

Making life Easier (Git Basics)

Commands

Clone a new repo / branch

- 1) `git clone <repo link(http)>`
- 2) `git clone -b <branch> <remote_repo>`

If an existing repository and not a new clone always execute the below to get all changes to local system

- 1) `git pull`

Check all the active branch in your repository

- 1) `git branch -a`

Below Hello and main are local branches and the rest in **red** are remote (which we r not supposed to use)

```
((base) pratiksannakki@Pratiks-MacBook-Pro git_test % git branch -a
* hello
main
remotes/origin/HEAD -> origin/main
remotes/origin/hello
remotes/origin/main
(base) pratiksannakki@Pratiks-MacBook-Pro git_test %
```

Note - On Mac as soon as you clone the repo you don't see other local branches apart from main (even with git fetch). Just git checkout <branch name only (eg. hello)> it will auto create.

```
Last login: Tue Nov 29 00:39:48 on ttys007
(base) pratiksannakki@Pratiks-MacBook-Pro git_test_1 % git clone https://github.com/Pratik-Prakash-Sannakki/git_test.git
Cloning into 'git_test'...
remote: Enumerating objects: 16, done.
remote: Counting objects: 100% (16/16), done.
remote: Compressing objects: 100% (7/7), done.
remote: Total 16 (delta 1), reused 7 (delta 1), pack-reused 0
Receiving objects: 100% (16/16), done.
Resolving deltas: 100% (1/1), done.
(base) pratiksannakki@Pratiks-MacBook-Pro git_test_1 % git branch -a
fatal: not a git repository (or any of the parent directories): .git
(base) pratiksannakki@Pratiks-MacBook-Pro git_test_1 % cd git_test
(base) pratiksannakki@Pratiks-MacBook-Pro git_test % ls
README
(base) pratiksannakki@Pratiks-MacBook-Pro git_test % git branch -a
* main
  remotes/origin/HEAD -> origin/main
  remotes/origin/hello
  remotes/origin/main
(base) pratiksannakki@Pratiks-MacBook-Pro git_test % git checkout hello
branch 'hello' set up to track 'origin/hello'.
Switched to a new branch 'hello'
(base) pratiksannakki@Pratiks-MacBook-Pro git_test % git branch -a
* hello
  main
  remotes/origin/HEAD -> origin/main
  remotes/origin/hello
  remotes/origin/main
```

Updating current branch and pushing changes to main

- 1) git add . //adds changes
- 2) git commit -a -m "<add a message here>" //adds a tag msg associated to changes
- 3) git status //to check if changes being made
- 4) git push //pushes your changes to current branch

Note - Now in UI create a pull request and merge the request (also check the commit by clicking on them if the changes have gone in)

Updating local branch with changes from main

- 1) git checkout main //switch to main branch
- 2) git pull //pulls changes from remote main to local main
- 3) git checkout <local branch name> //switches to local branch
- 4) git rebase main //takes changes from local main n adds it to current local branch

Note- if issues come up in push and pull append it with -f to force pull and push