Welcome to Day 1!

Complex Human Data Summer School

Wifi name: Visitor wireless
(or viswireless)

Username: chd-school

Password: #dsG9y

Introductions

Summer School Overview

- Day 0: R bootcamp
- Day 1: Workflow, Google App Engine
- Day 2: Online Experiments
- Day 3: Data wrangling, visualization
- Day 4: Statistics, Probabilistic models
- Day 5: Experience sampling

Announcements

- Piazza
- Photo today: 4:40 at steps of Melbourne School of Design
- Dinner tonight: 5:00 in the courtyard of the Redmond Barry building

Day 1: Workflow, Google App Engine

1. Git
2. Project organization

   (lunch)

3. Internet and webpages
4. Deploying to Google App Engine

Why workflow matters

- A good workflow
  - saves time in the long run
  - helps you avoid errors
  - makes it easy for others to reproduce your work

Replication crisis

Reproducing computational work

MAY 04 2015

12 COMMENTS

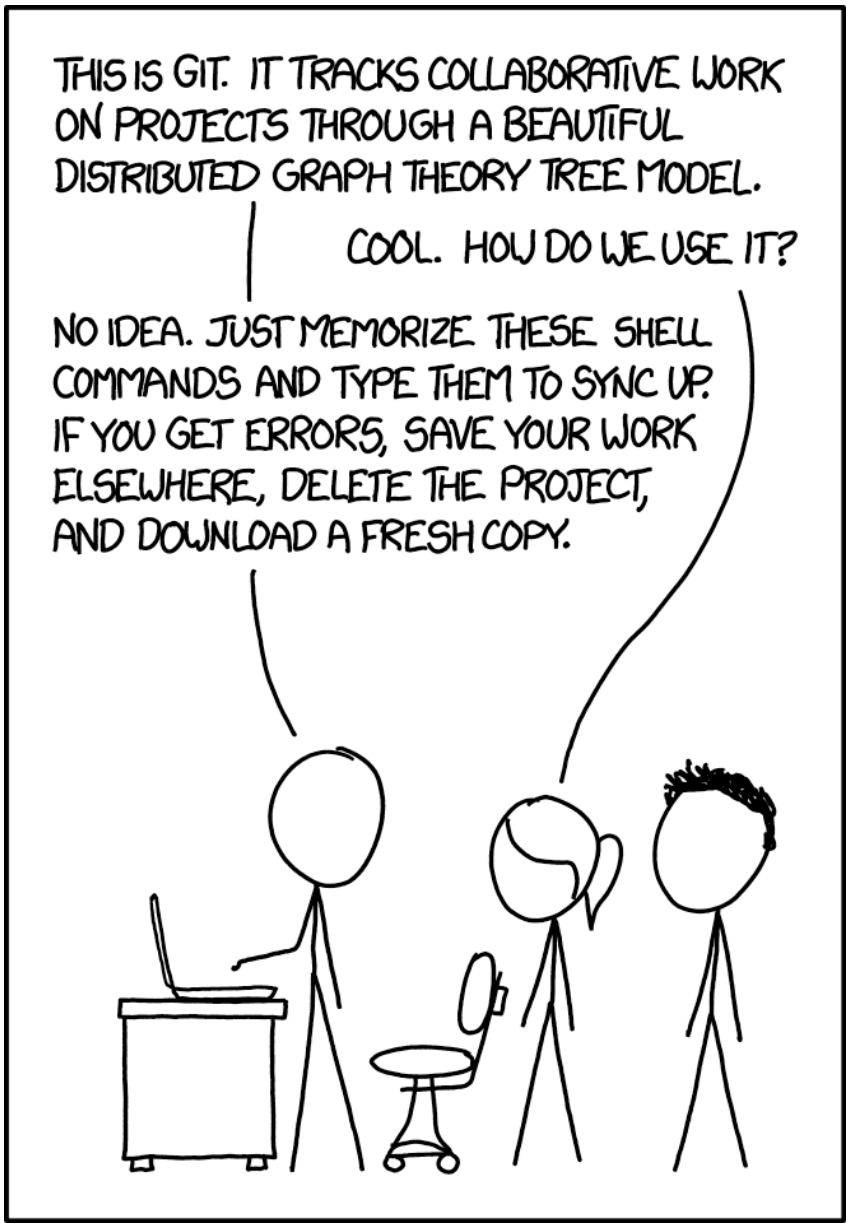
DATA SHARING, JOURNALS & REPLICATION

LEADING JOURNAL VERIFIES ARTICLES BEFORE PUBLICATION – SO FAR, ALL REPLICATIONS FAILED

The American Journal of Political Science recently announced that every article will be externally verified before it is published. Authors have to provide all data, code and materials which will be verified by an external statistician. I talked to the editor William G. Jacoby about the goals of the new policy, and why no author has provided 'perfect' files yet.

Version control with Git

- Why use Git?
  - keep a record of what you were doing and thinking during the lifecycle of a project
  - "version control is like an undo command for *everything*"
  - have a backup if your laptop dies or is stolen
  - collaborate on code and writing (optional)
  - release code and data publicly (optional)


THIS IS GIT. IT TRACKS COLLABORATIVE WORK ON PROJECTS THROUGH A BEAUTIFUL DISTRIBUTED GRAPH THEORY TREE MODEL.
COOL. HOW DO WE USE IT?
NO IDEA. JUST MEMORIZE THESE SHELL COMMANDS AND TYPE THEM TO SYNC UP. IF YOU GET ERRORS, SAVE YOUR WORK ELSEWHERE, DELETE THE PROJECT, AND DOWNLOAD A FRESH COPY.

Exercises (follow tutorial)

1. Install Git
   - Mac: install Xcode command line tools from the App Store
   - Windows: https://gitforwindows.org/

2. Check Git is installed
3. Set user.name and user.email

GitHub

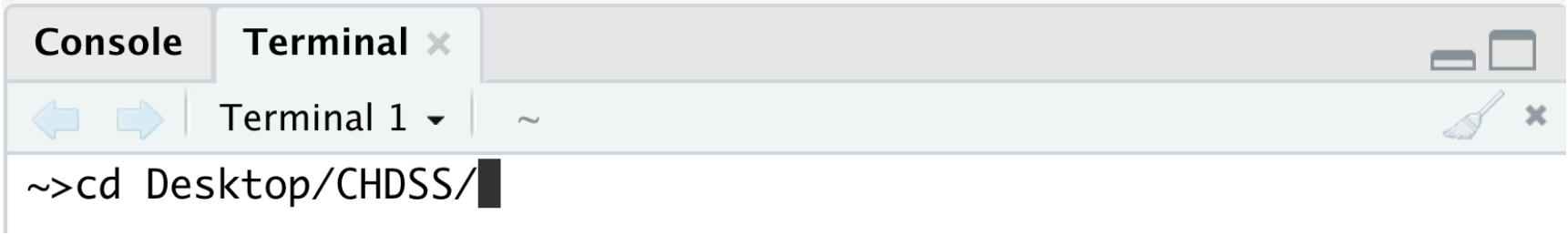
GitHub (and other similar sites) allows you to host repositories remotely.

Exercise:

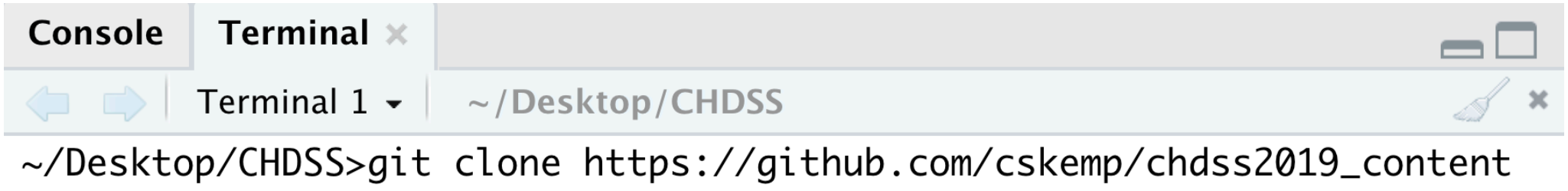
- Sign up for a GitHub account. Use a university email if possible, and choose your username wisely!

Exercise: Cloning a repository

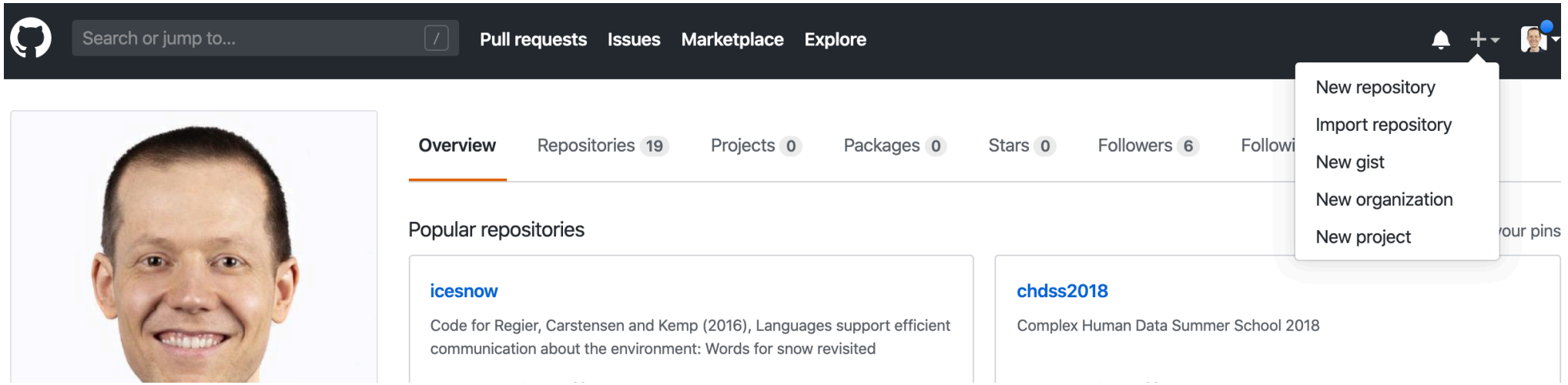
1. If you didn't already, make a folder called CHDSS on your desktop.
2. Open a terminal and change into your CHDSS folder



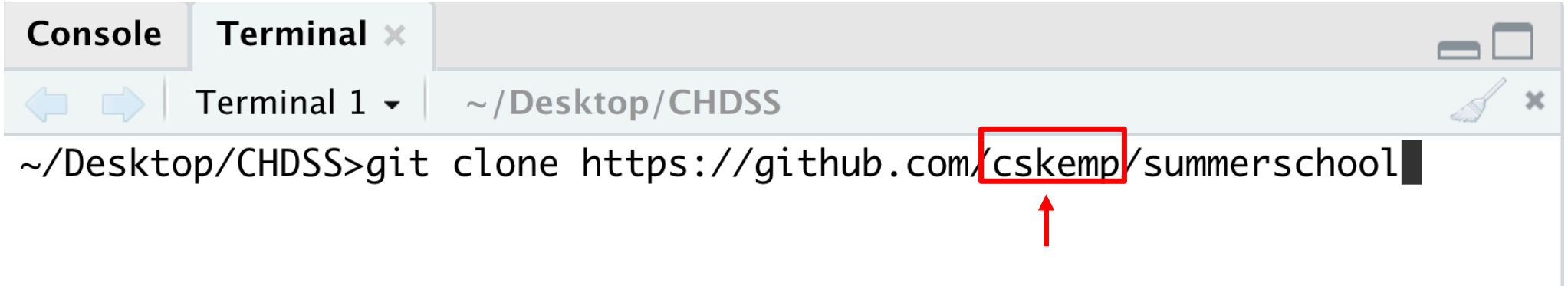
3. Clone the repository for summer school content



Exercise: make your own repository

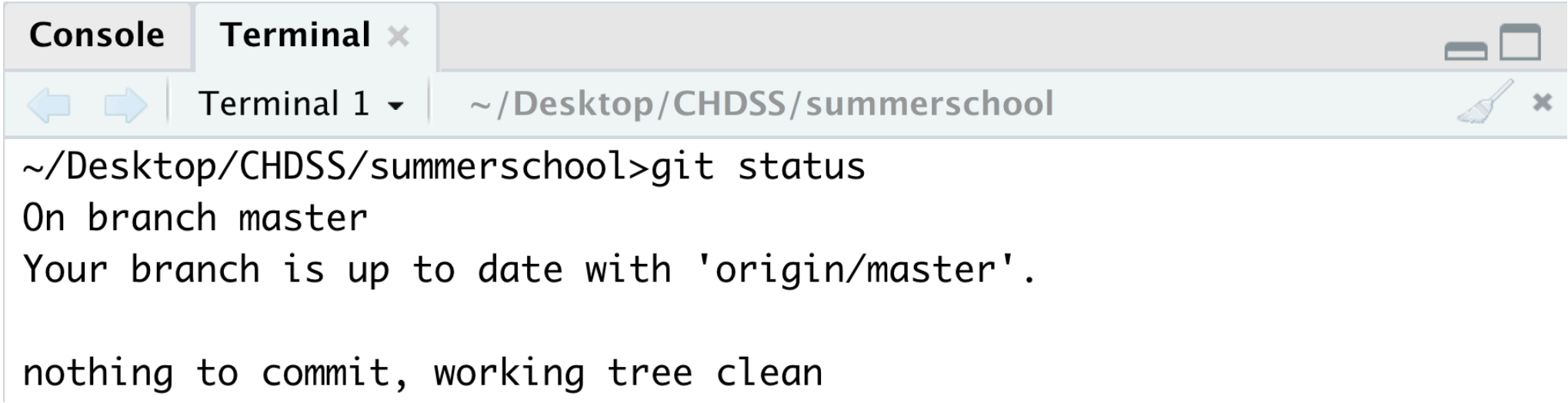


When you're done, clone your repository:



Exercises

1. Check the status of your repository



2. Edit README.md and play around with markdown
3. Check the status again

Exercises

1. > git add –all
2. > git status
3. > git commit –m”updated README.md”
4. > git status
5. > git push
6. > git status

Also check the online GitHub page for your repository to confirm that your edits were uploaded successfully

Collaborating using GitHub

- The tutorial shows how to add a collaborator so that both of you can work on the same set of files.

- Exercise (later):
  - Find a partner and ask her to add you as a collaborator on her repository. Clone her repository, make a change, and push your edit to her repository.

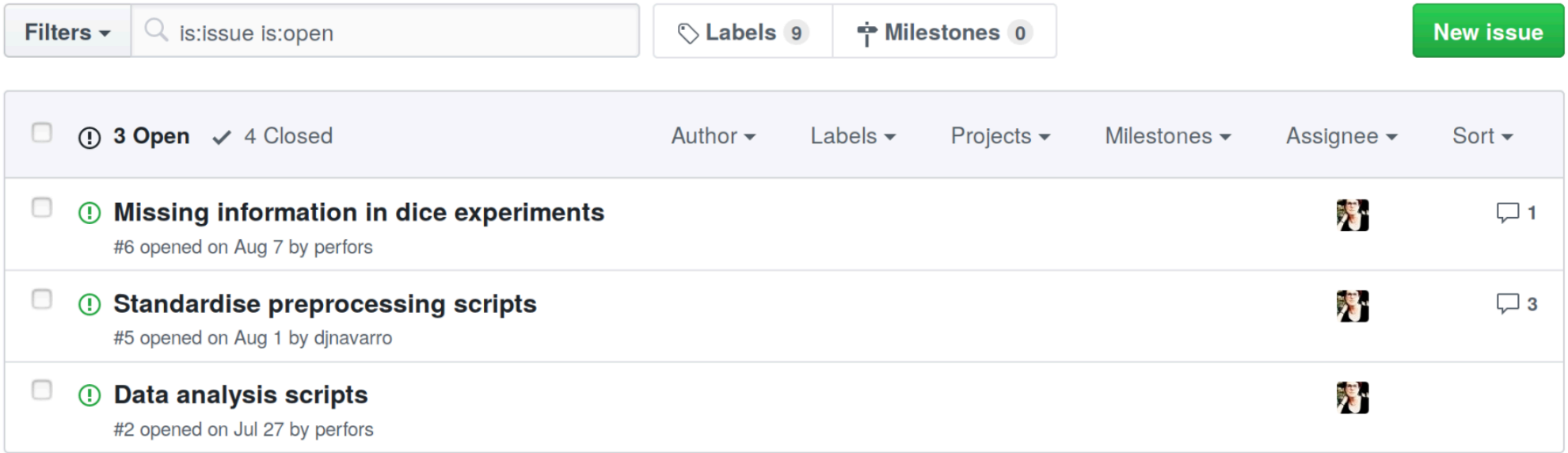
Using the issue tracker

Rules

(A) Manage tasks with a task management system.

(B) E-mail is not a task management system.

(Gentzkow + Shapiro, Code and Data for the social sciences: a practitioner's guide



Using the issue tracker

Rules

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(Gentzkow + Shapiro, Code and Data for the social sciences: a practitioner's guide

- Exercise:
  - Add an issue to your repository.
  - Add a comment to the issue
  - Add a final comment and close the issue