

# Git

clone → makes copy of code from repo to local  
add → track your files and changes in git  
commit → save your files to git  
push → upload commits to a remote repo like GitHub  
pull → download changes from remote repo to local

Readme.md (markdown file to describe code)

git config --global user.name user.name  
set up branch main

cd c:/Users/"Ethan Perry"/OneDrive/Desktop/Wheaton/...

git status (of repo) of tracked files  
★ GIT does not track unchanged files  
to check status of tracked files, do git add --all,  
to remove do "git rm -cached <file.name>"

IGNORE FILE .gitignore  
See more ignore notes w/ further research

tracked files are in staging → holding pen  
Commit takes a snapshot at moment in time  
→ git commit -m "first commit"  
See what difference is  
→ git diff

Working files, Staging, Commit

 merge conflict

git restore - staged index.htm

git commit -a -m "Skipping staging"  
(all) (message)

git can recognize when a file has been deleted while it is being tracked

git mv oldname newname rename

git log , newest commits (-- one line)  
-i amend message text last message

BRANCHING push branch changes

git branch NAME creates

git branch shows all branches and active one

git switch NAME

edits made in dir are on branch

MERGE git merge -m " " branch

delete git branch -d NAME

Merge CONFLICT git switch -c NAME  
(master/merging)

git branch branchName

## GitHub

push local repo to cloud

→ git remote add origin "https://"

→ git branch -M main set target branch to main

git push -u origin main!

// push all branches  
git push --all

## Pull request

This change has to be approved before change is pushed to main branch.

- creates branch w/ proposed change so someone can review the branch, and then work is added on there

tie issues to pull requests

## Pull from cloud to local

git fetch and then git merge to fetch and merge

OR git pull

open CLion and create from existing sources

git init (not terminal to create git repo)

create .gitignore and add

.idea /

cmake-build-\*/

build/

\*/build/

\*.o

\*.exe

\*.out

create this file in  
folder explorer

git add . // to staging

git commit -m "initial commit"

create git hub repo, no Readme, copy url

git branch -M main

git remote add origin https://...

git push -u origin main

↑ first time, thereafter just do git push

Can manually update name w/ edit in github

# Config Clion & GitHub

- 1) open Clion and create new project
- 2) `git init` and create a `.gitignore` file by adding file to dir
- 3) add `.idea/`, `cmake-build-*/`, `build/`, `*/build/`, `*.o`, `*.exe`, `*.at`, `*.pdf`  
\*do not `git add` to staging before this
- 4) then `git add`.  
`git commit -m "initial commit"`
- 5) create repo on github and copy URL
- 6) `git branch -M main`  
`git remote add origin https://`  
`git push -u origin main`