Cheat Sheet 1

Xueyan Zhang

09/08/2021

1. Git, GitHub, and version control

Git is a version control system that allows you to store files in a retrievable way at any time with any goals. Git can record who changed the files, what changes made, and when in a trackable way. We can also use Git to compare changes made before. The basic working flow of Git includes modifying files, staging modified file version in the staging area, committing staged files, and pushing all changes to Github (the remote server). Therefore, Github is just a software (platform) managing Git repositories that are private or public. Version control is the main idea of Git that decently organizes all changes.

1. What is a repo?

A repository looks like a folder but not exactly same as a folder. A repository documents the revision history and cannot be under another repository. We can update or make changes of repositories using pull or push buttons of GitKraken.

1. The difference between local, remote, origin

Local is repository in local computer, which is cloned using https or ssh url. Remote repository is the one on the remote server. Origin repository is the remote repository with the initial (default) name.

1. The major actions and what they mean - Clone, Fork, Commit, Push, Pull, Fetch (note this could lend itself to a graphic illustration)

Clone is copying the remote repository to a local machine that can be done using a command “git clone”. Any changes made in this cloned repository can be shown in the original repository.

Fork is copying a repository but with full control of the copied repository, which is a new repository and any changes to the forked repository will not be reflected to the original repository.

Commit is recording changes to files we made with a unique ID.

Push is used to upload committed local changes to the remote repository.

Pull is taking all changes from the remote repository to your local and update the local repository.

Fetch is a way to download all changes to your local and review it; however, fetch will not integrate all new changes with the local repository.