Cheatography

Git Basics Cheat Sheet

by MKoe via cheatography.com/174546/cs/36666/

Getting a Git Repository - p. 26

Initializing Repository in Existing Directory	
Go to directory	$ cd C:/Users/user/my_project
Initialize .git subdirectory	$ git init
Begin file tracking	$ git add *.c
$ git add LICENSE	
Initial Commit	$ git commit -m <message>
Cloning Existing Repository	
Clone directory	$ git clone <url> <directory name>

Tracking File Status - p. 28

Tracked files	
Files that were in last snapshot + any newly staged files	
can be unmodified, modified, or staged	
Untracked Files	
any files in working directory that were not in your last snapshot and are not in your staging area.	
won't be included in your commit snapshots until explicitly told	
$ git status	check status
$ git add <file/directory name>	track new file, stage file
If you modify a file after you run git add, you have to run git add again to stage the latest version of the file	
$ git status -s	check status (short)
??	new untracked files
A	newly staged files
M	modified files
lefthand column indicates status of staging area and the right-hand column indicates status of working tree	
Ignoring Files	

Tracking File Status - p. 28 (cont)

repository might have a single .gitignore file in its root directory, which applies to the entire repository
additional .gitignore files in subdirectories possible
specifies which files are ignored by version control

View and Commit Changes - p. 33

git diff	view unstaged changes
git diff --staged	compare staged changes to last commit
If all changes are staged, git diff will give no output.	
git difftool	view changes in graphical difftool
git commit	commit changes, launches editor for commit message
git commit -m	add message in command line
git commit -a	commit all changed files, skip staging
git rm	remove file from tracked files
git rm -f	force removal of already staged file
git rm --cached	remove file from Git track, keep it on hard drive
If you simply remove the file from working directory, it shows up under the “Changes not staged for commit"	
git mv file_from file_to	Move/Rename File
Git doesn’t explicitly track file movement	

Viewing the Commit History - p. 40

git log	list commits made in chronological order
git log -p	show difference introduced in each commit
git log -2	show last two log entries
git log --stat	show abbreviated stats for each commit
git log --pretty	change log output format
pretty=format: "%h - %an, %ar : %s"	format specifier for log output
%h	abbreviated commit hash
%an	author name
%ar	author date, relative
%s	Subject
git log --graph	display ASCII graph for merging history
git log --since=x	limit log output to time x
git log --author=x	limit log output to author x
git log --all-match	limit output to those that match all limiting patterns
git log -S	Only show commits adding or removing code matching string
-- path/file	limit log output to changes introduced in specified files
Is always the last option and is generally preceded by double dashes (--) to separate paths from the options	
--no-merges	prevent display of merge commits