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Excuse me, do you have a moment to talk about version control?

https://doi.org/10.7287/peerj.preprints.3159v2

A iris-2-jb.R
iris-avg.R
?? iris-FINAL.R
iris-str.R
iris.R

B iris-2-jb.R
iris-avg.R
iris-str.R
iris.R ??
iris-FINAL.R
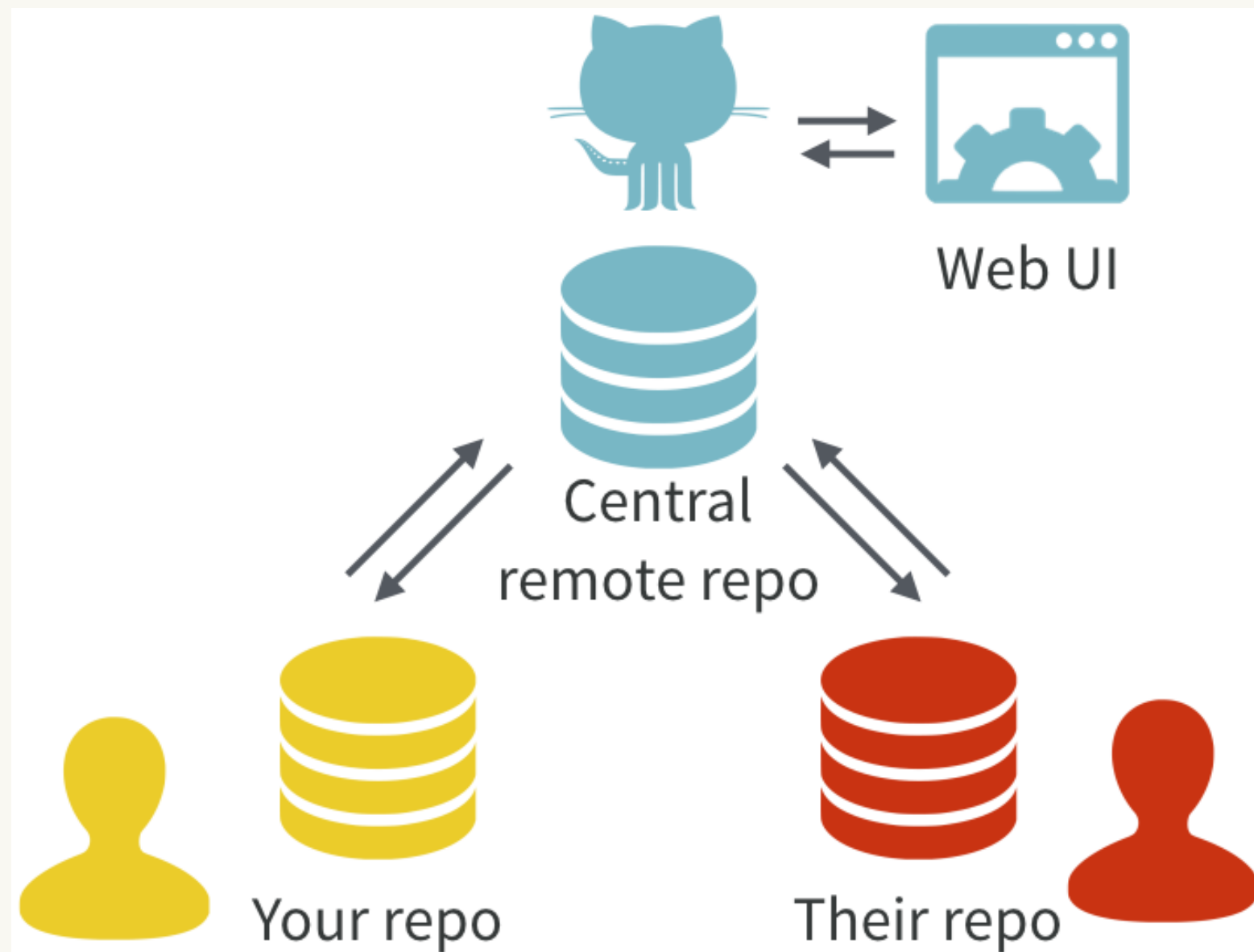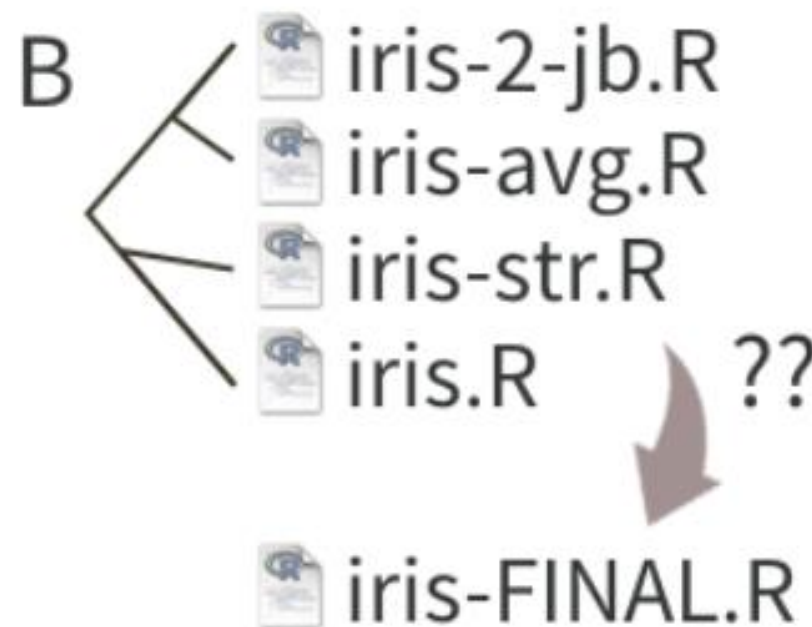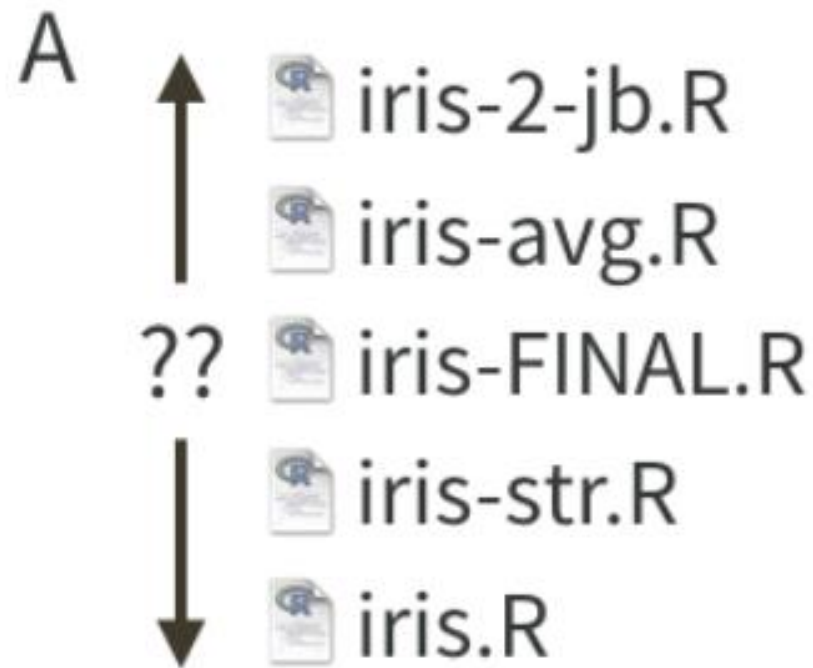
C 🏷 draft-01 Render as report
Formula method
Coauthor prefers str()
Avg by species
Obligatory iris example

D 🏷 draft-01 Render as report
Merge branch 'formula'
⑂ formula Formula method
Coauthor prefers str()
Merge branch 'species'
⑂ species Avg by species
Obligatory iris example

Demo

A look around a GitHub repo (README, commits, issues)

Your turn

Let's make a repo!
1. (Sign up for free and) log in to GitHub.
2. Click '+' to create a public repository
   - choose to initialize with a README
3. Click to open README.md, select pencil icon (`Edit this file`) and write a sentence or two.
4. Commit your changes with a comment.

Demo

A look at a repo in RStudio
(history, stage, commit, push)

Your turn

Let's make a project in RStudio from our repo!

1. On the repo homepage click `Clone or download` and copy the URL.

2. In RStudio go to File > New Project… > Version Control > Git, paste the URL to create the project.

3. Make sure your local git knows who you are
   usethis::use_gitconfig(
       scope = "project", # use "user" to set globally
       user.name = "Jane Doe",
       user.email = jane@example.com
)

4. Add a new section to your README, stage, commit and push the change.

Collaboration

We have already seen **issues** as a way to collaborate – but we can do more!

Through `Settings` on the GitHub repo we can add other GitHub users as collaborators.

Any GitHub user can **fork** a GitHub repo to work on it – then submit a **pull request (PR)** to propose changes to the original owner.

Your turn

Part 1: Create a PR on a partner's repo
1. On your partner's repo on GitHub, click `Fork`.
2. In forked repo on GitHub, click `branch:master` to create a new branch: `edit-README`.
3. Still on GitHub, edit README and commit your changes to the new branch.
4. Click on `Compare & pull request`, check your changes and create a PR.

Part 2: Merge your partner's PR on your repo
1. Go to `Pull requests` tab on your repo, merge PR and delete branch.
2. In RStudio, do a git pull and look at git history.

Going Further

Charlotte Wickham's Collaborative Coding talk
http://www.cwick.co.nz/talks/collab-code-user17/#/

Lucy D'Agostino McGowan's Shiny app to find
beginner issues on R packages
https://github.com/LucyMcGowan/contributr