

# HWRS 501 Cheat Sheet



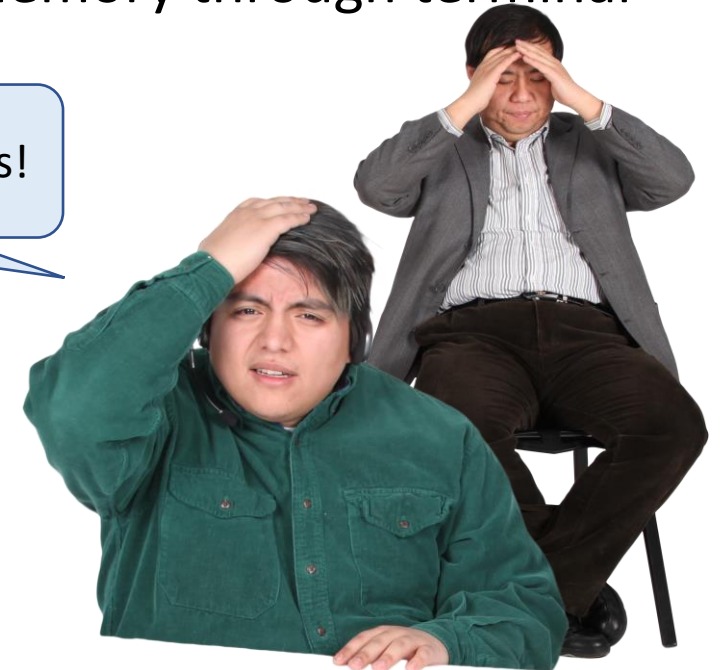
# What is GitHub and version control?

- GitHub is an online, cloud-based platform that facilitates collaborative projects through enhanced version control protocols and ease-of-access.
- Version control is a system to keep track of changes made to files through time.
  - Different protocols of version control exist—and not all are equally effective!
    - (e.g., Microsoft Word *Track Changes*)
  - GitHub uses a robust form of version control through terminal-based or GUI-based interactions (see *Major Actions*) and repositories.

# What is a repo(sitory)?

- A repository is a folder containing a .git file
  - The .git file directs the computer to track changes made to all contents within the repository, both files and folders alike.
  - The changes are timestamped and added to a permanent history within the .git file so long as the changes are committed to its memory through terminal or GUI-based interactions.

Don't place repos within repos!

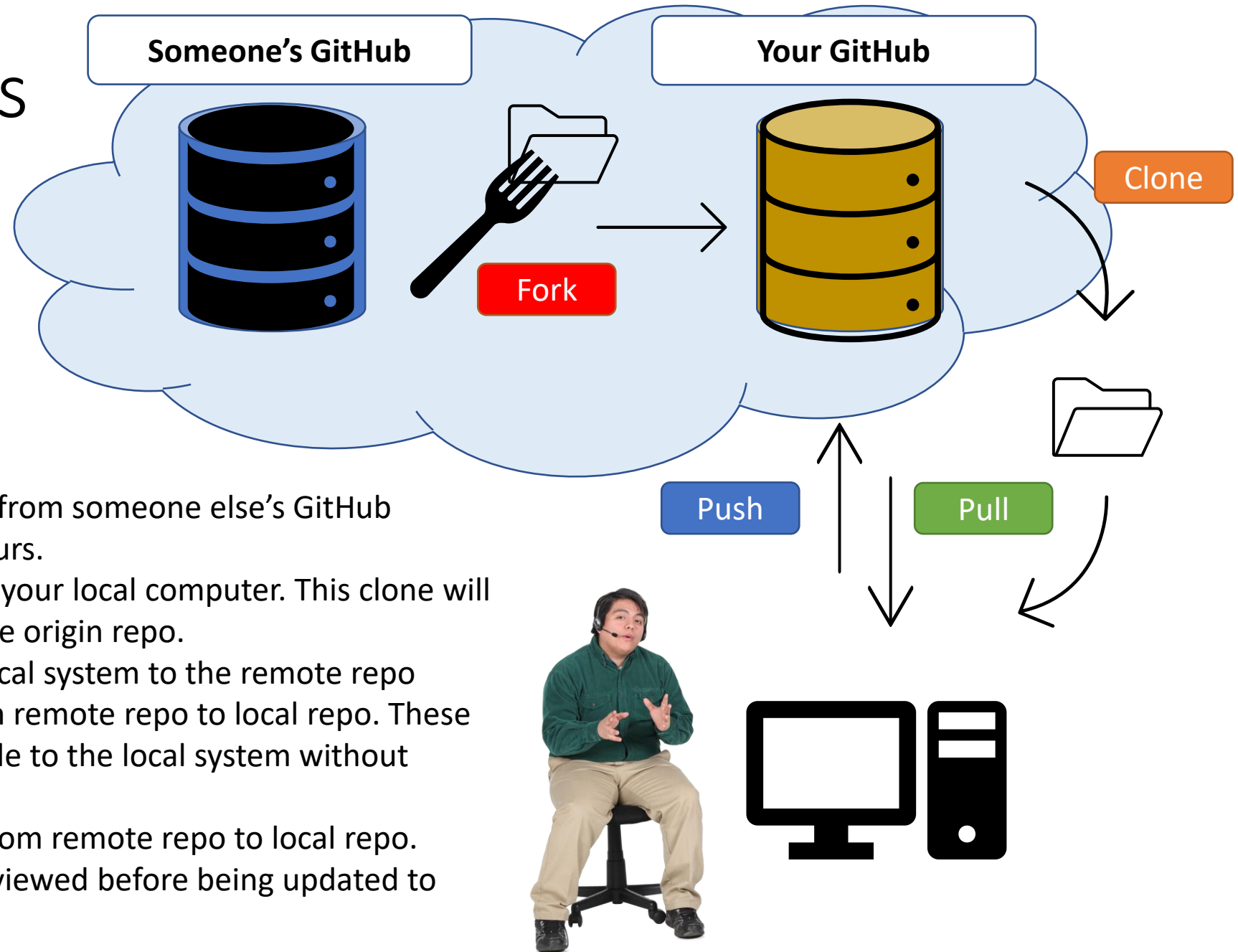


# The difference between local, remote, origin

- Local, remote, and origin are terms that relate repositories to the version control system.
  - Local: denotes a physical, accessible location based within the computer's memory drive where current changes are being made. All working repositories are first updated within the local system.
  - Remote: denotes an off-site location based outside of the space where current changes are being made. Remote repositories will not reflect changes made to local files without interactions in the version control system.
  - Origin: denotes the repository from which a project was cloned.



# Major actions



To be continued...

