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Essential Git Cheatsheet!

Basic Commands

git init – Initialize a new Git repository.

git clone <repo_url> – Clone a remote repository.

git status – Check the status of your working directory.

git add <file> – Stage changes for commit.

git commit -m "message" – Commit staged changes with a message.

git push – Push your local commits to the remote repository.

git pull – Fetch and merge changes from the remote repo.

git diff – Show changes in the working directory (uncommitted changes).

git diff --staged – Show changes between the staging area and last commit.

Branching & Merging

git branch – List branches.

git branch <branch_name> – Create a new branch.

git checkout <branch_name> – Switch to another branch.

git checkout -b <branch_name> – Create and switch to a new branch.

git merge <branch_name> – Merge a branch into the current one.

git branch -d <branch_name> – Delete a branch after merging.

git branch -D <branch_name> – Forcefully delete a branch, even if it hasn't merged.

Synchronization

git fetch – Download changes from remote without merging.

git rebase <branch> – Reapply commits on top of another branch to maintain linear history.

git pull --rebase – Fetch and reapply your changes on top of the latest remote changes.

git remote add <name> <url> – Add a new remote repository.

Advanced Git

git stash – Temporarily save changes without committing.

git stash pop – Reapply stashed changes.

git cherry-pick <commit> – Apply a specific commit to your current branch.

git log --oneline – View simplified commit history.

git reflog – Show the history of your reference changes (e.g., checkout, resets).

git log --graph --decorate --all – Show a visual commit history.



Undoing Changes

git reset <file> – Unstage a file.

git reset --soft <commit> – Reset to a commit but keep changes in the working directory.

git reset --hard <commit> – Completely reset to a previous commit, discarding changes.

git revert <commit> – Create a new commit that undoes a specific commit.



Collaborating with Others

git fork – Fork a repository on GitHub (via UI) to start contributing.

git pull origin <branch> – Pull changes from the original remote branch.

git push origin <branch> – Push your branch to the original repository for collaboration.

Over to you: did we miss anything?

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