

Suppliment 1: Git and GitHub

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Git + Github

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What about Github?

- Cloud-based service for managing Git repositories
- Useful for teamwork
- Just like “Dropbox”

Why Git + Github?

- You can undo anything
- You won't need to keep undo-ing things (merge/load difference)
- You can identify exactly when and where changes were made
- Teamwork

Some github terminology

- User: A Github account for you (e.g., jules32).
- Organization: The Github account for one or more user (e.g., datacarpentry).
- Repository: A folder within the organization that includes files dedicated to a project.
- Local Github: Copies of Github files located your computer.
- Remote Github: Github files located on the <https://github.com> website.

Basic Git commands and workflow

When you are working on a your local machine you typically get started by:

- `git clone`: Cloning a remote repository to work on locally. This is a way to work with an ongoing project or edit someone else's project that is available remotely (aka on GitHub).

From there, the typical workflow involves:

- `git add`: Adding files to your repo
- `git commit`: Committing changes you have made
- `git push`: Pushing changes to a remote repository (aka GitHub)

For a collaborative project, or work between desktop and personal laptop, you would use the following first before `git add`

- `git pull`: Pulling changes from a remote repository

Illustration diagram

REMOTE (aka Github website)



Clone (i.e., copy)
repository to your
computer (a one
time event)

**Pull remote
changes**

**Push local
changes**

Almost all work
is done 'locally'



LOCAL

Let's Git!

Download Github and set up your github profile.

- Github Desktop, a GUI for using Github [\[link\]](#)
- (Optional) Learn how to use command line for Github management
 - Command line tutorial [\[link\]](#)