

Git Cheat Sheet

Basic Commands:



Command	Description
<code>git init</code>	Initializes a new Git repository in the current directory
<code>git clone <repo_url></code> <code>git clone git@git.com:Path/name.git</code> <code>git clone ssh://git@git.com/Path/name.git</code>	Clones an existing Git repository from the specified URL
<code>git add <filename></code> <code>git add .</code> <code>git add -A</code>	Adds a file to the staging area
<code>git commit -m "message"</code> <code>git commit --amend</code>	Commits changes to the repository with a commit message
<code>git status</code>	Shows the status of the repository
<code>git log</code>	Shows the commit history of the repository
<code>git diff</code>	Shows the changes made to files
<code>git branch</code>	Shows a list of branches
<code>git checkout <branch_name></code>	Switches to the specified branch
<code>git merge <branch_name></code>	Merges the specified branch into the current branch
<code>git push</code> <code>git push --force</code>	Pushes changes to a remote repository
<code>git push <remote> <branch></code> <code>git push -fu origin <branch></code>	Forces a push of the local branch to the specified remote branch.
<code>git pull</code> <code>git pull upstream <branch></code>	Pulls changes from a remote repository
<code>git config pull.rebase true</code>	Configure Git to use the <code>--rebase</code> option by default whenever you run <code>git pull</code> .

Branching:



Command	Description
<code>git branch</code> <code>git branch -a</code>	Lists all local branches in the repository
<code>git branch <new_branch></code>	Creates a new branch with the given name
<code>git checkout <branch></code>	Switches to the specified branch
<code>git merge <branch></code>	Merges the specified branch into the current branch
<code>git branch -d <branch></code>	Deletes the specified branch
<code>git branch --set-upstream-to=upstream/<branch></code>	Sets the upstream branch for the current local branch to the specified remote branch.

Working with Remotes:

Command	Description
<code>git remote -v</code>	Lists all remotes currently configured for the repository
<code>git remote add <name> <url></code> <code>git remote add upstream <repo_url></code> <code>git remote add upstream ssh://git@git.com/Repo/name</code>	Adds a new remote with the given name and URL
<code>git push <remote> <branch></code>	Pushes changes to the specified branch on the remote repository
<code>git pull <remote> <branch></code>	Pulls changes from the specified branch on the remote repository
<code>git fetch upstream</code>	Fetches the changes from the remote repository named "upstream" into your local repository. git fetch only downloads the changes from the remote repository into your local repository, while git pull not only fetches the changes but also merges them into your current branch.

Undoing Changes:



Command	Description
<code>git reset <filename></code>	Unstages a file
<code>git checkout <filename></code>	Discards changes to a file
<code>git revert <commit></code>	Creates a new commit that undoes the changes made in the specified commit
<code>git reset --hard</code>	Resets your current branch to the state of the previous commit and discards any changes that you have made since then.
<code>git reset --hard <commit></code>	Resets the repository to the specified commit, discarding all changes made after that point.
<code>git reset --hard upstream/main</code>	Resets your local branch to match the state of the remote branch named "main" in the remote repository named "upstream".
<code>git stash -m "message"</code>	Stashes your local changes in a temporary area called the stash, and adds a message to describe the changes that you are stashing.
<code>git stash list</code>	Shows a list of all stashes that you've created in the current repository.
<code>git stash apply 0</code>	Applies the changes from the stash with index 0 to the working directory.