



`$ git init` -> initialize git -> start tracking project

`$ git status` -> check if untracked files present

`$ git add <file>` -> add file to staging area
`$ git add .` -> add all files in a directory to staging area

`$ git commit` -> record changes to the local repo
`$ git commit -m "Comment"` -> start a new version
`$ git commit -a` -> commit everything
`$ git commit --amend` -> rewrite the last commit (only if not pushed to remote repo yet!)

`$ git log` -> show number/list of commits & commit messages
`$ git log --graph --decorate --online` -> visualization of the log
`$ git log --patch -2` -> show difference in commits (here last 2)
`$ git log --stat` -> short stats for commits

`$ git diff` -> show changes to previous state
either -> `$ git add <file>` -> update
or -> `$ git restore <file>` -> discard changes

`$ git checkout` -> go to branch / last unchanged version

`$ git branch <branchName>` -> create new branch
`$ git checkout -b <branchName>` -> create new branch and switch
`$ git branch` -> show branches
`$ git branch -d <localBranchName>` -> delete branch
`$ git merge <branchName>` -> on main: will merge branch

`$ git rm --cached -r` -> set all files in directory to untracked
`$ git rm --cached <file>` -> set a certain file to untracked

`$ git restore` -> restore the last committed state
`$ git restore <file> / . / *.html` -> restoring a file / all / certain files
`$ git restore --staged (<file>...)` -> remove from staging area but leave modifications

`$ git reset <file>` -> unstage a file
`$ git reset HEAD <file>` -> unstage a file to current commit (HEAD)
`$ git reset --hard <CommitVersion>` -> spin back to a certain version
`$ git reset --hard HEAD` -> spin back to the last commit

`$ git remote add origin <URLfromGitHub>` -> create remote repo / connect

`$ git push -u origin main` -> -u: upstream - links repo to a central one

-> `git push origin` -> push all local branches

-> `git push origin main` -> push the local main branch

`$ git fetch` -> get latest changes from remote repo w/o merging

`$ git pull` -> get latest changes and merge

`$ git pull --rebase` -> get latest changes and rebase

`$ git clone <URLfromGitHub>` -> clone a GitHub project locally

Forking: copy of a repo on GitHub.

Cloned repo on local machine with write access can push directly to upstream (= original) repo - if no write access, a previous fork is required -> pull request to repo owner to merge changes

