Remote repository:

Remote repository providers.

GitHub

GitLab

Bitbucket

AWS,

Azure

Google cloud etc

Push the code from local machine to remote machine.

Steps

1. Create the remote repository in git hub account.
2. In local machine create folder.
3. Then create any type of file with sample contents.
4. Then open the command prompt or terminal inside a folder.
5. **git init**
6. **git add .**
7. **git commit -m "commit message"**
8. **git branch -M main**
9. **git remote add origin URL**
10. **git push -u origin branchName**

   if you do any changes in local repository repeat below command to push new changes in remote repository
   1. **git add .**
   2. **git commit -m "new commit message"**
   3. **git push -u origin main**

if you want to download any public repository in your local machine

open the command inside a folder

git clone URL

next time you need any new changes to download in existing clone repository

move inside repository folder using cd or any other way.

git pull

To download public repository from github into local machine you need to execute below command

git clone URL **:** it download public repository in local machine.

Clone is use to download fresh copy into local machine.

git pull **:** it pull new changes done in remote repository to local machine.

This command must be executed inside clone repository.

If you want to do any changes in clone repository. Don't do inside main or master branch(default branch). Create user defined branch using below command

Your command prompt inside hello_repository

Create the branch

git branch branchName

git checkout branchName

do some modification in any file and add and commit.

If you want to get new changes in clones repository. Switch to main or master branch and git pull

(changes in user defined branch and pull must be master or main branch).

If you want to get new updated from remote repository. You need to switch to main branch using command as
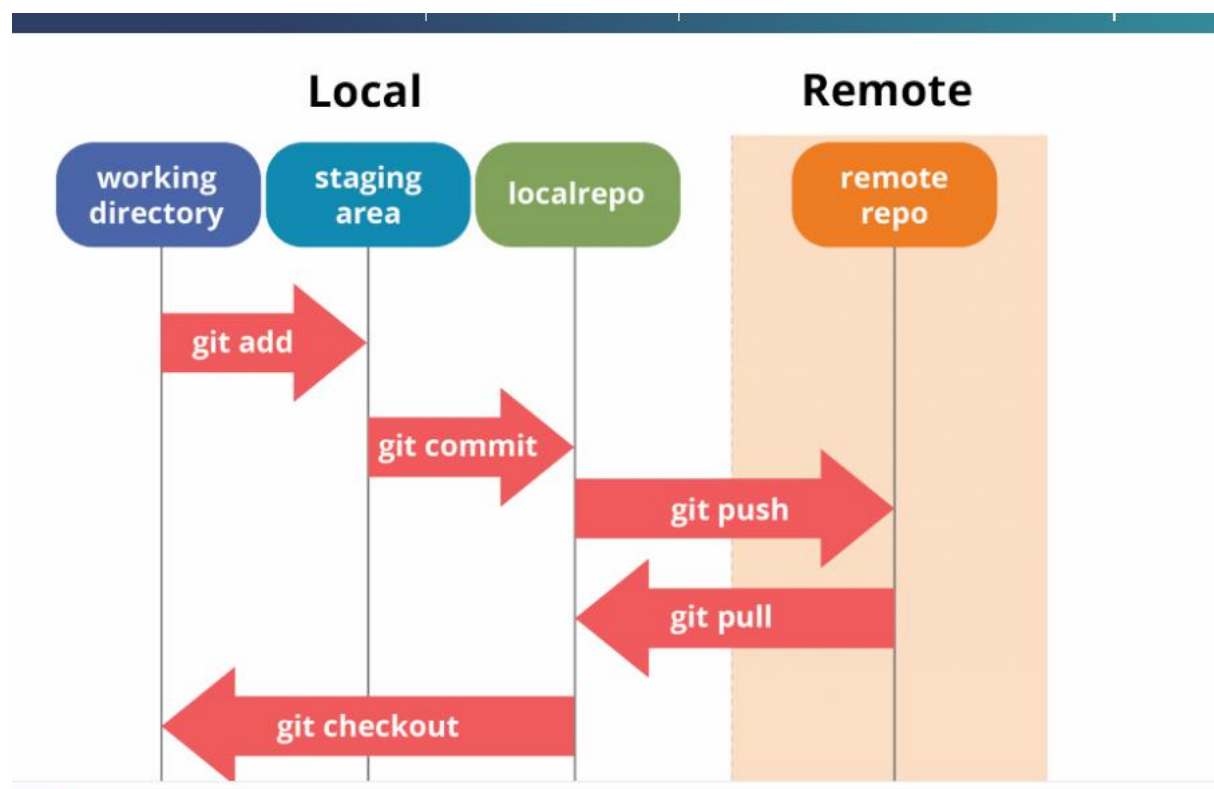
git checkout main

git pull

git pull vs git fetch

git pull it pull new updates from remote to local and merge the code in local repository.

But git fetch it pull only doesn't merge to local repository.

git commit -m "commit message"

git provide unique id for each commit. Using that commit id we can move from one pointer to another pointer. Like undo or re-undo

to check all commit details in particular branch

git log

HEAD which refer to last commit.

git reset --hard commitId

get the contents from deleted branch

creating and switch in new user defined branch you can run below command

git checkout -b feature_branch

git reflog   : it show all actions details like checkout, delete, commit etc.

using below command you can revert back deleted branch code in temporary branch

git checkout -b temp_features_branch ea8db26

temp_features_branch   new branch to hold deleted branch code

ea8db26   action id which we retrieve using git reflog