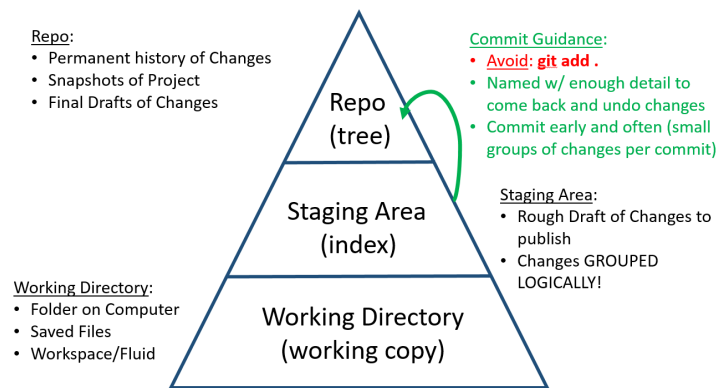
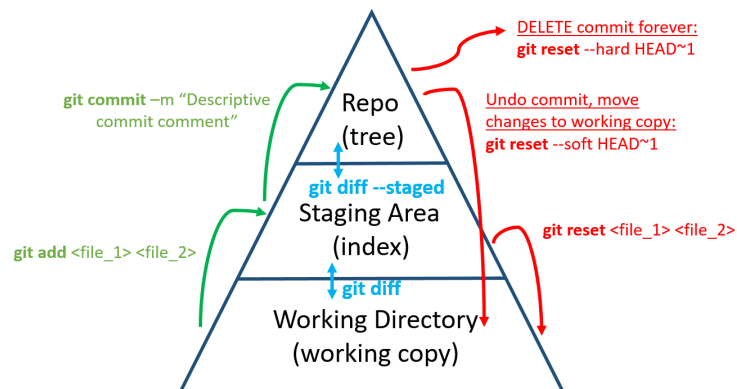


git Basics: the git pyramid and common git commands

Understanding a git repository using the pyramid abstraction can take a student from simply repeating commands to make a commit, to actually understanding the changes that the git commands are making in their local repository. Read through this diagram to understand the three git abstractions present in every local repository: the Repo (or tree), the Staging Area (or index) and the Working Directory (or working copy):



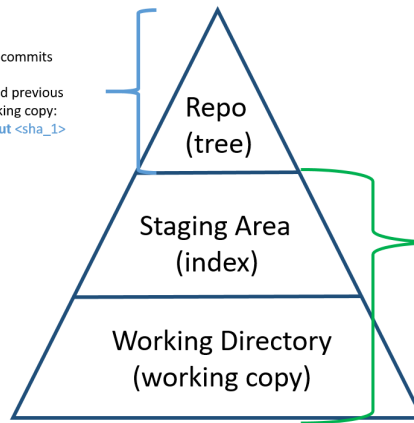
Understanding the basics of the local repository, let's look at some commands that move changes we've made to files in our Working Directory to the Staging Area and eventually the Repo to publish the changes permanently:



Let's look at some useful commands for checking the status of changes we've been making in our local repository. We also want to understand how to revert back to a previous commit should we get in trouble with our changes!

git log

- History of repo commits by SHA-1 Hash
- Temporarily load previous commit to working copy:
 - `git checkout <sha_1>`



git status

- Changes to working directory / staging area
- staged / untracked files
- What will happen upon commit?

Once we are happy with our changes locally, we want to share them to a shared copy of the repository so that others can access the changes! We typically only need two commands: one to push our local changes to our remote copy of the repo and one to pull changes from the remote to our local copy.

