Git Quick Reference

Getting help:

git help command

git *command* --help Show help for a command

Repository creation:

git init Create a repository in the current directory
git clone *url* Clone a remote repository into a subdirectory

File operations:

git add path Add file or files in directory recursively

git rm path Remove file or directory from the working tree

-f Force deletion of file(s) from disk

git mv path destination Move file or directory to new location

-f Overwrite existing destination files

git checkout [rev] file Restore file from current branch or revision

-f Overwrite uncommitted local changes

Working tree:

git status Show status of the working tree

git diff [path]Show diff of changes in the working treegit diff HEAD pathShow diff of stages and unstaged changes

git add pathStage file for commitgit reset HEAD pathUnstage file for commit

git commit Commit files that has been staged (with git-add)

-a Automatically stage all modified files

git reset --soft HEAD^ Undo commit & keep changes in the working tree

git reset --hard HEAD^ Reset the working tree to the last commit
git clean Clean unknown files from the working tree

Examining History:

git log [path] View commit log, optionally for specific path

git log [from[..to]] View commit log for a given revision range

--stat List diffstat for each revision

-S'pattern' Search history for changes matching pattern **git blame** [file] Show file annotated with line modifications

Remote repositories - remotes:

git fetch [remote] Fetch changes from a remote repository

git pull [remote] Fetch and merge changes from a remote repository

git push [remote] Push changes to a remote repository

git remote List remote repositories

git remote add remote url Add remote to list of tracked repositories

Branches:

git checkout branch
-b branch

Switch working tree to branch

Create branch before switching to it

git branch List local branches

git branch -f *branch rev* Overwrite existing branch, start from revision

git merge branch Merge changes from branch

Exporting and importing:

git apply - < *file* Apply patch from stdin

git format-patch from[..to] Format a patch with log message and diffstat

git archive rev > file Export snapshot of revision to file

--prefix=*dir*/ Nest all files in the snapshot in directory
--format=[*tar*|*zip*] Specify archive format to use: *tar* or *zip*

Tags:

git tag name [revision] Create tag for a given revision

-s Sign tag with your private key using GPG

-1 [pattern] List tags, optionally matching pattern

File status flags:

M modified File has been modified

C copy-edit File has been copied and modified R rename-edit File has been renamed and modified

A added File has been added D deleted File has been deleted

U unmerged File has conflicts after a merge