

Go to AWS (setting up cloud server for GIT)

search service → EC2 (virtual server in cloud)

then → launch instance (coz mujhe apna server/instance banana hai)

Name my-git-server

Amazon Machine Image (AMI)

Ubuntu

Architecture → 64 bit

Spiral

Instance type →

t2.large or t2.medium

Key pair create करना होगा

→ Jissey mei SSH kar sakta hai

name
→ git
key pair type

RSA
private key file format
.pem

create key pair

Now Automatically

git.pem → file
download ho jayegi

without this we can't able to do SSH
(secure shell)

Now

Launch Instance

Go on Instances

my-git-server

Instance ID
i-0cb8a2b

Running

click

After that
connect it

Connect to instance

EC2 instance
connect

session
manager

SSH
client

is key like

hannary pass certificate hai

Configuring GIT Server

~~cd~~ cd Download

ls

git.pem

chmod 400 "git.pem"

yei vo cloud pei hoga
issey ham isey
permission dene hai

ssh -i "git.pem" ubuntu@ec2-13-201-104-37
ap-South-1.compute.amazonaws.com

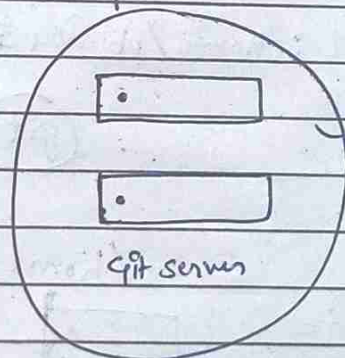
that means
SSH karo using this file → address
of our machine

Then He ask
do you want
to add that
SSH machine

→ Yes

then Ham ubuntu ke inside hayerge

ubuntu@ip-172-31-12-94:~\$



mejhe is key ander
git ko setup karna hai

public apni
machine ko update
karlete hai jitney
bhi packages and all repos

sudo apt update

git install karke

sudo apt install git

git-version

who am i

~~ubuntu~~ ubuntu

abhi ham ubuntu
user ke ander hai

(WE HAVE TO MAKE git USER)

Local codespace

clone Date.....

git@github.com:prigarth-dev/review

yei hamari
machine ka
address hai

This is
our user

So we have to
make user named git

sudo adduser git

New password : write password
here

iske baad merse
git user bann
chuka hai

sudo su git

switch
user

git@ip-172-31-12-94:/home/ubuntu\$ who am i

git user
bann chuka hai

cd ..

/home\$ ls

ubuntu git

cd ..

git@ip-172-31-12-94:/\$ ls

bin	dev	home	lib32	libx32	media	opt	root
sbin	srv	tmp	var	boot	etc	lib	lib64
mnt	proc	run	snap	sys	usr	lost+found	

Spiral

mainly used path

Date.....

/var/lib/git/

Yes we can set up git server outside the '/var/lib/git/' path

Here we keep mainly repos

Chat gpt if you want to know more about this

But mainly this path follows coz of

- security consideration
- Backup & maintenance
- Performance & storage

```
cd var/  
cd old  
ls
```

backups	cache	crash	<u>lib</u> *	local	lock	log
mail	opt	run	spool	tmp		

```
cd lib/  
ls
```

}
}
}
}

```
cd git/  
ls
```

nothing here

→ so here we will make our repos

make directory

Date.....

`mkdir my-review-app.git`

`mkdir: cannot create directory 'my-review-app.git':
Permission denied`

(aapke paas permission
nahi hai yaha pei kisi
bhe type ke file ya
folder bananey ki)

then i will press

`(Control ^ + D)`

Issey mai wapas ubuntu mai aa jauru

`ubuntu@ip-172-31-12-74 ~$ sudo chown -R git /var/lib/git`

(git user ko
iss particular path
ka access dedo)

`sudo su git`

`cd /var/lib/git`

now,

`mkdir my-review-app.git`

`ls`

`my-review-app.git`

Bann gya

`var/lib/git/myreview-app.git`

.

.

yei khali folder hai

(isey hamney
git repository
panama hai)

Spiral

```
cd my-review-app.git
```

```
git@ip-172-31-12-94: /var/lib/git/my-review-app.git$ git init --bare
```

git init --bare

This means → it tell us

that ki iskey

ander actually mei files

ko store nahi karna hai

only

Version Control

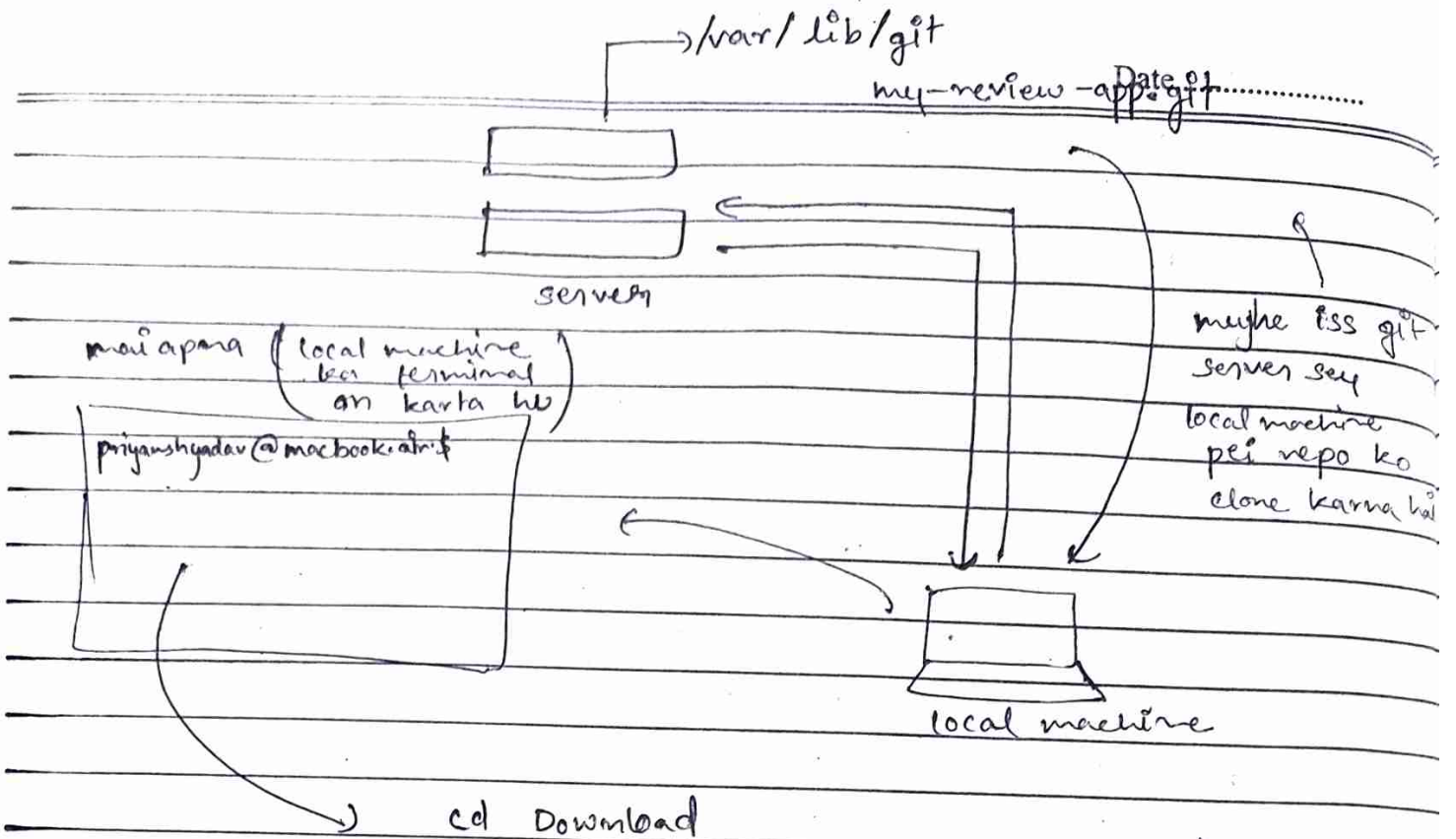
ko track karna hai

↓
iss command mei
yei kiya hai ki isney hamney
'master' branch bana ke di

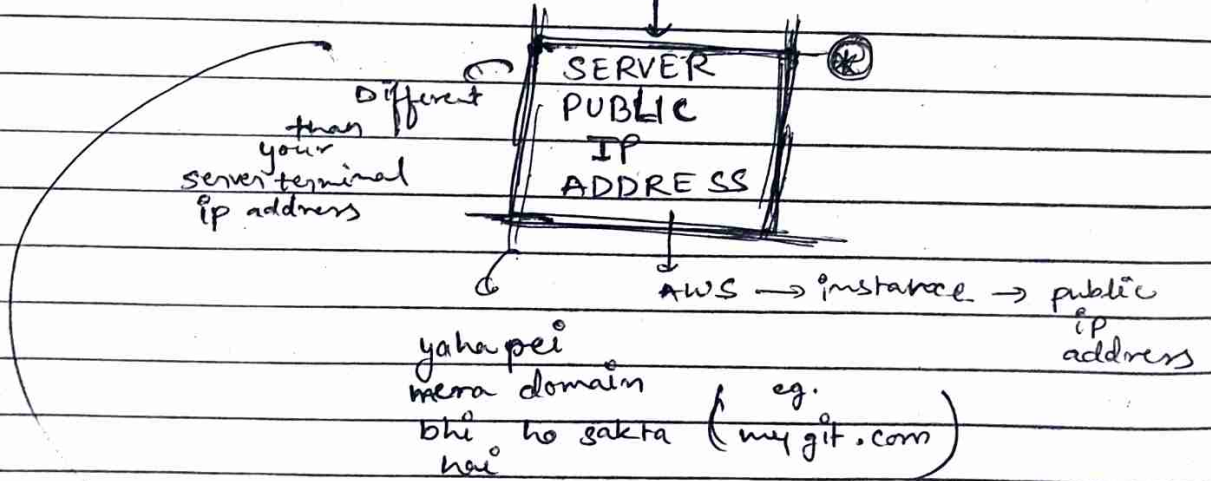
ls

HEAD	branches	config	description	hooks	info
objects	refs				

↓
toh basically yei
meri git repository ban gayi
jissey mai apne version control ko track
kar sakta hu



`git clone git@13.201.104.37:/var/lib/git/my-review-app`



BUT AFTER THIS YOU WILL GET ERROR?

(Please make sure you have the correct access rights and repository exists)

Hua ye ki mainey apni local machine se

`git@1.2.3.4:/var/lib/git/mynewapp.git`

MAI APNA SSH NAHI KAR PAYA

Spiral

Q2 → tab hamney machine connect kiya tha
hamney certificate use kara tha
(git.pem)

&
now ~~bas~~ mai ~~ssh~~ SSH hi nahi kar
paaya reason?

here paas server ka access hi nahi hai

(Now what we do ki local machine
ki SSH key ko ham server mai
add kar denge)

GitHub setting → SSH & GPG keys

.git

generating a
new SSH
key

(Documentation)

← connecting to GitHub using SSH keys

read it & generate SSH key

public

server
terminal

```
/var/lib/git/my-review-app.git$ cd ..
cd ..
cd ..
cd ..
```

```
/$ cd home/git
mkdir .ssh
cd .ssh/
vim authorized_keys
```

↖ yaha insert karke
paste that public SSH key

:wq → (write
quite)

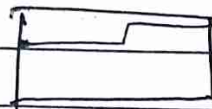
Spiral

now local machine terminal if we

try to clone it then yes we can clone it

~~git~~@ git clone git@13.201.104.37:/var/lib/git/my-review

now ab agar downloads mei jayega



my-review-app

← yei folder hoga
(yei server se)
aaya

→ git remote -v

origin
origin

git@13.201.104.37 : /var/lib/git/

(fetch) **PULL**

git@13.201.104.37 : /var/lib/git/

(push) **PUSH**

using this cmd
we can see

yei kaha se pull
karega & kaha push
karega

code .



issey yei hoga ki my-review-app
hai vo vs code mei khul jayega

then

my-review-app

↳ index.html

<h1> Nice </h1>

vs code Terminal

git add .

git commit -m "this is my first commit"

~~git push~~

~~git~~ git checkout -b "master" *Spiral*

git push
git push --set-upstream origin master

→ agar mai yaha
git log

app.git

commit 2d8b3bc31af9

commit id

yei jo abhi commit
kara uski id hai

git@ip-172-31-12-94:var/lib/git/my-review-app.git \$ cd objects

ls
* 2d 62 93 info pack

cd 2d/

ls

8b3bc31af9

kya yei vo

id hai jo commit hui hai? → Yes *

* index.html

→ make changes in it

<h1> Nice one </h1>

now

git add .

git commit -m "second commit"

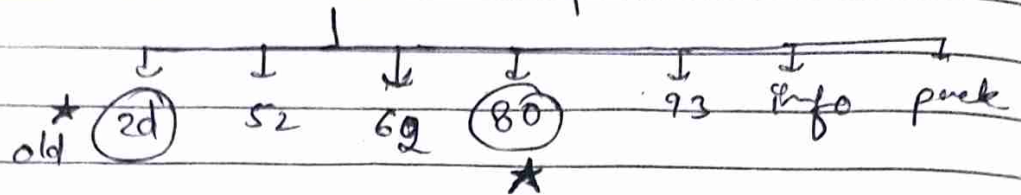
git push

git log

commit 802aee6ef0 ~ Second commit

commit 2d8b3bc31 ~ This is first commit

now agar pahle ki
tarah is kamenge toh



cd ..

cd ..

git@ip-172-31-12-74:/var/lib/git/my-review-app.git\$ git log

same loges as previous
on server

git diff 2d8b3bc31af917725 802aee...

issey yei
pata lag jayega ki
changes kon-konsey
hai!

- <h1> Nice <h1>

+ <h1> Nice One <h1>

Now UI?

git → UI bhi provide karta hai

google search → git web

\$ git instaweb --httpd=webrick

But
this will
show error → Ruby install karo

control ^ + D

ubuntu@ip-172-31-12-74:~\$ sudo apt install ruby

sudo su git

cd..

cd..

cd var/lib/git/my-review-app.git

git instaweb --httpd=webrick

No known browsers available.

http://127.0.0.1:1234

mera ek server chakra hai 1234 ke upar

ab agar ham

public IP of instance : 1234

13.201.104.37 : 1234

yei agar mei search karunga toh
yei nahi chalega (coz



server

:1234

AWS ka jo EC2
instance hai iskey
security groups mei
yei wali cheez
ko allow nahi
kara

instance → security → security group

id of 883b5946b1779ab

click on that

Spiral

now we have to edit inbound rules

Edit

security group rule	Type	Port range	Source
sg-r-0261dcdd	SSH		<u>Custom</u>
	Custom TCP	1234	Anywhere IPv4
	Custom TCP	1234	Anywhere IPv6

Add them

Save changes

toh mainey yei bola ki jo meri machine ka jo port no. 1234 usko publically allow kardo

After 1-2 min

control ^ + D

ubuntu@ip-172-31-12-94:~\$ sudo apt install gitweb

sudo su git

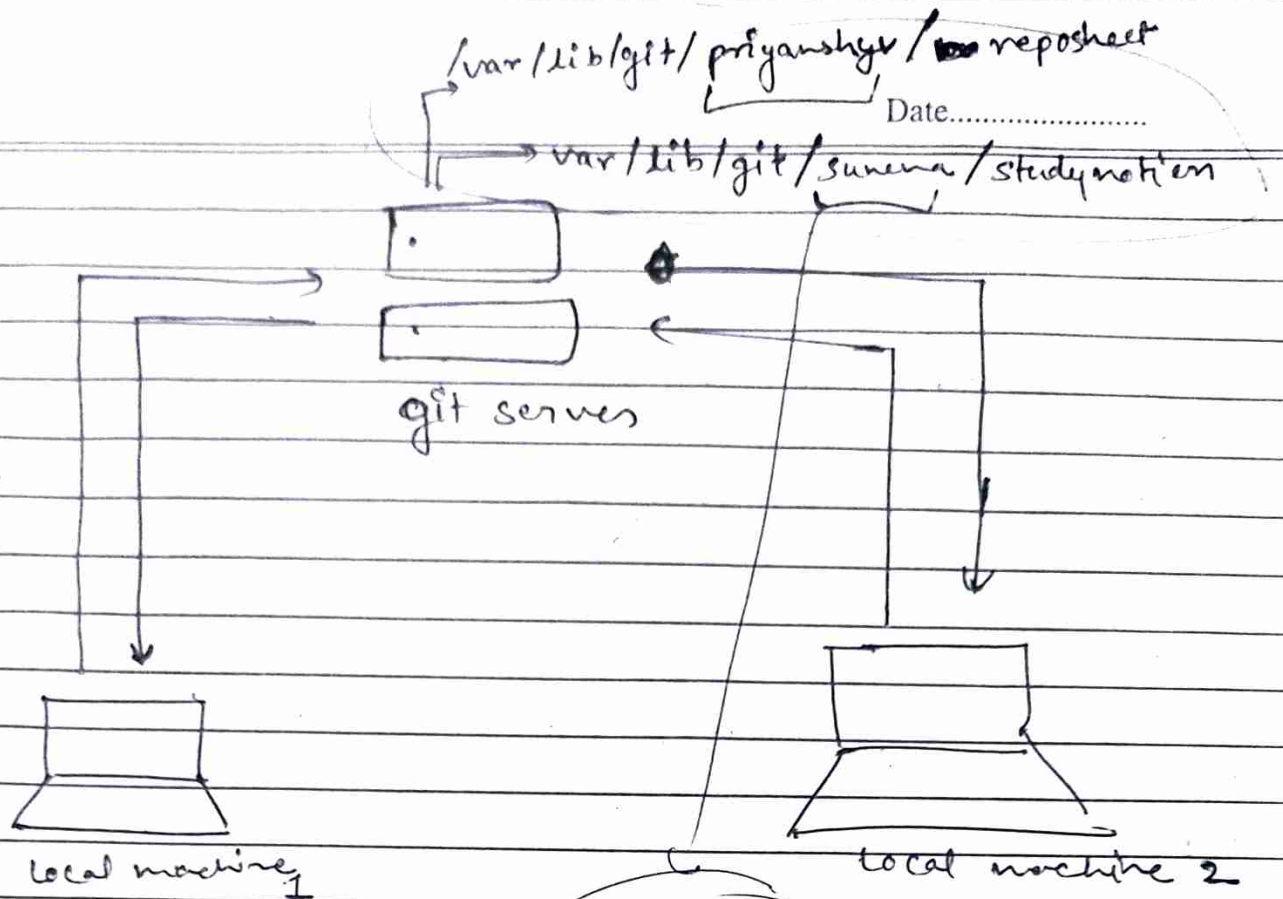
cd /var/lib/git/my-review-app.git
git instaweb --httpd=webbrick

now we can see the UI layer

public IP of instance: 1234

google search it.

you will now see the UI layer



That's how git Hub is working

iskey top pei
yei UI layer
provide karne hai

GITHUB

Project	Description	owner	last change
my-review-app.git			6 min ago

yei UI layer provide karne hai

Head branches

is config

description gitweb

vim description

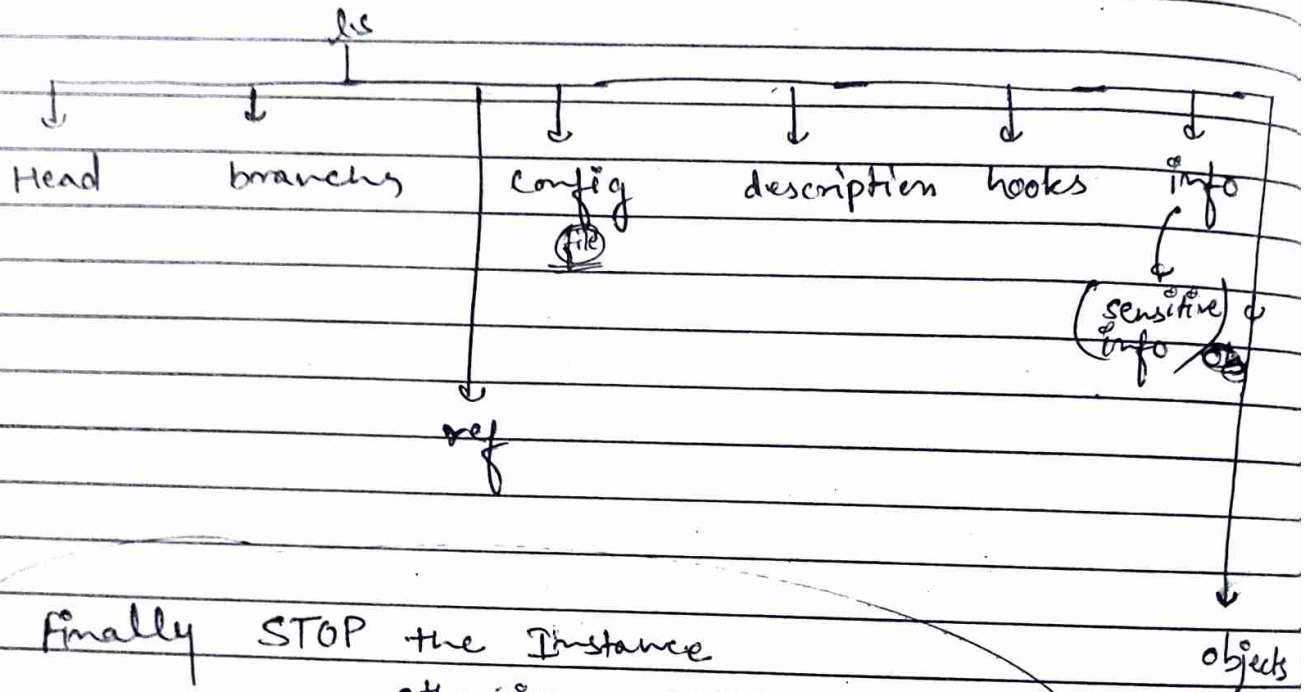
WRITE DESCRIPTION

INSERT
control + c
:wq

Spiral

Date.....

Now you can see description of it



finally STOP the Instance
otherwise BILL sayegon