Extremely basic command line and git usage

https://github.com/dlilien/pybb

Don’t be scared

- I just want you to be aware of some useful tools for getting code that is already written to solve your problems!

Git

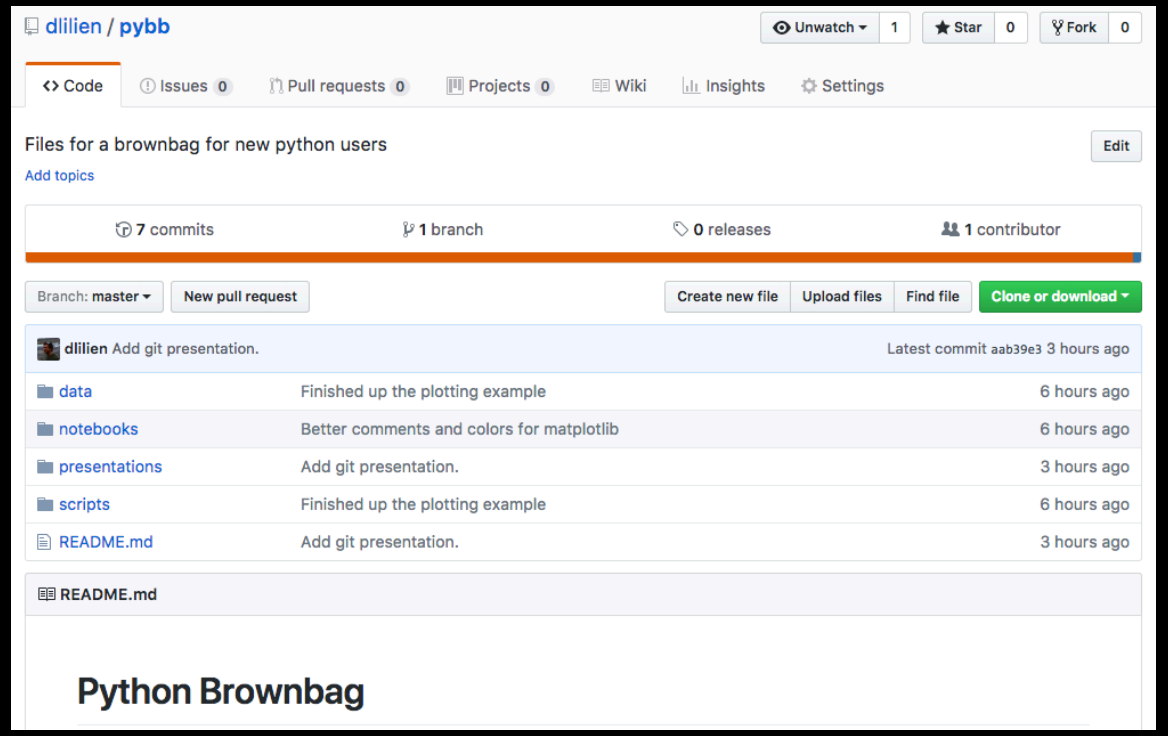
- Lets you keep easy track of versions of your code
- Let’s people collaborate on code
- git is the version control, github hosts repositories

Git Repositories (repos)

- These should help you organize code and not repeat code
- Can branch to make edits without clobbering old code
- You can ”checkout” old code if you screw up, or completely revert without losing the present version!
- E.g. I have a repository for general tools related to modeling and plotting models, then separate repositories for several projects that are ~papers

Github

- Public repositories on github are always free, private are free for students



What is a package in python?

- Think of it as something you import
- It may contain other things like executables or data
- These can be installed into your site—packages directory to have similar functionality to putting them on your Matlab path

Installing packages

- Use a manager!
  - Pip
  - Conda

- Do it yourself
  - Clone a repository
  - `python setup.py install [--user]`

Let's install gdal and pygeotools

- Conda has some packages, but we need to hunt down a compatible gdal
  - `»conda install -c conda-forge gdal`
  - This is going to take a while to run…
- Pip has more; let's get a nice way to get files from the internet
  - RUN `which pip` FIRST!!!! Make sure this is in the anaconda install. DON'T INSTALL SOMEWHERE UNINTENDED
  - `pip install wget`
- Dave Shean has nice tools for raster data
  - RUN `which python` FIRST!!!! Make sure this is in the anaconda install. DON'T INSTALL SOMEWHERE UNINTENDED

```
»git clone https://github.com/dshean/pygeotools.git
»cd pygeotools
»python setup.py install
```