

Git Cheat Sheet



GIT BASICS

<code>git init <directory></code>	Create empty Git repo in specified directory. Run with no arguments to initialize the current directory as a git repository.
<code>git clone <repo></code>	Clone repo located at <repo> onto local machine. Original repo can be located on the local filesystem or on a remote machine via HTTP or SSH.
<code>git config user.name <name></code>	Define author name to be used for all commits in current repo. Devs commonly use <code>--global</code> flag to set config options for current user.
<code>git add <directory></code>	Stage all changes in <directory> for the next commit. Replace <directory> with a <file> to change a specific file.
<code>git commit -m "<message>"</code>	Commit the staged snapshot, but instead of launching a text editor, use <message> as the commit message.
<code>git status</code>	List which files are staged, unstaged, and untracked.
<code>git log</code>	Display the entire commit history using the default format. For customization see additional options.
<code>git diff</code>	Show unstaged changes between your index and working directory.

UNDOING CHANGES

<code>git revert <commit></code>	Create new commit that undoes all of the changes made in <commit>, then apply it to the current branch.
<code>git reset <file></code>	Remove <file> from the staging area, but leave the working directory unchanged. This unstages a file without overwriting any changes.
<code>git clean -n</code>	Shows which files would be removed from working directory. Use the <code>-f</code> flag in place of the <code>-n</code> flag to execute the clean.

REWRITING GIT HISTORY

<code>git commit --amend</code>	Replace the last commit with the staged changes and last commit combined. Use with nothing staged to edit the last commit's message.
<code>git rebase <base></code>	Rebase the current branch onto <base>. <base> can be a commit ID, branch name, a tag, or a relative reference to HEAD.
<code>git reflog</code>	Show a log of changes to the local repository's HEAD. Add <code>--relative-date</code> flag to show date info or <code>--all</code> to show all refs.

GIT BRANCHES

<code>git branch</code>	List all of the branches in your repo. Add a <branch> argument to create a new branch with the name <branch>.
<code>git checkout -b <branch></code>	Create and check out a new branch named <branch>. Drop the <code>-b</code> flag to checkout an existing branch.
<code>git merge <branch></code>	Merge <branch> into the current branch.

REMOTE REPOSITORIES

<code>git remote add <name> <url></code>	Create a new connection to a remote repo. After adding a remote, you can use <name> as a shortcut for <url> in other commands.
<code>git fetch <remote> <branch></code>	Fetches a specific <branch>, from the repo. Leave off <branch> to fetch all remote refs.
<code>git pull <remote></code>	Fetch the specified remote's copy of current branch and immediately merge it into the local copy.
<code>git push <remote> <branch></code>	Push the branch to <remote>, along with necessary commits and objects. Creates named branch in the remote repo if it doesn't exist.