Git and GitHub Handout

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18/5/2023

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 remotely.

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 a 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 commiting 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 authentication? –> 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.