

Git

Version Control System is a tools that helps to track changes in code

Git is a **Version Control System**. It is :

popular

free & Open Source

fast & scalable

- 1) track the history
- 2) collaborate

Github

Website that allows developers to store and manage their code using Git.

<https://github.com>

Clone & Status

Clone - Cloning a repository on our local machine

git clone <- some link ->

status - displays the state of the code

git status

remote
[Github]

local
[laptop / PC]

cd → change directory

cd → change directory



● PS C:\Users\hp\Downloads\harsh demo vs code\bothub-harshlearning> ls

Directory: C:\Users\hp\Downloads\harsh demo vs code\bothub-harshlearning

Mode	LastWriteTime	Length	Name
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-a----	14-07-2025 06:50 PM	68	README.md

○ PS C:\Users\hp\Downloads\harsh demo vs code\bothub-harshlearning> █

untracked

new files that git doesn't yet track

modified

changed

staged

file is ready to be committed

unmodified

unchanged

Add & Commit

add - adds new or changed files in your working directory to the Git staging area.

```
git add <- file name ->
```

commit - it is the record of change

```
git commit -m "some message"
```

Push Command

Remote ← *push* → Local

push - upload local repo content to remote repo

```
git push origin main
```

Init Command

init - used to create a new git repo

git init

git remote add origin <- link ->


git remote -v (to verify remote)

git branch (to check branch)

git branch -M main (to rename branch)

git push origin main

git push -u origin main



set upstream

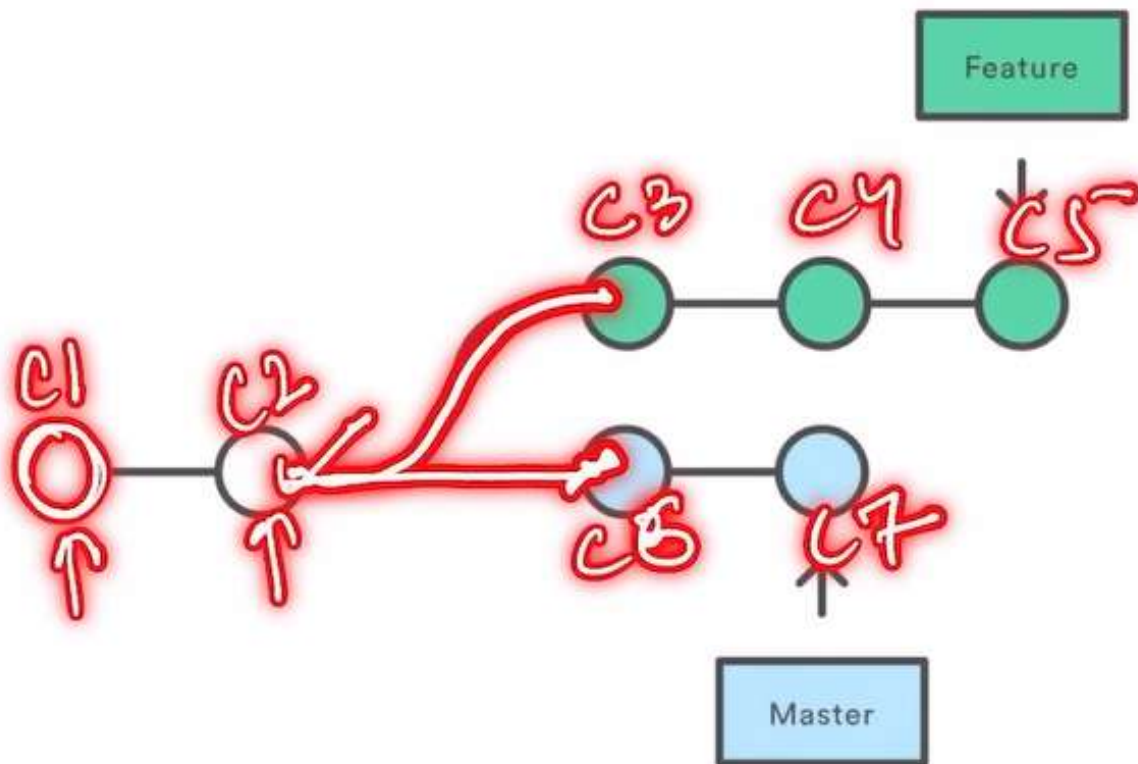
WorkFlow

Local Git

github repo
↓
clone
↓
changes
↓
add
↓
commit
↓
push



Git Branches



Branch Commands

git branch (to check branch)

git branch -M main (to rename branch)

git checkout <- branch name -> (to navigate)

git checkout -b <- new branch name -> (to create new branch)

git branch -d <- branch name -> (to delete branch)

ls - to see list in files

```
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-a-----         14-07-2025   06:50 PM             68 README.md

○ PS C:\Users\hp\Downloads\harsh demo vs code\bothub-harshlearning> |
```

Ls -a = this show the hidden files.

Merging Code



Way 1

`git diff <- branch name->` (to compare commits, branches, files & more)

`git merge <- branch name->` (to merge 2 branches)

Way 2

Create a PR

