration tool?

- Git is not just VCS — it is also a collaboration tool!
- Github allows you to make pull requests. Pull requests are your best friends.
- Since you can’t fork, you should make pull requests from branches.

# Unix

- **`man`** : Instructions on how to use all other commands. Your best friend.

- **`cat`** : Prints files. This is a good way to get some data into a pipe stream.

- **`sort`** : Writes a sorted version of the input file to stdout.

- **`head`** : Displays the first few lines of a file (configurable).

- **`tail`** : Displays the last few files of a file (also configurable).

- **`wc`** : Displays the number of words in the file.