title: Git FUN!damentals
subtitle: Github-based workflow
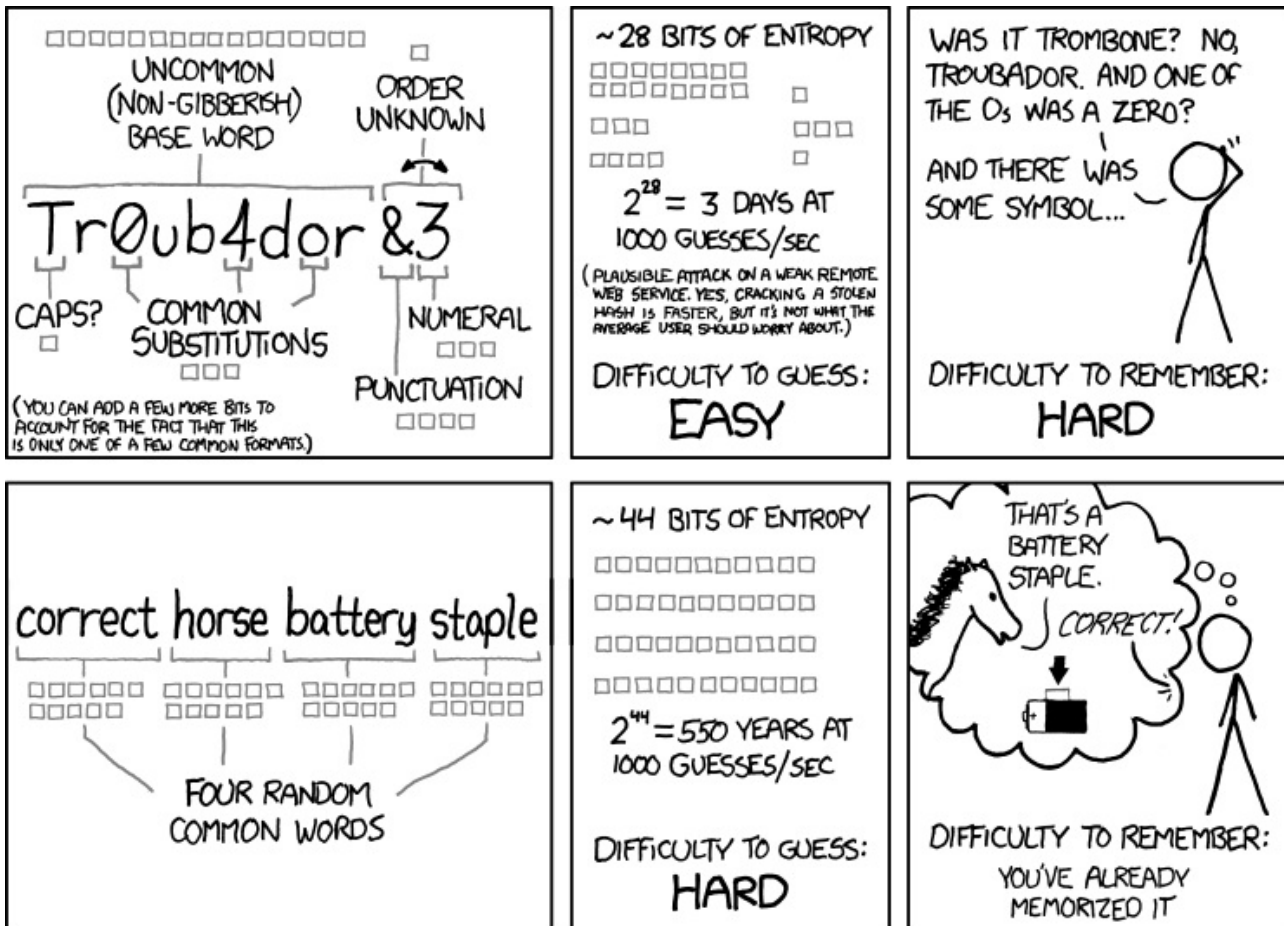minutes:

Enter the OctoCat

While git is useful to use locally, it is invaluable when there are lots of people contributing to the same project. Github works by being a remote server that stands outside of your local file directory. The basic GitHub workflow looks like:

1. Pull
2. Branch
3. Modify
4. Commit

5. Push

Your first GitHub account

- Go to https://github.com/join (https://github.com/join)
- Follow instructions!
- A free/student account is fine, and you'll get free private repos as a student
- You'll want to use the same email address that you used for git locally
- Choose a strong password!

THROUGH 20 YEARS OF EFFORT, WE'VE SUCCESSFULLY TRAINED EVERYONE TO USE PASSWORDS THAT ARE HARD FOR HUMANS TO REMEMBER, BUT EASY FOR COMPUTERS TO GUESS.

Enhancing your GitHub account

GitHub offers account upgrades for current students, that you can apply for at https://education.github.com/ (https://education.github.com/)

The education upgrade comes with:

- Free private repositories
- Free upgrade to a Micro account on GitHub (for writing code)
- Free Travis CI account (for testing code)
- Free SendGrid account (automated email API)
- 15USD in Amazon Web Services credits (for deploying code)

- 50USD in Digital Ocean credits (for deploying code)
- No transaction fees for your first 1000USD in sales via Stripe

Creating repos on GitHub

- Go to your homepage
- Press the + in the upper righthand corner
- Select repository

GitHub initializes your repo for you, and can also create a LICENSE, README, and .gitignore with common non-comitted files

Cloning a repo from GitHub

- Many workshops at the D-Lab develop and distribute materials via GitHub
- The process of copying one of these repositories to your local directory is called `cloning`

On the righthand side of the page, you'll see a `clone` URL.