



git

ESSENTIAL GIT

COMMANDS

www.blacksnwhite.com



What Is Git ?

Git is a tool that helps developers work together on software projects.

It keeps track of changes in the code, making it easy for multiple people to collaborate without messing things up.

Git manages your code version, and GitHub provides a platform for you to store, share and collaborate on those versions with others.



Clone :- Cloning a repository on our local machine

```
git clone <repository_url>
```

Init :- Initialize a new Git repository

```
git init
```

Version:- Displays the installed Git version

```
git version
```

Status:- Displays the state of the code

```
git status
```



add:- adds new or changed files in your working directory to the git staging area .

```
git add <- file name ->
```

```
git add. //adds all
```

commit:- It is the record of change .

```
git commit -m "some message"
```

amend:- Changes to the most recent commit |--

```
amend -m "New Msg"
```

```
git commit --"amend"
```



remote:- Add a remote repository

```
git remote add origin <repository_url> | git remote -v // to verify remote
```

branch :- independent line of development

```
git branch -v // to check branch
```

```
git branch -M <name> // to rename
```

```
git checkout <b-name> // to navigate
```

```
git checkout -b<name-b> //create new
```

```
git checkout -d<b-name> // Delete b
```



push :- upload local repo content to remote repo |  -

u upstream

```
git push origin <branch> or main
```

pull:- Featch and merge chsnge from a remote repository

```
git pull origin <branch> or main
```

diff:- to compare commits , branches , file and more

```
git diff <branch_name>
```

log:- Display commit history

```
git log
```



Undoing Changes:-

Case 1: staged changes

```
git reset <file_name>
```

```
git reset // Reset all
```

Case 2: committed changes (for one)

```
git reset HEAD~1
```

Case 3: committed changes (for many)

```
git reset <commit-hash>
```

```
git reset --hard <commit -hash>
```



merge :- Merges one branch into another | with 2 ways

1. Using the git merge command

```
git merge <branch_name>
```

2. Using pull request (GitHub)

untracked : new files that git doesn't yet track

modified : changed

staged : files is ready to be committed

unmodified : unchanged

