



git and Github

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Version control in 2 parts

git through command line

git and Github

What is git?



git

git was

originally developed by Linus Torvalds to store and
version Linux

Who uses git?



Who uses git?



Version control:

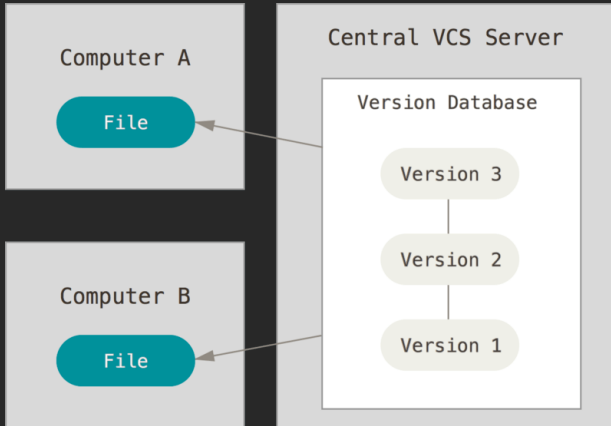
System that tracks changes to files,
such that the user can recall different
versions at any time

Why use git?



<https://phdcomics.com/>

How does git work?



<https://git-scm.com/>

How does git work?

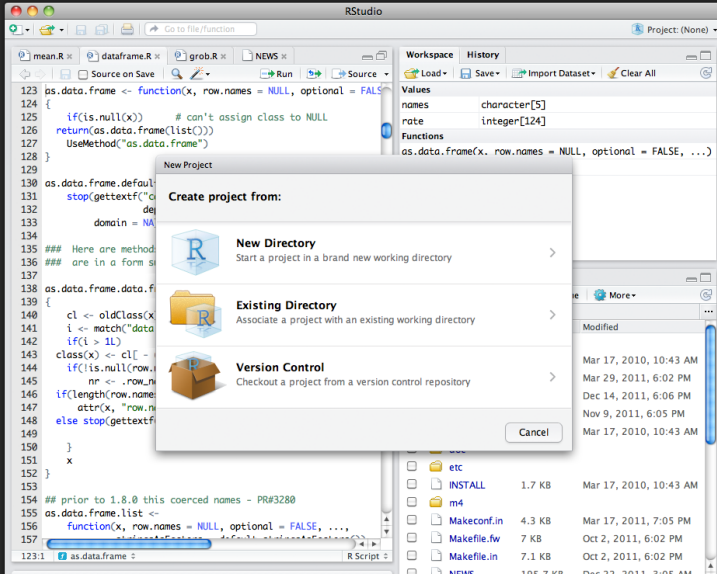


How does git work?

	COMMENT	DATE
○	CREATED MAIN LOOP & TIMING CONTROL	14 HOURS AGO
○	ENABLED CONFIG FILE PARSING	9 HOURS AGO
○	MISC BUGFIXES	5 HOURS AGO
○	CODE ADDITIONS/EDITS	4 HOURS AGO
○	MORE CODE	4 HOURS AGO
○	HERE HAVE CODE	4 HOURS AGO
○	AAAAAAAAA	3 HOURS AGO
○	ADKFJSLKDFJSDKLFJ	3 HOURS AGO
○	MY HANDS ARE TYPING WORDS	2 HOURS AGO
○	HAAAAAAAAAANDS	2 HOURS AGO

AS A PROJECT DRAGS ON, MY GIT COMMIT MESSAGES GET LESS AND LESS INFORMATIVE.

git + Rstudio



A simple example

Commands to cover:

- init
- remote
- add
- commit
- status
- branch
- checkout











What is Github?



GitHub

git repository hosting service and development platform

Who uses Github?

Rank	Organization	Star
1	 google	767253
2	 facebook	754310
3	 Microsoft	474776
4	 apache	340959
5	 freeCodeCamp	318318
6	 vuejs	266300
7	 airbnb	230072
8	 alibaba	226944
9	 angular	218022
10	 square	193667

Why use Github?

- Open data/code facilitates contributions
- Initiate collaborations
- Track issues
- Assign tasks
- Track progress (milestones)

Github repo != depositing data/code for manuscripts

A simple walkthrough

- Set remote.
- Push to repo.
- File an issue.
- Create a branch.
- Create new content.
- Push.
- Pull request.
- Look at commit history and diff.
- Comment on a commit or issue.
- Reference an issue or commit in a comment.
- View milestones.

git with Rstudio

jennybc.github.io/2014-05-12-ubc/ubc-r/session03_git.html

git tutorials

try.github.io/
guides.github.com/
www.codecademy.com/learn/learn-git

git GUIs

git-scm.com/download/gui/windows
git-scm.com/download/gui/mac
git-scm.com/download/gui/linux

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