The Command Line and Git

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Week 2
April 11 2019

Attendance
tinyurl.com/y33jhcxr

Announcements

- Ed’s office hours:
  Tuesdays 3:30-5pm
  Life Sciences Lobby
- Class website
- Anonymous feedback form
- Google Drive and Calendar

Attendance
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- Oval challenge

Command Line

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- Alternative to GUI interfaces
- Make you look like a scary hacker
- Do stuff by entering commands in text
  - Press enter to run

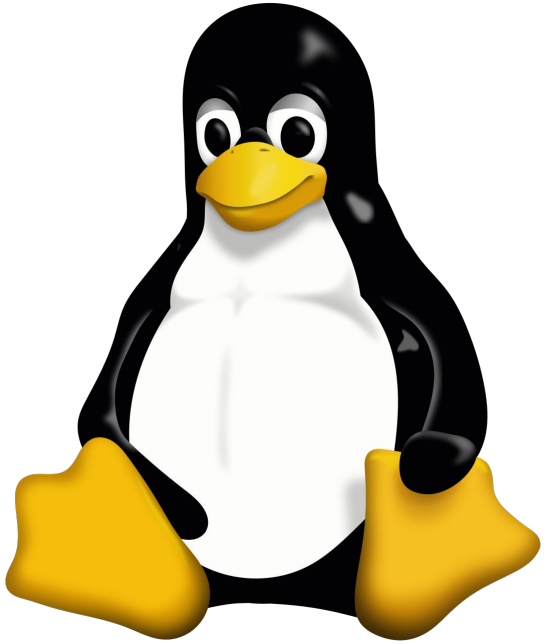
<cmd> <arguments> …

- Arguments often file names
  - Can have flags which start with a hyphen
- An interactive programming language called a shell
  - Most commonly Bash

ls – **LiSt** files
cd – **C**hange **D**irectories (folder)
mv – **MoVe** file
cp – **CoPy** file
rm – **ReMove** file
mkdir – **MaKe Dir**ectory
rmdir – **ReMove** empty **Dir**ectory
touch – Create new empty file

Directory - Fancy name for a folder

. - **Current directory**, where you are
.. - **Previous directory**, one folder back
~ - **Home** user's home folder
/ - **Root** base of the entire file system



Linus Torvalds

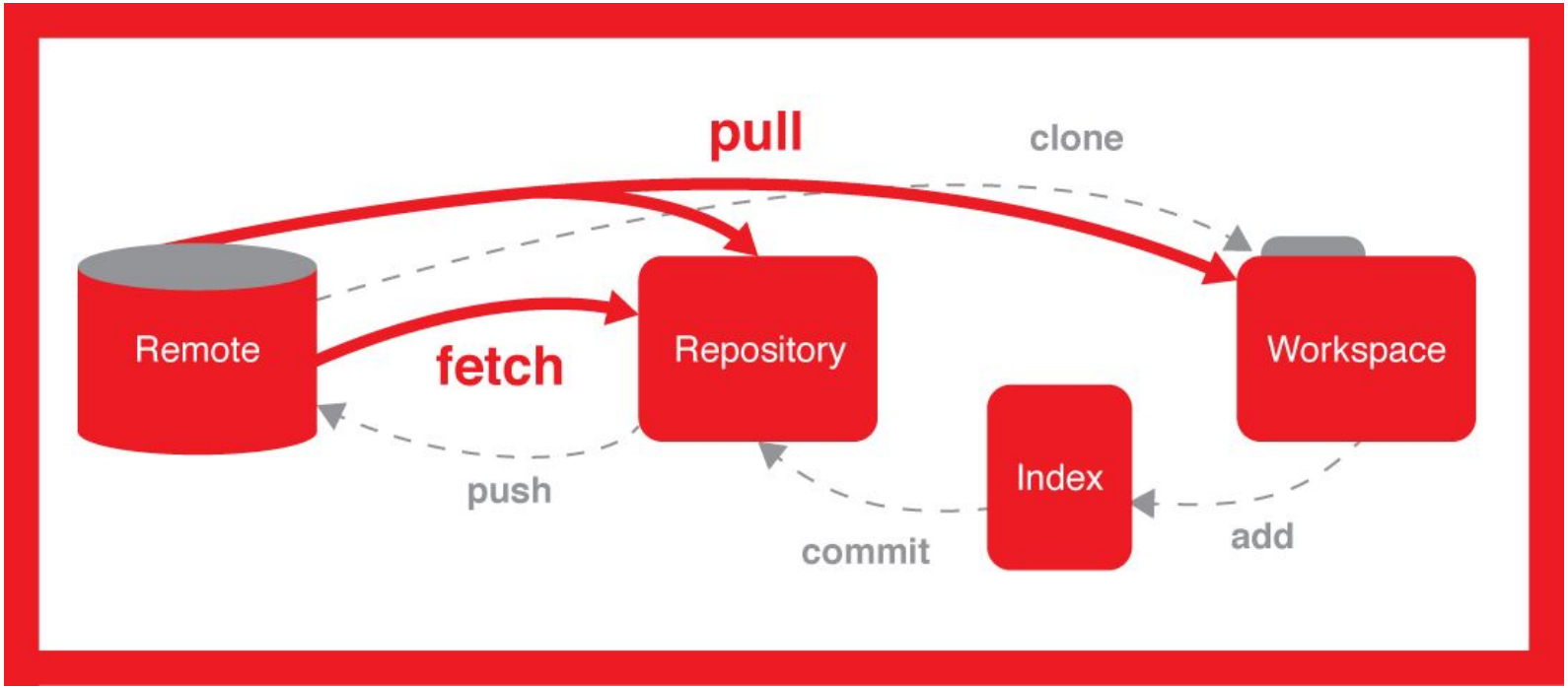
Git

- **Version Control System**
  - Keeps track of changes made to source code
- Used to share code
- Makes collaborations in open source easier
- Revert back to before mistake

- British word for a very stupid person

“I'm an egotistical bastard, and I name all my projects after myself. First Linux, now git ”

git init – Initial current directory as a git **repo**
git status – Display changes
git add – Add change in file
git rm – Remove commited file
git commit – Commit added changes to git history
git push – Add changes to GitHub
git pull – Get changes from GitHub
git clone – Copy entire repo from GitHub


pull
clone
Remote
fetch
Repository
Workspace
push
Index
commit
add

Create New GitHub Repo

New directory
New file inside
Copy file to root

ls
cd
mv
cp
rm
mkdir
rmdir
touch

git init
git status
git add <file>
git rm <file>
git commit -m “message”
git push
git pull
git clone