Beginner Git Guide: Commands & Examples

Initialize Git Repository

`git init`

Initializes a new Git repo in your project folder.

Clone a Remote Repository

`git clone https://github.com/user/repo.git`

Creates a local copy of a remote GitHub repository.

Check File Status

`git status`

Displays which files are staged, modified or untracked.

Add Files to Staging

`git add filename.txt` - Adds a specific file.

`git add .` - Adds all files.

Commit Changes

`git commit -m "Your message"`

Records a snapshot of the staged changes.

Push Changes to Remote

`git push origin main`

Sends committed changes to the main branch of the remote repository.

Pull Latest Changes

`git pull origin main`

Downloads and integrates changes from the remote repository.

Create and Switch Branch

`git branch new-feature` - Creates a new branch.

`git checkout new-feature` - Switches to it.

Merge Branches

Beginner Git Guide: Commands & Examples

`git merge new-feature`

Merges another branch into the current branch.

View Commit History

`git log`

Shows the commit history.

Compare Changes

`git diff` - Shows unstaged changes.

`git diff --staged` - Shows staged changes.

Unstage Files

`git reset filename.txt`

Removes files from staging area.

Hard Reset (Undo Commits)

`git reset --hard HEAD~1`

Reverts the last commit permanently.

Temporarily Save Changes

`git stash`

Saves changes temporarily.

`git stash pop` - Restores them.

Set Git User

`git config --global user.name "Your Name"`

`git config --global user.email "you@example.com"`

Link Remote Repository

`git remote add origin https://github.com/user/repo.git`

Links local repo to remote GitHub repository.

Fetch Without Merge

Beginner Git Guide: Commands & Examples

`git fetch origin`

Gets updates without applying them to current branch.

Tag a Commit

`git tag v1.0`

Marks a specific commit with a version.

Rebase Branch

`git rebase main`

Replay current branch commits on top of main (advanced).