Git with Jadi---->

What is git???git is VCS Build by Linux Torvalds

->Git is a free and open source distributed version control system designed to handle everything from small to very large projects with speed and efficiency.

Project->Directory->new folder->final->the new and new

->if you mistake and go back and change something or we have tow programmer of the project then Git with meaning of distributed version control system help us.

(change the something in project)->for example->

In project V2 we have Bug the you can with Git go to V1 project and change the code and continue in V2 project in idiom language of Git merge the changes in project V1 by V2

You can with git change the project and merge the other project that the second project develop another person and if you work as team on one special project you can see one person change or push or merge something.

Download Git--> go to <a href="https://git-scm.com/">https://git-scm.com/</a> and if you windows or mac download from site

If you linux

- -->Debian--->sudo apk-get install git
- -->rpm or fedora--->sudo dnf/yum install git

Sessoin2

Point--->git is program that see the file and decided for it

Go to file by terminal or cmd

For example

cd /tmp

#make directory

/tmp mkdir project

cd project

project git init

→git init

Initialized git repository

How see inside the git by CLI or Terminal

Is -Itrha

what is git status???

Give us status of git

For example-->Initialized commit

Point--->if you change something in project the changes go to stage status and prepared to commit.

What is untracked file??

If you new file or something in file project of git and then you git status from the project file you hit that concept of Untracked file---->this is meaning that git don't follow this file until you change that.

For example -->you build as index.html file in project direct first you see git initialized commit file directory of project but don't follow.

How can I add the index.html to git to follow this file???-->

git add new file

git add index.html

point--->if you add something in git the status show you change to committed it means the changes in stage mode and don't commit until you change status.

How change the status from stage to commit?

---->git commit -m 'massage to another person who can see the Log'

Point → better you first go to stage and then commit by massage

Important point???

If you commit and then change the new file in project for example index.html and you git status you can see from that order show you have commit file before and now you modified something in project and tell you add the modifier and then commit that.

git add "modifier file"

for example---->

git add "index.html"

what is happening if you ordered git add -A??

git add -A

--->accept all file in the project in directory if the modifier or not and go to stage mode

Point → if you add and sure the modifier the commit the changes.

```
What is git log order?
git log
show the log of git and the massages and show the unique number for each commit.
Session3
Point--> you have 3 new file in pergoct in directory in git and is Untracked
and his name is pag1,2,3.html
you can ordered by git add "page*" alter the -A
and then commit by massage and if you have modifier something
git add -A
git status
point-->the ordered of git status is order that you can see the status and kind of help you how to work
with your file in your git
git commit -m 'something massage"
git log
session 4
what is diff Head in git how working??
git diff HEAD
→show you the git (disk) where is it (show the header of the git by stack).
For example you have modifier file in project directory in git.
If you git diff head-->show you the header the git and show your file as
---a/index.html ---->before modifier
+++b/index.html --->after modifier → the header of git is this here
@@ -1+1,2 @@ \rightarrow show what's changes in line
what is diff Head --stage in git how working??
git diff HEAD --staged
--->if you change and modifier the file and (git add -A) and don't sure about changes to stage mode
You can sure about it and check without problem which head of git and show you changes in stage
mode.
How can I reset the stage mode to before(normal) stage status??
git reset file
```

→ the file that you put on your stage mode to before stage. For example: git reset page3.html how can I reset and Never mind all the changes of file? git checkout - file for example → git checkout - page3.html --->get the git before all changes and last commit. Session 5 Talk about branch!!!!! In the gate, you usually want to move in a line, if we move in the form of branches, a concept is created in the gate called branches. Branch is usually merge in git on each project. We work on another branch and then complete the project this branch merge it an original line and continue on line. Point!!!!!--> the name of original line and original branch is Master. How can I show all branch in git?? git branch how can I create branches?? git branch (branch name) for example---> git branch fixpages how can I move from original branch to another branch??? git checkout (other branch name) for example git checkout fixpages git branch

\*fixepages

What is ohmyzsh?? Show me where I 'm in branch. The of changing the changes of another branches and merge in original master branch 1-create the file or choose the file project in project directory in git 2-git branch 3-git checkout (another branch name) 4-git add file 5-git commit -m 'new file in brache' 6-git branch 7-git checkout master(original branch) Point-->the file in git directory in another branch and doesn't show us 8-git merge (another branch name) Point→show us the file in project directory What is the git merge? Merge whole project the branch and other project in original line of branch or another branch. git merge (another branch name) session 6 lined the file when the git your file in another branch and git keep it that you can see as lined index . already git keep in directory until you merge the master and doesn't show you. How can I delete file from git and my project directory in git??? git rm (file name) for example → git rm footer.html how can I see in the file (in linux)?? cat (file name) how can I delete the branch? git branch -d (branchNmae) for example → git branch -d fixepages

```
session 7
```

look at the remote and distributed

go to store by your remote for example bitbucket or github or git lab and clone the url and git clone (url of the place you want to remote)

git push (url)-->

the whole your commit in your project push in your place of your repository in your remote

point-->As default when you remote of url from site the branch is origin

how can I whole my project pull the master to origin??

git pull origin master

point-->if you automatically push/pull to remote

git push -u (url)

session 8

what's the order of git remote??

there is tow way to clone and push first session 7 I told ,Tell him whole name and branch and url and the remote by hand

git remote add origin (url)

the url maybe https or http

how to completely information to me by verbose?

Git remote -v

Busuness of the aoyo\_merge

If you commit and working on specific project and directory and another commit and push on project the you work it , you can not push and hit auto-merge-->it means first pull and the push and go to problem

git add file.html

git commit -m "change"

another

git add file.html

git commit -m "change2"

-->don't allow to push and hit the auto-merge

-->git pull origin master

```
As default-->git merge master(branch you work and master another work)
How can I solve it??
--->you should see the head of changes
Vi file.html
=======
<<<<<hr/>head
Definition
>>>>>>>>>>>3435r25t432r53
You should delete the symbol header and number and solve conflate
Seesion 9
What is tag in git??
Tag whit annotate give us the version of and control the whole version if I change I don't go the last
commit
git tag -a v1 -m 'firs tag'
۷1
How I build tag from my old commit
git log
Number of log of commit
git tag -a v2 4141365
If I had many tags hoe search it??
git tag -I "v*"
example-->show me the tag with name start by v
how can I show my commit or my tags??
git show v1
point-->if you tag don't change and by default push anything if you tell git push your tag!!!!!!
git push origin -- tag
point-->you can checkout the tag
git checkout v1
```

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session 10
digital signature by cryptography in git in each commit
pgp==gpg-->pretty good privacy(cryptography with key(public and private)
gpg-->free software company it's origin by pgp
first install package gpg
how create key??
gpg --gen-key
name:??
address email:??
--> then click ok
Password:??
Keys id create(:
gpg --list-key
how create digital signature??
I have git config as global it means by default have user.name
git config --global user.name
-->example-->jadi
First show your signature digital key
gpg --list-secret-keys --keyid-format LONG
example-->
sec rsa34/35F2C45B435R63E
gpg config –global user.signingkey 35F2C45B435R63E
how can I setup for tag use signature digital???--->instead of annotate sign
git tag -s v1 -m 'mareza'
git show v1
how can test and figure out sing by me??
git tag -v(verify) v1
how can I setup for commit use signature digital???
git commit -S -m 'change'
```

## point -->if your team one of them sign all of them sign else you gonna be in trouble

session 11

help and blame and search in commit for destroy bug

git help blame

//help me for blames

who is blame and bad change in project??

git blame filename.html(name) -L8,10(Line(8,10)

how can I binary search tree in git in commit and figure out the bug and destroy it?

git biscet start

git biscet bad(situation start of search line)

or--> git biscet bad(situation start of search line) 816546551464(number of commit)

git log

git biscet good 41346134136487(number of commit)

session 12

what is forks and what's different by clone??

Fork usually cloud base!!!!!

A fork in Git is simply a copy of an existing repository in which the new owner disconnects the codebase from previous committers. A fork often occurs when a developer becomes dissatisfied or disillusioned with the direction of a project and wants to detach their work from that of the original project