

Basic Git Commands

Dealing with your local repository

git init	initialize a new git repository; this creates the “.git” hidden folder that keeps track of all of the files, folders, and changes in your project
git log	show the commit logs
git add [file]	adds the file named [file] to the staging area of files to be committed
git add .	adds all of the files in the current directory (referred to as “.”) to the staging area
git status	displays the status of the working tree;
git commit -m “[message]”	commit a snapshot of the files in the staging area with a message specified in [message]
git revert [commit]	revert the current branch to a the given [commit]; revert creates a new commit in the git history and is used when you <i>do not</i> want to get rid of any commits in the history; referring to a past commit can be done by specifying the first 7 characters in the commit hash or by specifying the number of commits before HEAD
git reset [commit]	reset the top of the current branch to a the given [commit]; reset is used to completely remove commits from branch; referring to a past commit can be done by specifying the first 7 characters in the commit hash or by specifying the number of commits before HEAD
git branch [branch_name]	create a new branch or version of your project that exists in parallel with other branches; running git branch without the branch_name will list all of the branches in the repository
git checkout [branch]	switch to the given branch; this will change the files in your project to the state of the branch that you are checking out
git merge [branch]	merge the given branch into the current branch; this will combine both versions and may result in merge conflicts if there is conflicting information between the branches

Working with a Remote Repository

git remote	lists all remote repositories linked to the project
git remote add [remote_name] [address]	add a remote repository with the specified name at the specified address; the address is usually an https url
Git push [remote] [branch]	push the latest changes on the specified branch from the local repository to the specified remote
Git pull	pull the latest changes from the remote down to the local repository

Other Useful Commands

git clone [url]	clone the full repository from the url down to the local machine
git stash	stash changes that have been made since the last commit without having to make a new commit; often used when pulling from a remote since you cannot pull when you have uncommitted changes