8 September 2021

Cheat Sheet

What is GitHub and version control?

- Git
 - Version Control Software
 - This is the program/system. It tracks all the codes/changes/communication between various computers. It is the brains of the program.
- GitHub
 - Cloud based repo sharing
- GitKraken
- This is the computer software/terminal. It is where one would do commands to interact with other programs (ex.: installation, SSH, etc.) and provide commands directly to a local computer.
- GitKraken
 - GUI
 - Stands for 'Graphical User Interface
 - This is a place to "point" and "click" (interact) with different repositories.
 - Repositories (Repos) are files that are stored locally in order to provide changes on a local computer that can be pushed (updated) into a cloud for others to see and pull from.
 - This is where we pull, push, stage, and commit any files that have been updated locally or in the cloud.

- Pull: This is a button that is pressed to bring the files in the local computer up to date to the cloud.
- Stage/Commit: This is to create a place where one can roll back to a "meaningful chunk" if someone is working on code.
- Push: This is when files that have been updated locally are updated within the cloud.

Example of how to turn in a HW assignment:

- Clone personal homework repo into the Course-Materials21 repo for this course using GitKraken and personal SSH key.
 - a. SSH = Secure Shell
 - i. This is a personal key/login that allows a user to continue to pull updated files into their repo from the cloud without having to enter a password every time. It is totally secure and allows for easier "communication" between multiple computers (to securely transfer files).
- 2. Place completed homework assignment in the local homework folder (on computer) in the correction assignment folder.
 - a. Ex.: Place completed cheat sheet in: HAS_Tools -> homework-StephSerrano -> Cheat_Sheets
- Open GitKraken and pull any files that may have been updated elsewhere in order to be caught up with the entire course/class.
- 4. Open the homework repo and select the "WIP" file.
- 5. "Stage" any changes to the file.
- 6. Write a small description of the file OR any changes that have been made.
- 7. "Commit" the file.

- 8. Push the commit so that the file is moved from the local folder to the course cloud.
- 9. Done! Changes should be updated in GitKraken/GitHub.