Git and GitHub Handout

Fernando Hoces de la Guardia 3/1/2019

Definitions

Terms

- **Git:** is the software that does tracks changes across your files. All happens under the hood (there is no "Git app"")
- **Github** is an implementation of Git that is easier to use, provides free (public) cloud service, and tools for collaboration.
- **Github Desktop App** is software develop by Github that helps you run Git in your computer and access your work on the web.
- Repo: A repository or is a master folder that contains all your work.
- Local: when you make changes to your files in your computer, you are working locally.
- Remote: whenever you make changes to the files in the cloud/server you are working remotelly.

Actions to get files

- Fork: when in github.com you copy the repo of somebody else's account into your account, you fork it
- Clone: when you download at repo into your local machine, using the github app, you clone a repo.

Actions to track files

- Commit: whenever you take a local snapshot of your *saved* work, you commit. Get used to committing early and often.
- Push: when you want to upload a set of local commits to the remote, you push.
- Pull: when you want to update your local repo with more recent content from the remote, you pull.

Pain points and (quick and dirty) solutions

- Not sure if you have git installed? -> Install the Github desktop app.
- Having problem with authetification? -> Install the Github desktop app and login.
- Cannot pull or push due to merge conflicts? -> Back up local repo, then delete, then clone from remote.