How I Use GitHub at the Command Line

Ryan T. Moore*

12 September 2019

You would like to contribute to a project that's stored on GitHub. You have a GitHub account and are comfortable at the command line. I use iTerm2 and Terminal on macOS.

- 1. Clone the repository. From your Desktop (or wherever you want the repo to live), git clone git@github.com:username/reponame.git
 - For example,
 - git clone git@github.com:ryantmoore/mytestrepo.git
- 2. Check that you're on the correct branch. Sometimes, you might commit to master: git branch
- 3. Each work session, I start by making sure there's nothing in my local directory that I've changed, and nothing on the remote that I need to incorporate. For the first,

```
git status
```

Then, if I have no local work to commit, I

git fetch

git status

git pull (if needed)

git status (if needed)

If instead I do have local work to commit, I follow 6 below, then do the above.

- 4. Make your edits to the local files in your text editor, IDE, etc. Save your edits.
- 5. Add your work to the next commit:

```
git add <files>
```

6. Commit your work. A *commit* is a snapshot of the repo at a moment in time. A commit should be minimal and complete. To add a commit message easily, use -m:

```
git commit -m "Fix typos"
```

7. When you're ready to send your commits back to the remote on GitHub,

git push

Hope this helps!

^{*}Department of Government, American University, Ward Circle Building 226, 4400 Massachusetts Avenue NW, Washington DC 20016-8130. tel: 202.885.6470; fax: 202.885.2967; rtm (at) american (dot) edu; http://ryantmoore.org.