

git-cheat-sheet

Git Quick Reference

Essential commands for daily Git workflows and operations.

Setup & Config

- `git config --global user.name "Name"`—Set your username globally
- `git config --global user.email "email@example.com"`—Set your email globally
- `git config --list`—List all current configurations
- `git config --global core.editor "editor"`—Set default text editor
- `git config --global alias.co checkout`—Create alias for checkout

Daily Workflow

- `git status`—Show working directory status
- `git add .`—Stage all changes for commit
- `git commit -m "message"`—Commit staged changes with message
- `git push origin branch`—Push commits to remote branch
- `git pull origin branch`—Fetch and merge from remote branch
- `git checkout branch`—Switch to specified branch
- `git diff`—Show unstaged changes
- `git log`—View commit history

Branching

- `git branch`—List all branches
- `git branch new-branch`—Create a new branch
- `git checkout -b new-branch`—Create and switch to new branch
- `git merge branch`—Merge specified branch into current
- `git branch -d branch`—Delete specified branch
- `git branch -D branch`—Force delete specified branch

Viewing History

- `git log --oneline`—Compact view of commit history
- `git log --graph`—View commit history as a graph
- `git diff commit1 commit2`—Show changes between commits
- `git show commit`—Show changes in a specific commit
- `git blame file`—Show who last modified each line

Remote Operations

- `git remote -v`—List remote repositories
- `git remote add name URL`—Add a new remote repository
- `git fetch origin`—Fetch changes from remote
- `git push origin --tags`—Push all tags to remote
- `git pull --rebase`—Rebase local commits on top of remote

Undoing Changes

- `git restore file`—Discard changes in working directory
- `git reset HEAD file`—Unstage a file
- `git reset --hard commit`—Reset to a specific commit
- `git revert commit`—Create a new commit to undo changes
- `git stash`—Save changes for later
- `git stash pop`—Apply stashed changes

Useful Aliases

- `git config --global alias.st status`—Alias for status
- `git config --global alias.ci commit`—Alias for commit
- `git config --global alias.br branch`—Alias for branch
- `git config --global alias.unstage 'reset HEAD --'`—Alias to unstage
- `git config --global alias.last 'log -1 HEAD'`—Alias for last commit

Quick Tips

- Commit often with clear messages for better tracking
- Use branches for features and bug fixes
- Regularly pull from remote to stay updated
- Stash changes before switching branches
- Review changes with `git diff` before committing