



Git Cheatsheet Essential Commands

Setup & Configuration

- ``git config --global user.name "Your Name"``: Set your username
- ``git config --global user.email "your.email@example.com"``: Set your email
- ``git config --global core.editor nano``: Set default editor (can be vim, code, etc.)
- ``git config --list``: List all configuration settings

Repository Initialization

- ``git init``: Initialize a new Git repository
- ``git clone <repo_url>``: Clone an existing repository

Staging & Committing

- ``git status``: Show current changes
- ``git add <file>``: Stage a file
- ``git add .``: Stage all changes
- ``git commit -m "commit message"``: Commit staged changes
- ``git commit -am "commit message"``: Add and commit in one step

Branching & Merging

- ``git branch``: List branches
- ``git branch <name>``: Create a new branch
- ``git checkout <branch>``: Switch branches
- ``git checkout -b <branch>``: Create and switch to a new branch
- ``git merge <branch>``: Merge a branch into the current one
- ``git branch -d <branch>``: Delete a branch

Pushing & Pulling

- ``git push``: Push changes to remote
- ``git push origin <branch>``: Push specific branch
- ``git pull``: Pull latest changes from remote
- ``git fetch``: Download objects and refs from another repository

History & Logs

- ``git log``: View commit history
- ``git log --oneline``: Compact commit history
- ``git diff``: Show file differences
- ``git show <commit>``: Show a specific commit

Undoing Changes

- ``git checkout -- <file>``: Discard changes in file
- ``git reset HEAD <file>``: Unstage file
- ``git revert <commit>``: Revert a specific commit
- ``git reset --hard``: Reset working directory and staging area

Remote Repositories

- ``git remote -v``: Show remotes
- ``git remote add origin <url>``: Add a remote repository
- ``git remote remove origin``: Remove a remote

Tags

- ``git tag``: List tags
- ``git tag <name>``: Create a tag
- ``git push origin <tag>``: Push a tag

Stashing

- ``git stash``: Stash changes
- ``git stash pop``: Apply and remove last stash
- ``git stash list``: List stashes

Miscellaneous

- ``git blame <file>``: Show who changed what and when
- ``git clean -fd``: Remove untracked files and directories
- ``git cherry-pick <commit>``: Apply a commit from another branch

