

Git Introduction

Sunday, August 28, 2022 11:03 PM

1. **pwd** :--- present working directory
2. **git config --global user.name "anurag"** :--- set username
3. **git config --global user.email "anuragkumargupta02@gmail.com"** :--- set email
4. **git config user.name** :--- show username
5. **git config user.email** :--- show email
6. **git status** :--- this is used to see the status of git repo whether everything is commit or not or what things I need to commit etc.
7. **git init** :--- to initialize the a folder as a git repo
8. **git add --a** :--- to add all file in staging area for commit
9. **git commit -m "message for commit"** :--- used to commit the changes
10. **git log** :--- used to see the previous commit
11. **rm -rf .git** :--- this is used to delete all the content of the specified folder or file here folder name is .git
12. **git clone URL name(name is optional)** :-- used to clone the code base in local repo hosted in the given URL and want to save this code base in local by giving a name or if we do not give the name then it is clone as same name which is present in the URL
13. **touch filename.txt** :--- create blank file of given name ex : touch error.txt
14. **.gitignore** :--- in this file we mention the file name or directory name which we want to ignore means not want to store in the git repository.
15. **git diff** :-- is used to compare working directory and staging area
16. **git diff --staged** :-- is used to compare purana git commit with present staging area
17. **git commit -a -m "message"** :--- this command is used to direct commit the file in git repo skipping the staging stage
18. **git rm fileName.extension** :--- used to delete file from git and do commit after it will remove file first from local git repo after that it is commit to the git
19. **git mv oldfilename newfilename** :--- rename file name
20. **git rm --cached filename** : --- used to untrack the file
21. **git log -p** :--- it show details like who when and what changes are made in previous times
22. **git log --stat** :- give the compressed summary of changes
23. **git log --pretty = oneline**
24. **git log --pretty = short**
25. **git log --pretty = full**
26. **git log --since=2.days/months/years**
27. **git commit -a -m** :--- used to append the changes with existing commit
28. **git restore --staged fileName** :--- used to unstage the files from the staging stage
29. **git checkout -- filename** :--- this command is used to undo the changed or back to previous commit for a particular file it restore the previous file and remove the current changes
30. **git checkout -f** :--- it is used to back to previous commit and lossing all the current changes including all file and folders
31. **git restore filename** :--- used to undo the specific file chnages

Git Remote :-GIT HUB

32. Shift + insert se gitbash mai paste hota hai
33. Git remote add origin url (remote git repo add)

34. Git remote -v

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SETUP GIT HUB

setup remote repo means create an account in git hub site and create a repository in git hub

Step1. First create git repository in local

Step2. open git bash in the local repository

Step3. run this command in local repo this command is given by github repository only

" git remote add origin <https://github.com/anuraggrd/gitTutorial.git> "

Here origin is the alias name of this url. You can alias name as per your choice

Step 4. git remote -v

Step 5. git push -u origin master

Step 6 how to generate SSH key

go to this url here all the details are given

<https://docs.github.com/en/authentication/connecting-to-github-with-ssh/generating-a-new-ssh-key-and-adding-it-to-the-ssh-agent>

Pub key is saved in : - Your public key has been saved in /c/Users/dell/.ssh/id_rsa.pub

Steps to generate pub key all commands are line by line

```
ssh-keygen -t rsa -b 4096 -C anuragkumargupta02@gmail.com
```

```
eval "$(ssh-agent -s)"
```

```
ssh-add ~/.ssh/id_rsa
```

```
tail ~/.ssh/id_rsa.pub
```

Now put the key generated by above command into git hub new ssh key

36. git config --global alias.ci commit :-- this command is used to create the alias of existing command

- a. We can shorten any command according to our convenience example
- b. I want to use git st for in place of git status
- c. For this we have to create an alias of status command
- d. Like git config --global alias.st status

37. git checkout -b develop :-- this is used to create new branch in local and enter into it

38. git checkout branchName :- switch from one branch to another here branchname show which branch you want to go

39. git branch :-- shows the no. of branches present in local repo

40. git merge branchName : - this branchName is name of branch from where I have to bring the change to present branch

41. git branch -v :-- used to show commit of all branches

42. git branch --merged :-- already merged branch

43. git branch --no-merged :-- already not merged branch

44. `git branch -d develop` : - used to delete the branch : here develop is name of the branch which is going to delete
45. `git push origin develop` :-- this will push the develop branch of local to remote server that is git hub
46. `git push origin master` :--this will push the all change of master branch to the hithub master branch
47. `Git push -d origin deblop` :- this will delete the deblop branch from remote or in hithub site
48. **Git reset --hard HEAD^** :--- suppose we do a wrong commit and want to undo this or remove this commit with all the changes are also remove
49. **Git reset --soft previousCommitCode** :--- suppose we do a wrong commit and I want to go back to previous commit but the preset change will still present than we do this command
50. **git pull** :--- bring all the changes from remote to local
51. **git push** :--- bring local changes to remote