# Git Branch

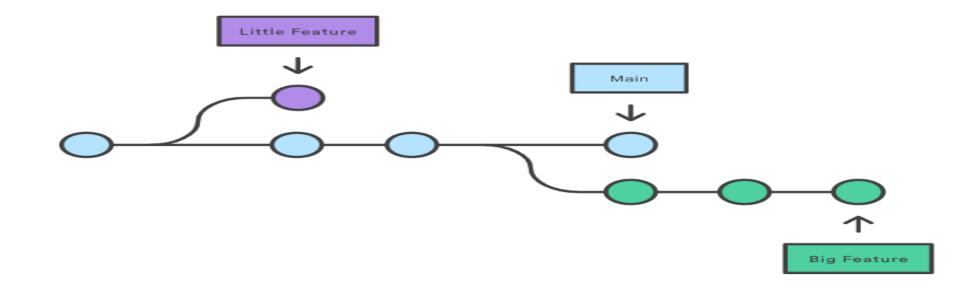
Ow

Mail: info@openwriteup.com

#### What is git branch

- Git branch is a pointer to snapshot of your changes. When you want to add a new feature or fix - spawn a new branch to encapsulate your changes.
- It provides an option before we merge the code to the main branch, In-case we directly merge the code to the main branch become harder to troubleshoot and make the full code unstable

#### flow



### Explanation

- In the diagram, we see two dev branches
  - Little feature
  - Big feature
- Provide option to work parallelly
- Main branch code has not been touched.
- Both the branches are fully isolated.
- Git branches are lightweight, instead of copying the code, git stores the branch as reference to commit

### How it works?

- A branch represents an independent line of development
- Branch is a way to request to new working directory, staging area and history
- New history would be recorded in the history for the current branch.
- git branch command
  - Create
  - List
  - Delete
  - Git checkout
  - Git merge

- List all of the branches in your repository. This is synonymous with git branch --list.
  - git branch <branch>

. .

- Create a new branch called <branch>. This does not check out the new branch.
  - git branch -d <branch>
- Delete the specified branch. This is a "safe" operation in that Git prevents you from deleting the branch if it has unmerged changes.
  - git branch -D <branch>

#### ..master branch(main)

양 master ▾ 양 2 Branches ♡ 0 Tags	Q Go to file	t + <> Code •
iie amitopenwriteup Added Jenkinsfile		bce1960 · 3 days ago 🛛 🕄 39 Commits
D Jenkinsfile	Added Jenkinsfile	3 days ago
🗅 a	А	2 months ago
C c	С	2 months ago
🗋 d	D	2 months ago
🗋 date.sh	test	10 months ago
🗋 dockerfile	adding	10 months ago
🗋 jenkinsfile	add	2 months ago
requirements.txt	tryone	6 months ago

### Mycode file in test branch

This branch is 1 commit ahead of master		រ៉ា Contribute 👻	<ul> <li>1 wa</li> <li>4 fo</li> </ul>
<b>root</b> adding to test branch		6cc38dc · 1 minute ago 🛛 🔁 40 Commits	Release
🗋 Jenkinsfile	Added Jenkinsfile	3 days ago	No release
🗅 a	А	2 months ago	Create a n
🗅 c	с	2 months ago	Packag
🗅 d	D	2 months ago	No packa Publish yc
🗋 date.sh	test	10 months ago	
🗋 dockerfile	adding	10 months ago	Contrib
🗋 jenkinsfile	add	2 months ago	ar
🗋 mycode	adding to test branch	1 minute ago	w w
requirements.txt	tryone	6 months ago	

## Merge on main and delete test branch

root adding to test branch		6cc38dc · 10 minutes ago	い 40 Commits
Denkinsfile	Added Jenkinsfile		3 days ago
🗋 a	А		2 months ago
🗋 c	С		2 months ago
🗋 d	D		2 months ago
🗋 date.sh	test		10 months ago
🗋 dockerfile	adding		10 months ago
🗋 jenkinsfile	add		2 months ago
🗋 mycode	adding to test branch		10 minutes ago
requirements.txt	tryone		6 months ago

### lab

git branch test git branch git checkout test git branch touch mycode git add mycode ls git commit -m "adding to test branch" git push origin test git checkout master git merge test git branch -d test git push origin --delete test