Image from: https://pippinsplugins.com/submitting-your-first-pull-request/

Why use Github?

- Backup / version control
- Sharing

How does it work?

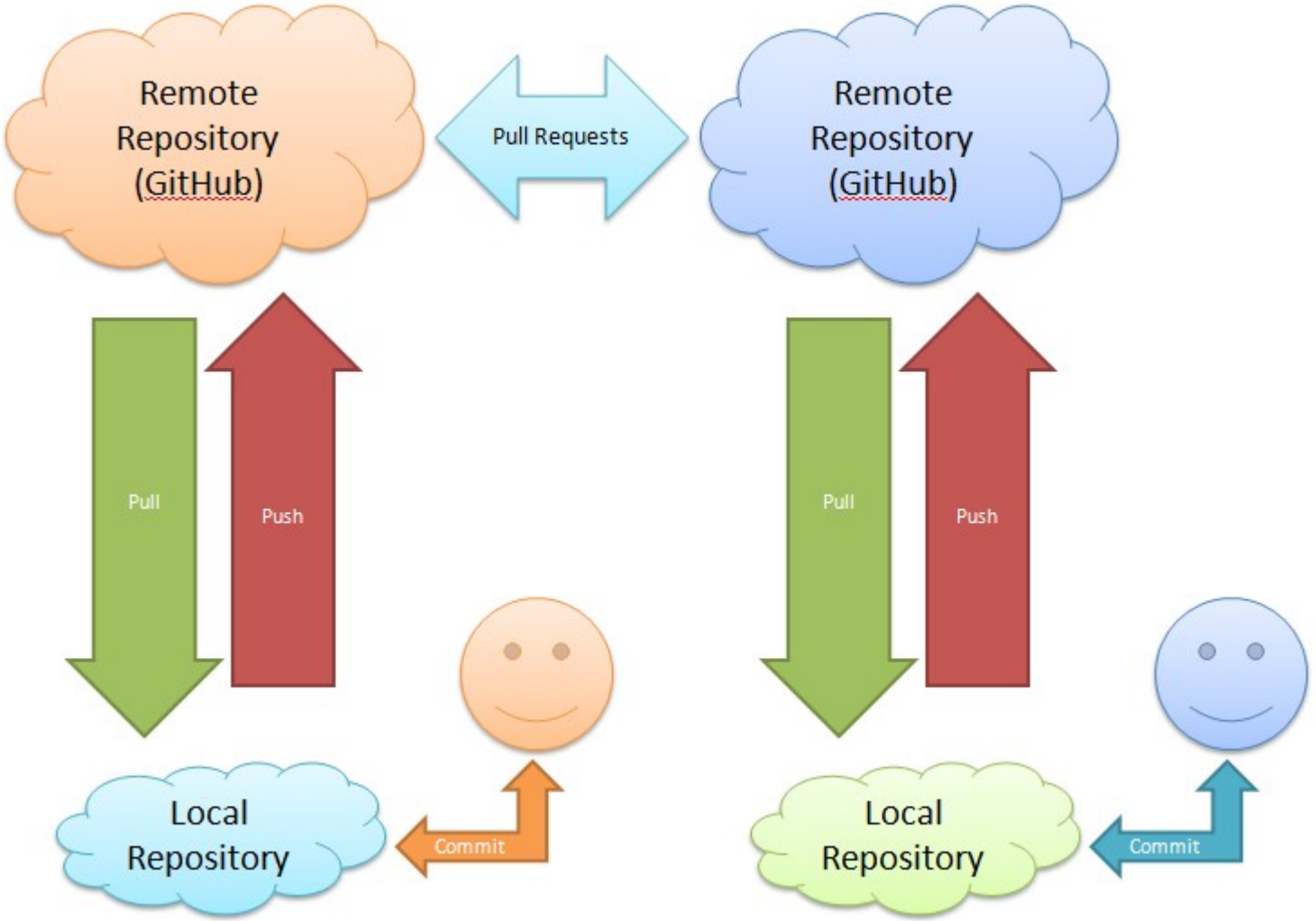
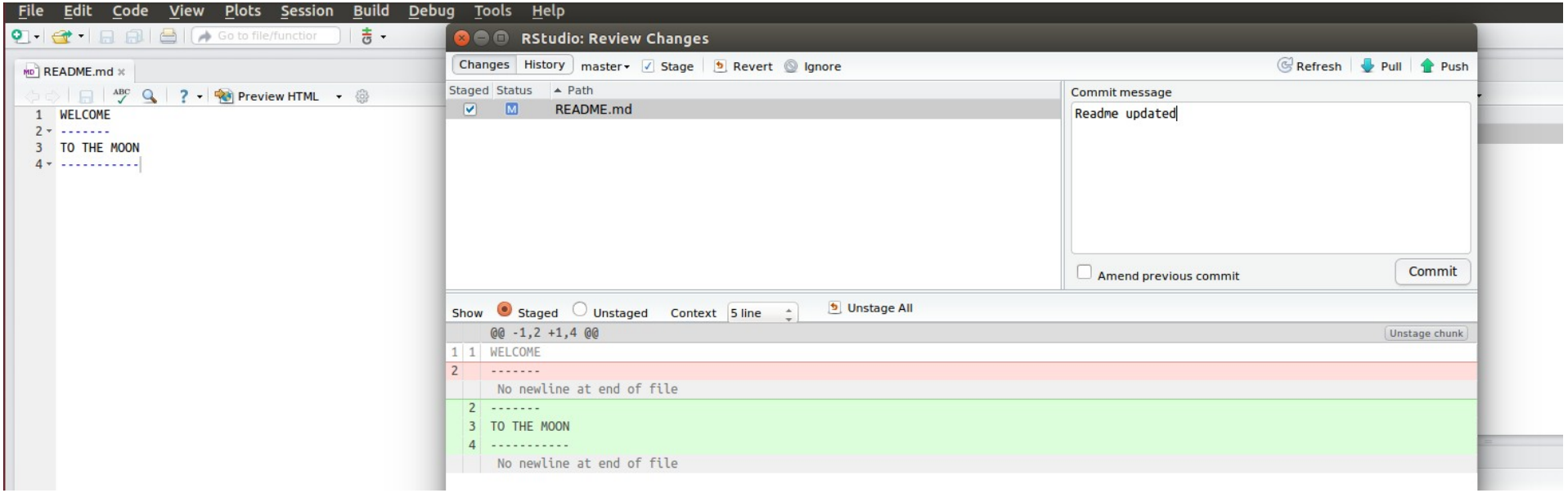


Image from: http://www.terminally-incoherent.com/blog/2012/05/07/the-plight-of-a-git-newb/

Getting started

- Install Github
  - https://stat545-ubc.github.io/git01_git-install.html
- Use a client if you can / want
  - http://stat545-ubc.github.io/git02_git-clients.html
  - Otherwise, use a terminal

Rstudio as a Git client



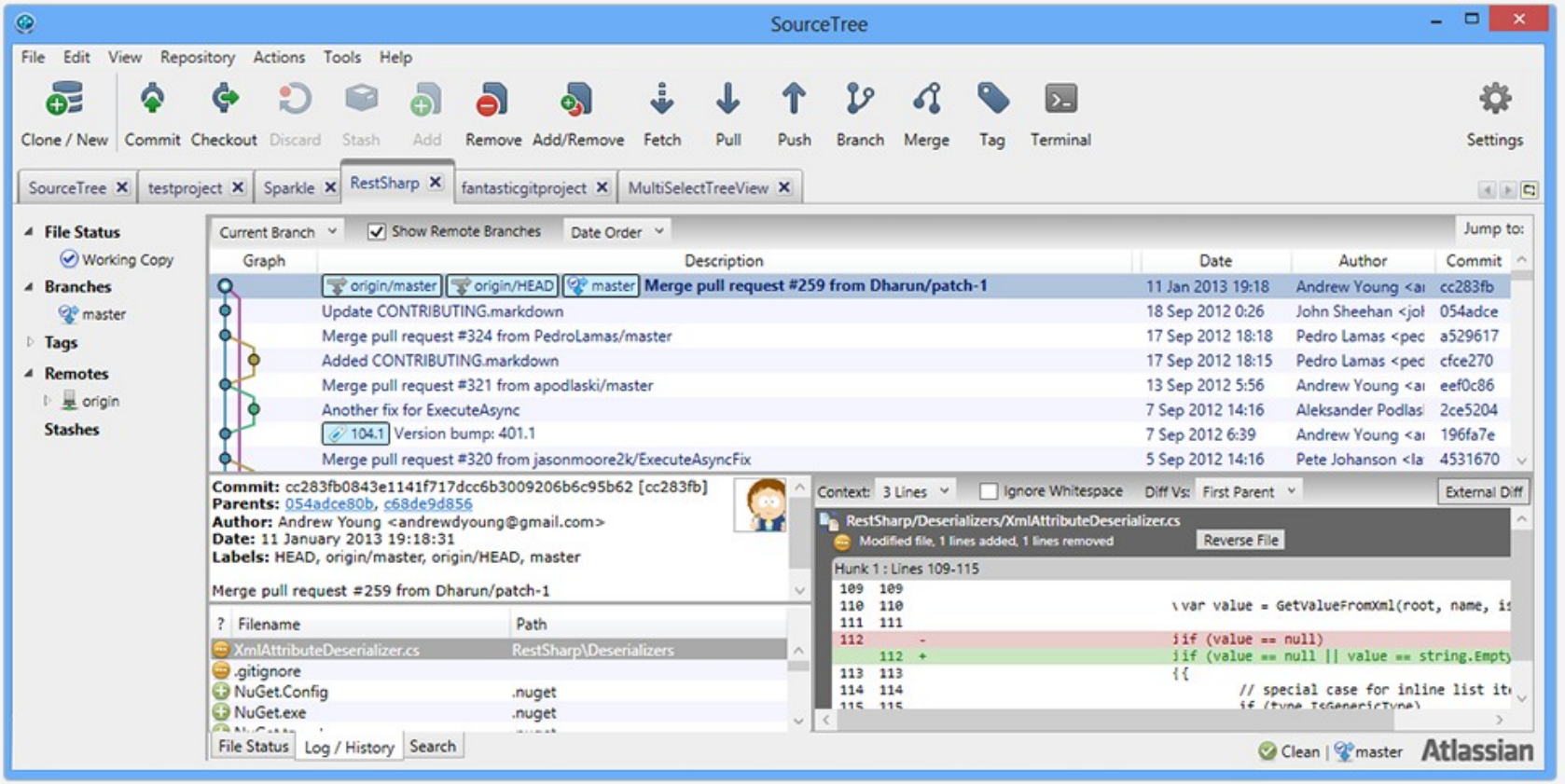
http://www.rstudio.com/

Atlassian SourceTree

A free Git & Mercurial client for Windows or Mac.

Download SourceTree Free
Microsoft Windows 7+

Download SourceTree for Mac OS X 10.7+



http://www.sourcetreeapp.com/

http://msysgit.github.io/

An oversimplified introduction for people who must learn to use the terminal

How to start a project

- Create repository
- Clone repository to your machine

How to get the latest version of a project

- git pull

```
evan@quadra:~/Documents/parallelProgramming/parrallelProgramming$ ls
cudaFloatSum  cudaForest  cudaForestClassify  data  figures  nbody  nbodyCUDA  nbodyMpiFloat  nbodyMPIvsCUDA  porfolioOverview.odp  README.md  speedGage
evan@quadra:~/Documents/parallelProgramming/parrallelProgramming$ git pull
Already up-to-date.
evan@quadra:~/Documents/parallelProgramming/parrallelProgramming$
```

How to upload code

- git add -A
- git commit -m “I fixed something”
- git push

```
evan@quadra:~/Documents/parallelProgramming/parrallelProgramming$ vim README.md
evan@quadra:~/Documents/parallelProgramming/parrallelProgramming$ git add -A
evan@quadra:~/Documents/parallelProgramming/parrallelProgramming$ git commit -m "updated readme"
[master f821e47] updated readme
 1 file changed, 1 insertion(+), 1 deletion(-)
evan@quadra:~/Documents/parallelProgramming/parrallelProgramming$ git push
Username for 'https://github.com': wdurnoUBC
Password for 'https://wdurnoUBC@github.com':
Counting objects: 8, done.
Delta compression using up to 4 threads.
Compressing objects: 100% (6/6), done.
Writing objects: 100% (6/6), 779 bytes | 0 bytes/s, done.
Total 6 (delta 3), reused 0 (delta 0)
To https://github.com/wdurnoUBC/parrallelProgramming.git
   d0ddeba..f821e47  master -> master
evan@quadra:~/Documents/parallelProgramming/parrallelProgramming$
```

Tasks for you today:

- 1: Create a Github account
- 2: Explore a small gene expression dataset
  - See: http://stat540-ubc.github.io/seminars.html
- 3: Understand the content of seminar00 perfectly!