

## IMPORTANT DISCLAIMER

Valued Reader,

Welcome to DY Notes Cloud! This website features my personal handwritten notes, which I have meticulously researched and compiled. These notes can be helpful for you as well. However, please be aware that while I strive for accuracy, I cannot guarantee that all information is completely error-free. Engineering is a complex and ever-evolving field, and there may be inaccuracies or outdated information within the notes.

I strongly encourage you to conduct your own research and verification when using this material. The content on this site is meant to be a supplementary resource, and I cannot take full responsibility for any inaccuracies or errors that may occur.

If you have any questions, notice any errors, or would like to contribute to DY Notes Cloud, please feel free to reach out to me via email or through my social media channels. Your feedback and contributions are highly valued, as they help improve the quality and accuracy of the notes provided.

Thank you for visiting DY Notes Cloud. I hope you find these notes helpful in your studies. Let's learn and grow together!



Diwate Yash



Content editing Partner



## Index

What is Git

(1)

What is Repository

(2)

What is Github

(3)

Setting up Git

(4)

Github Workflow

(5)

Clone

(6)

Add/commit/push

(7)

Git status

(8)

Branch

(9)

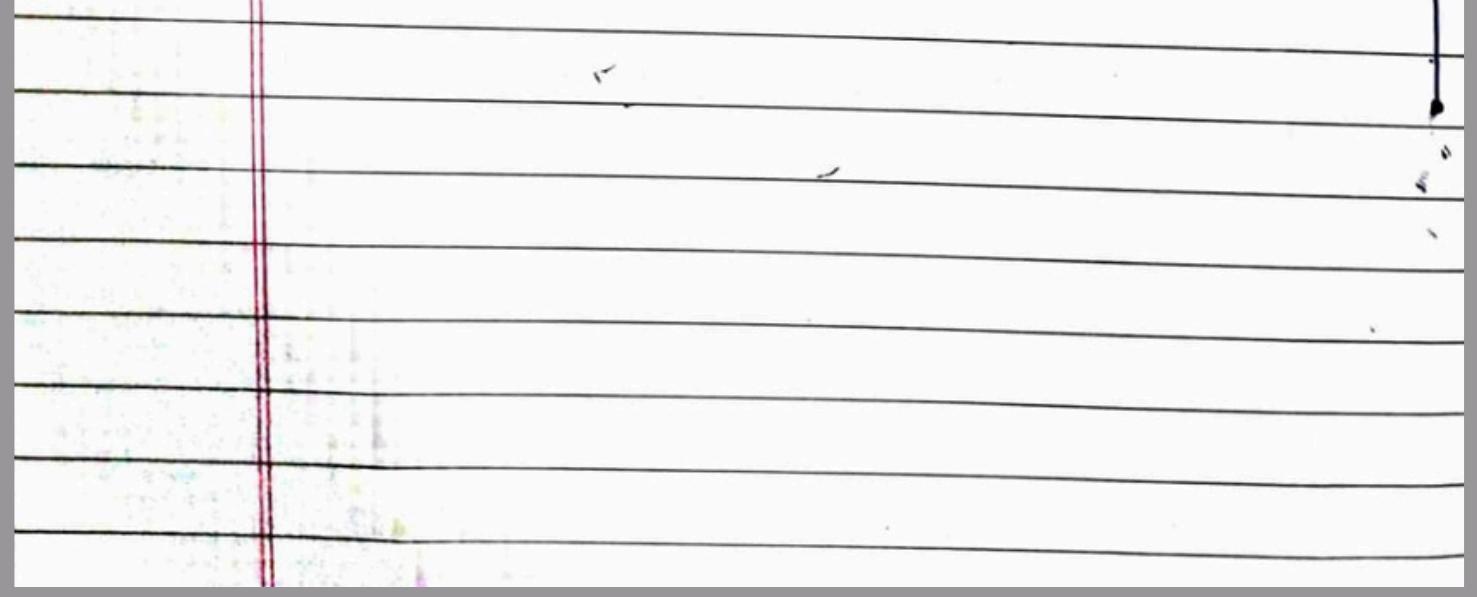
Merge

(10)

push pull

(11)

Fork



26/07/24

## Git and GitHub

- Yash Diwate

### What is Git

- Git is an Version Control tool essential for software development
- It help manage change to code track revision and collaborate with other

Git Allows each developer to have copy of project history on their local machine

### What is Repository

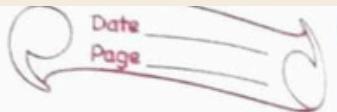
Repos is a folder uploaded on Git hub

There are Two types of Repository

Local Repo - folder stored on Local PC

Remote Repo folder stored on Github or Server

(1)



## Some basic commands of Git

To check Version	git --version
Clear the terminal	clear
To check Working directory	pwd
To Change Directory	cd
To List files	ls
To List hidden files	ls -a
To Make Directory	mkdir

Notes cloud By

DY

Personal Notes Digitally Delivered

## Every Commands of Git

Command	Description
git --version	To check Version of Git
git init	To initialize Git Repository
git config --global "User.Name" "User Name"	To config e Username
git config --global User.email	To config email
git clone [URL]	Retrive an entire Repository
git add [File]	Stage a file for Next commit
git reset [File]	Unstage a file while retaining
git status	Show modified file in working directory

Command	Description
git diff	Show changes Not yet staged
git commit -m "Des mess"	Commit staged content
git branch	List branches
git branch [branch Name]	Create a new branch
git checkout [branch]	Switch to another branch
git merge [branch]	Merge branch into current one
git log	Show commit history
git remote add [url]	Add a Git url

③

Command	Description
Git fetch [alias]	fetch branches from a remote
Git merge [alias]	merge changes from a remote branch

**Notes cloud By  
DY**

Personal Notes, Digitally Delivered



## Steps to Add folder on Git hub Repository

- 1) Make Github Repository
- 2) Make folder or open existing folder on Laptop
- 3) Clone the repository  
- Copy Link of Repo  
In Terminal  
    Git clone < Link >  
After Adding Code Use
- 4) Git Add .
- 5) Git commit -m " "
- 6) Git push origin Main

Personal Notes, Digitally Delivered

classmate

Date \_\_\_\_\_

Page \_\_\_\_\_

## What is Github

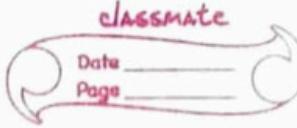
- Github is a platform which is used to store repository
- It is also used to host our project
- It provides graphical representation or interface for managing repos

Git → Version control system  
(Tool)

Github → A platform for hosting Git repository

Personal Notes, Digitally Delivered





## Setting up Git

Very first step to start Git is Configuring. We have to do:

- 1) Configure username
- 2) configure email

`git config --global "User.Name  
"Nano"`

`git config --global User.email  
"email"`

To Create repository using Terminal

- Initialize a repository

`git init`

- To Add remote repository to local repo  
Github folder → Local

Git Remote Add origin  
Command is use

(3)

- To Verify the remote

Git Remote -v

## Github Workflow

### 1) GitHub repository

- Create Repo on GitHub

### 2) Clone the repository

- Using Git Clone  $\leftrightarrow$  Link Comm you can create a local copy of your GitHub Repository

### 3) Make changes

- Edit files Add features etc

### 4) Stage Changes

- Using git Add command get prepare to publish on GitHub

### 5) Commit Change

Git Commit -m "message" Create Snapshot of project



6) push to Github  
To push committed change in Github use Git push origin main command

(you can change branch Name that is main to Any branch)

Repeat steps from 3 to 6

## Notes cloud By

### Basic Commands of Github

Personal Notes Digitally Delivered

#### Clone:

This creates a local copy of remote Git repository on your computer

Git Clone < Repo link >

#### Repo links

You will find Repository in github Repo - Click on code -- Copy -- HTTPS link

(5)



Add and commit

Add

This is used to prepare file to staged

Staged - Temporary Git that is

This is a change i have made

Git Add

Git add . filename

**Notes cloud By  
DY**

Commit

Personal Notes, Digitally Delivered

It tracks or save record of change made

Commit → Ok This is changes

Git Commit -m " message "

push

Send Changes to git hub

Git push origin main



## Status

To check Status like which file is modified Staged or Untracked

## Git status

Command is use

Type of message you will encounter after Scring Status

Untracked → New file which is Not on github

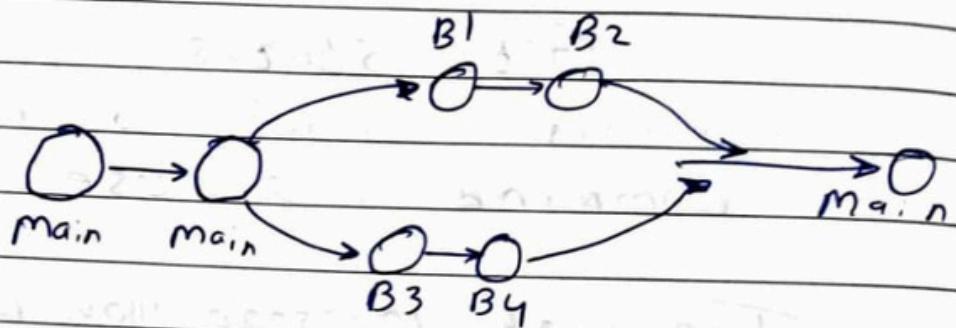
modified → Changes in file which is already exist on git

Staged → file is ready to commit

Unmodified → file is unchanged

## Branch

Branches allows to work differently on different device without changing on main code



**Notes cloud By**

**BDY** Branches

Personal Notes Digitally Delivered

List All Branches

git branch

Create a New branch

git branch <branch name>

Switch to a different branch

git checkout <branch Name>

Create and Switch to a New branch

git checkout -b <New branch Name>

(8)

Rename current branch  
git branch -m <new-branch-name>

Delete branch  
git branch -d <branch-name>

Merging of branch

After creating different branches once work on every branch finishes To merge every code block into main code

**Notes cloud By DY** Git merge <branch-name>

Personal Notes Digitally Delivered

(Easy way to merge code or branch is creating pull request on Github platform)

Pushing and pulling  
To make change in Github or, To take changes from Github  
push pull use

⑨

push changes to main branch  
git push origin main

Upload Local Commit to Main remote

Pulling changes

git pull origin main

Fetch changes from Github on local

Merge conflict

While Two peoples working on same code and after merge conflicts occur

To resolve this conflict we need to undo changes

Undo stage changes

git reset Head <file>

(10)



Reverting Commit  
git revert Commit

What is fork

Fork is personal copy of  
Someone else project that  
is existing on Github account

- It allows you to make changes  
freely without affecting  
original project

**Notes cloud By  
DY**

Personal Notes, Digitally Delivered



# Thank You

## Notes cloud By DY

Personal Notes. Digitally Delivered

