



git



TOOLS FOR COLLABORATION

NutNet Virtual Meeting, 2020

*Evan Batzer¹, Lauren Hallett²,
Emma Ladouceur³ & Andrew Muehleisen²*

¹ University of California, Davis

² University of Oregon

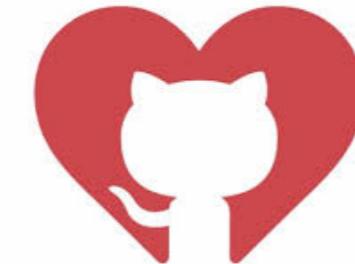
³ German Centre for Integrative Biodiversity Research (iDiv)

WHAT CAN YOU DO WITH GIT?



Evan shares his code open access

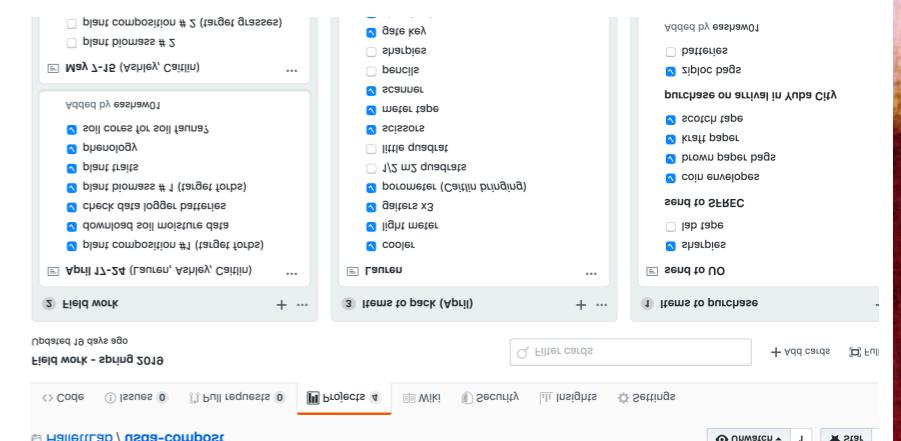
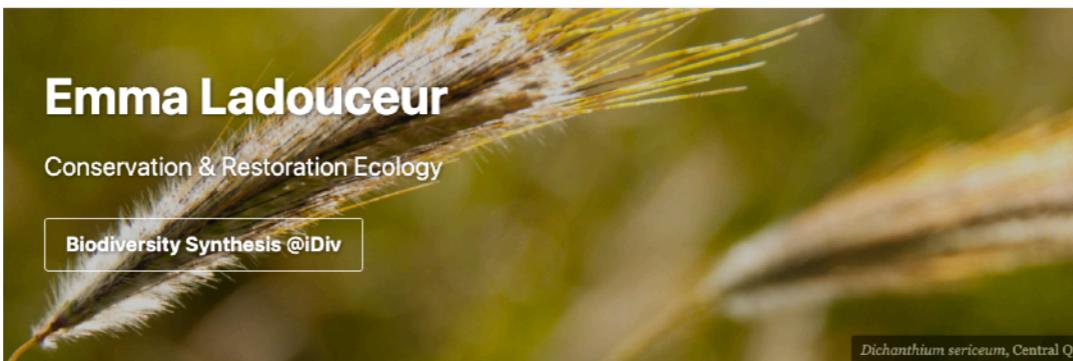
A circular portrait of a young man with dark hair and a beard, wearing a blue button-down shirt. He is smiling at the camera. The background is a solid blue color.



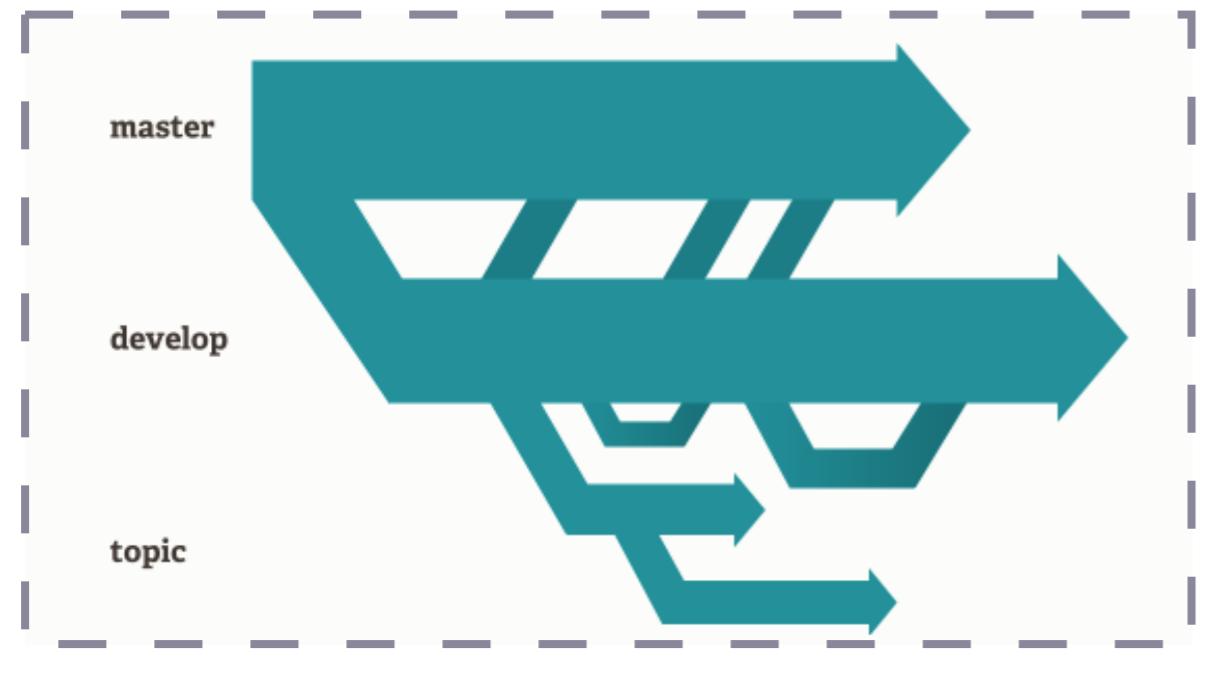
Lauren manages projects



Emma hosts a website



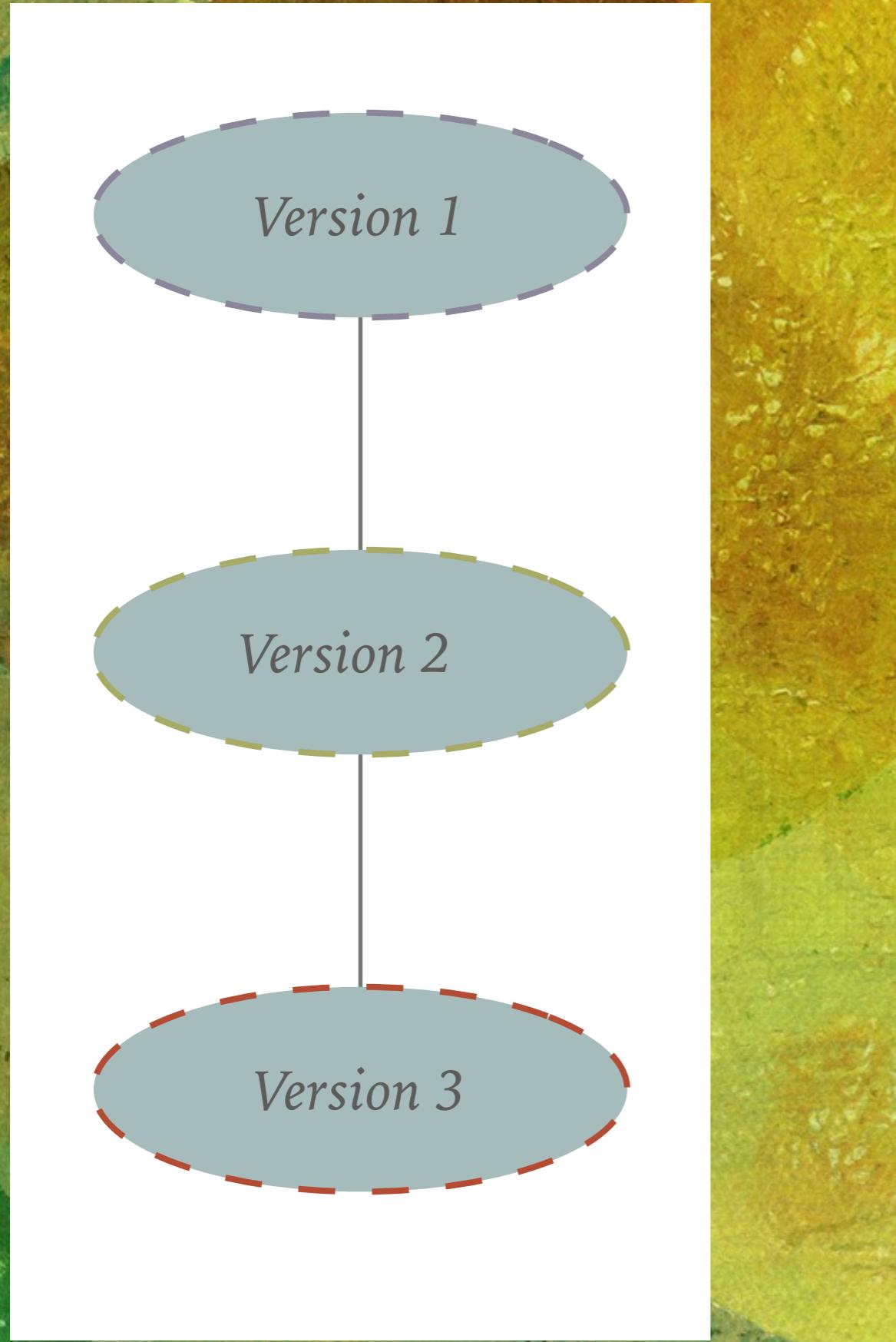
GitHub



WHAT'S A GIT

.....

- Git is a free and open source distributed system;
- Allows you to version control your work and collaborate with others anywhere;
- No central connectivity needed;
- Losing work in a project is very very hard to do;
- GitHub is a code hosting platform, and theres are others (eg. GitLab) but today we will use GitHub

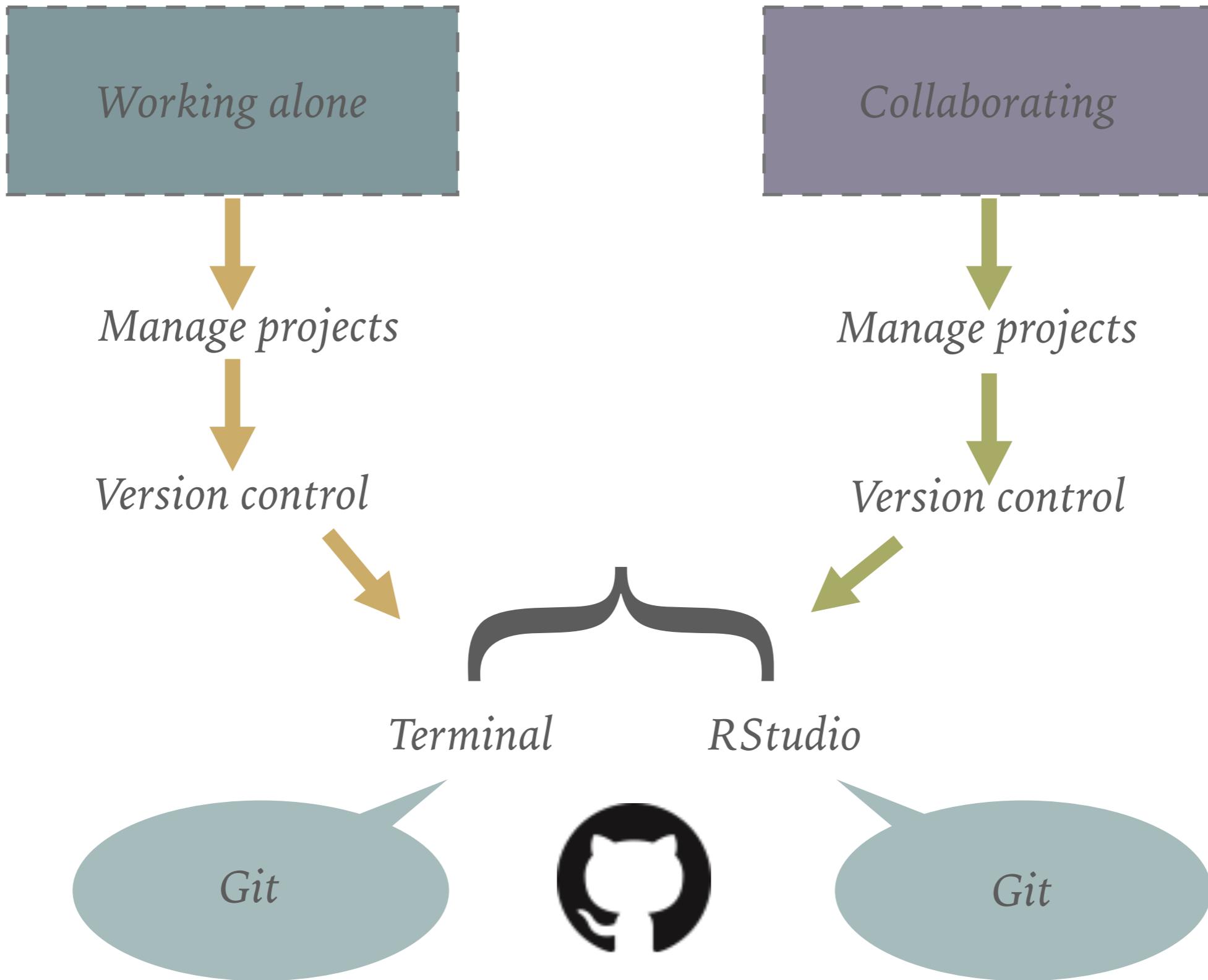


VERSION CONTROL SYSTEM (VCS)

.....

- Deleted something by accident? No problem!
- Revert back your files to previous version if something happened
- See why you made certain changes coming back to a project after sometime
- Compare current version to old version see what changes were line by line
- Work on same projects with people at the same time.

OPTIONS



GIT GOING : CREATE AN ACCOUNT AND PROFILE

Search or jump to... Pull requests Issues Marketplace Explore

Overview Repositories 17 Projects Packages

Customize your pins

emma-ladouceur

Edit profile

10 followers · 15 following · 6

@idiv-biodiversity
Leipzig, Germany
emma.ladouceur@idiv.de
<https://emma-ladouceur.github.io/contributions/>

Highlights
Arctic Code Vault Contributor
PRO

Organizations

A pro account allows you to have private and public repositories

Popular repositories

SeedAdditionSynthesis
Synthesis on the effect of seed addition on species richness and above-ground biomass in seed addition / unweeded diversity experiments.
Code used to generate results and figures for DOI: 10.1111/e...

R ★ 1

codeemma
Data to accompany R posts for GitHub pages personal research website

conservation
Emma Ladouceur Personal Research Website uses the Minimal Mistakes theme and GitHub Pages.

JavaScript

336 contributions in the last year

Contribution settings ▾

Less More

September 2020

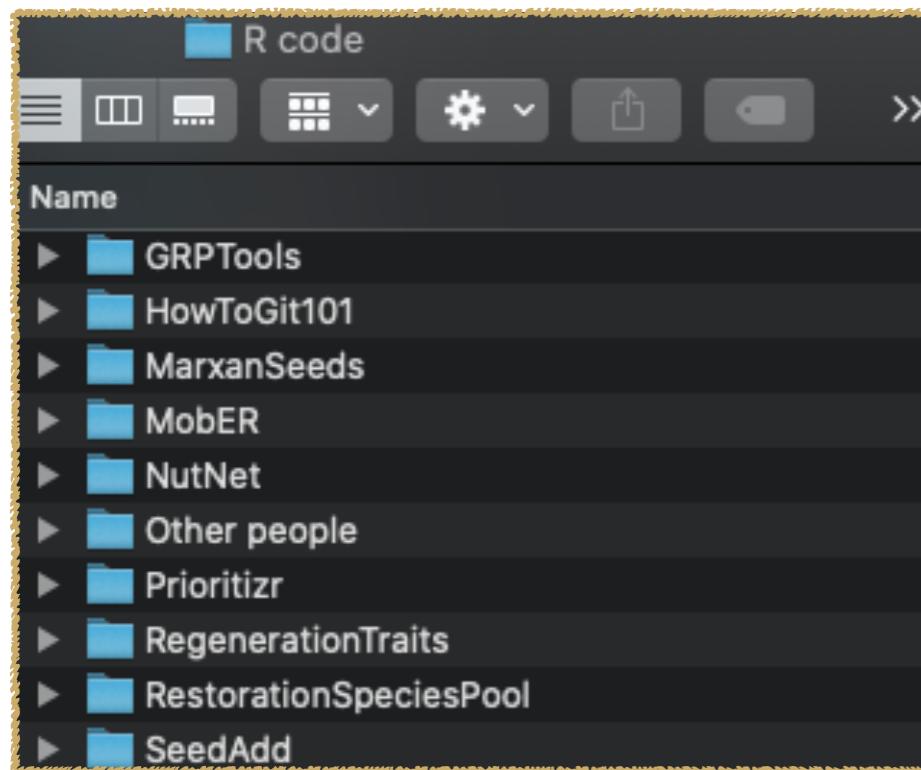
Created 11 commits in 4 repositories

2020 2019 2018

Hot Tip: Academics can apply for a free pro account

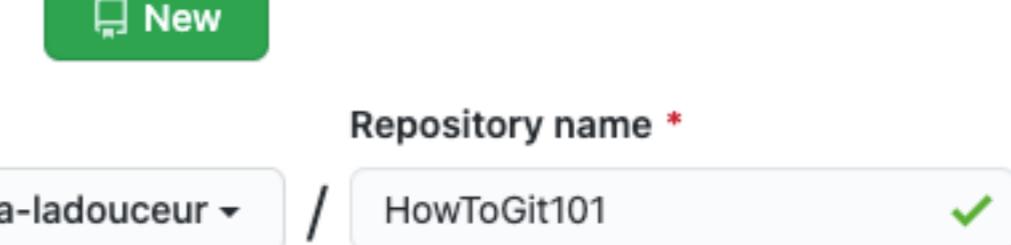
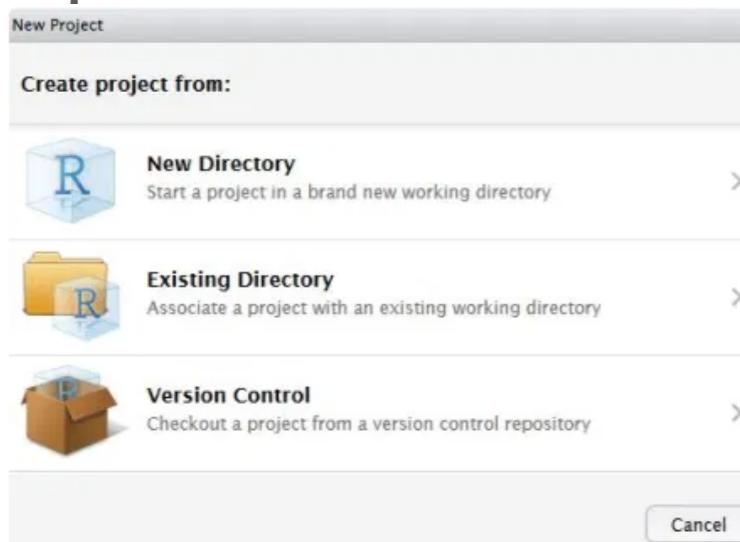
AN EMMA-BASED OCD PERSPECTIVE THAT WILL SPARK JOY

- Have a single folder for your R code in a simple location , not too many folders deep
- Have a single folder for every project within that R code folder
- Every RStudio Project is version controlled via git
- Every R studio Project is its own repository

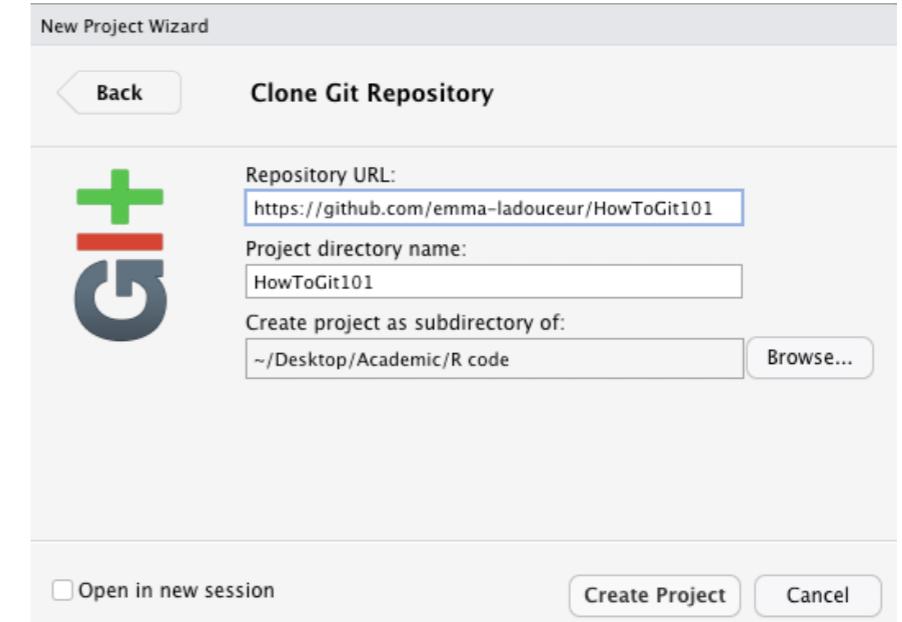


EASY STEPS TO FOLLOW TO CREATE YOUR OWN REPOSITORY

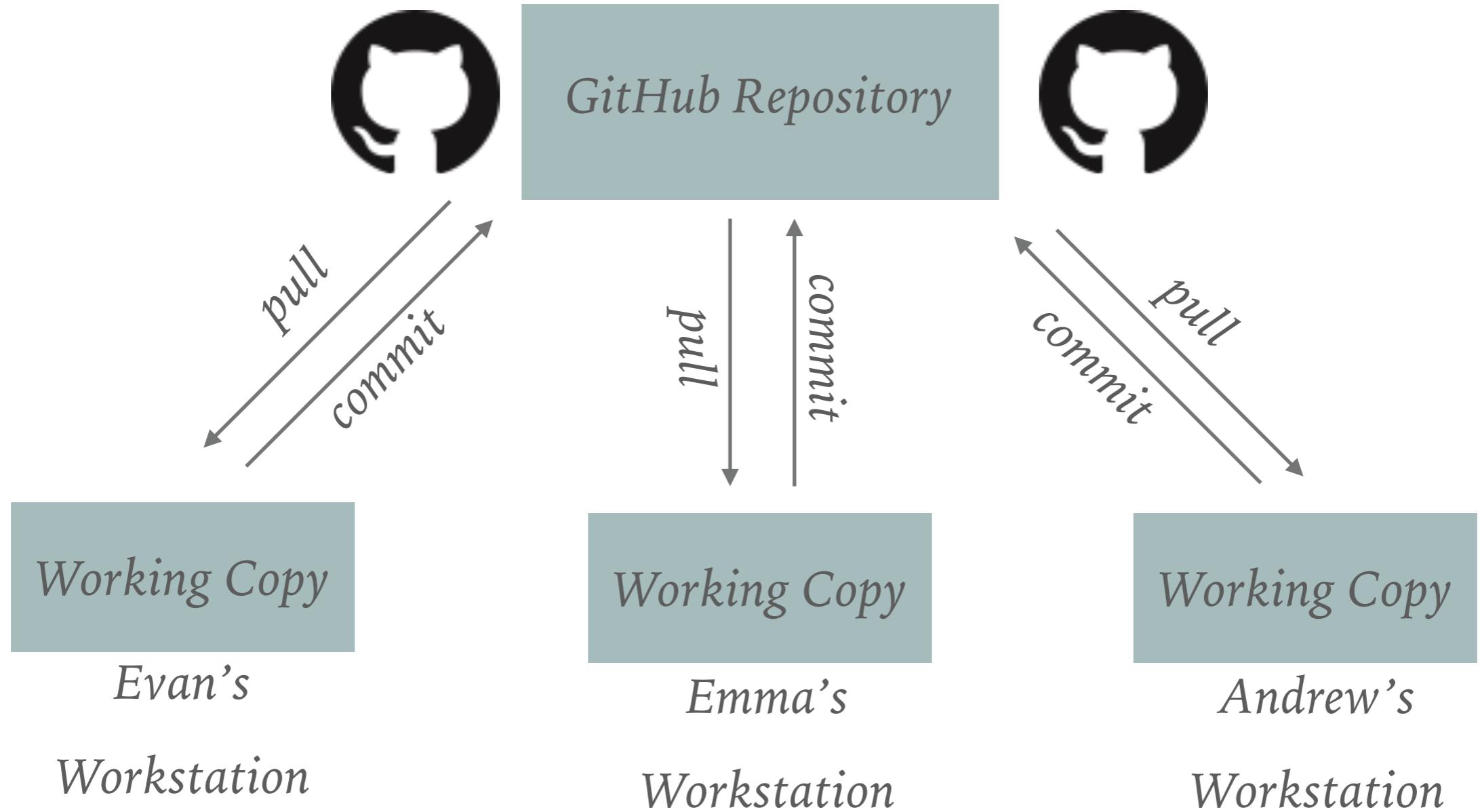
- Click on your repositories and click 
- Give your repository a name!
- Copy the link to your repo <https://github.com/emma-ladouceur/HowToGit101>
- Open RStudio -> New Project -> Version Control -> Git



- Paste the repository link and create!
- Keep all your RStudio Projects in one folder



COLLABORATING WITH OTHERS VIA A REPOSITORY



- Every member has a copy of the project on their system including all the history
- Do not store data on GitHub! Only code and extra small files

SOMEONE WANTS TO COLLABORATE?



- Don't panic A yellow circular emoji with wide eyes and a slightly downward-curved mouth, conveying a sense of confusion or bewilderment.
- People can add you as a collaborator to their repository or you can add them;
- Then you will have access to their repository or they, yours;
- Copy the link, and follow the same steps as given before to clone the repository;
- But there are different methods and options for approaches to this;
- Andrew and Lauren will run through them with us now!

HANDY GIT WORKFLOW COMMANDS

git clone [url] Downloads a project and its entire version history

git status To check current status of your local code in your system

Git add [filename] Tell git to track a file

git commit -m “[descriptive message]” Records a file snapshot permanently in version history with a description

git push Pushes commit to repository

git pull Downloads bookmark history and incorporates changes

git fetch Downloads all history from the repository bookmark

RESOURCES

- Hello World
- Getting Started
- Try.github
- RStudio & GitHub
- Git & GitHub Learning resources