ASSIGNMENT-9

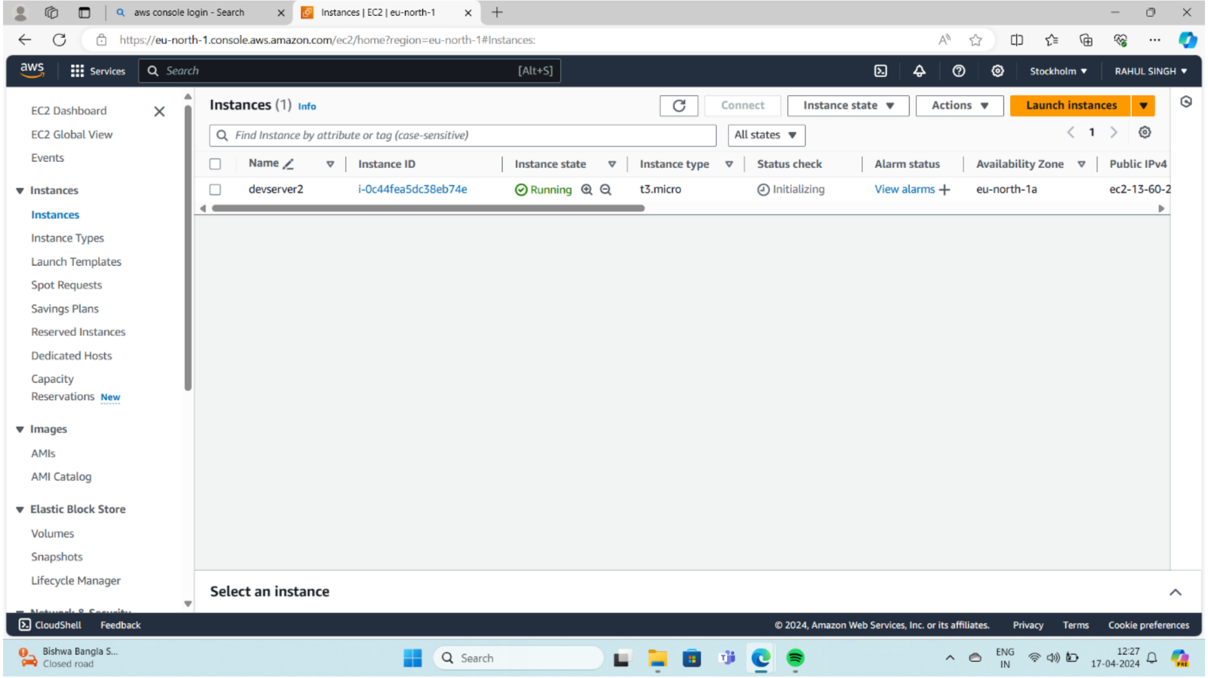
Problem Statement: Deploy a project from GitHub to EC2.

Procedure:

1. Go to GitHub Website https://github.com/ and Sign In to your account.

2. Also, Sign-In to your AWS account.

3. Create an EC2 instance (Refer to Ass7)



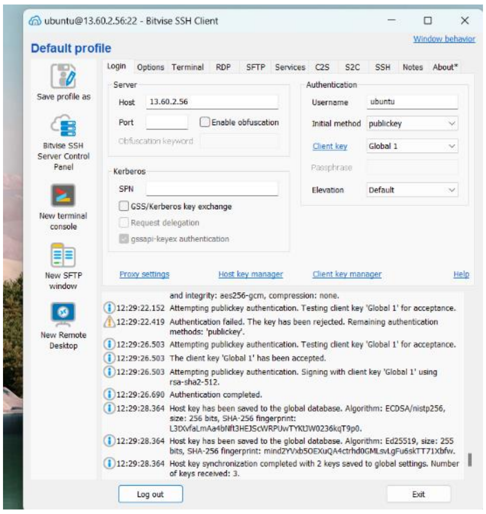
https://eu-north-1.console.aws.amazon.com/ec2/home?region=eu-north-1#Instances:

Instances (1)

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4
devserver2	i-0c44fea5dc38eb74e	Running	t3.micro	Initializing	View alarms	eu-north-1a	ec2-13-60-2

Select an instance

4. Connect the to the instance using the Bitvise SSH Client (Refer to Ass7)



ubuntu@13.60.2.56:22 - Bitvise SSH Client

Default profile

Server
Host: 13.60.2.56
Port:
□ Enable obfuscation

Authentication
Username: ubuntu
Initial method: publickey
Client key: Global 1
Elevation: Default

Kerberos
□ GSS/Kerberos key exchange
□ Request delegation
☑ gssapi-keyex authentication

```
             and integrity: aes256-gcm, compression: none.
12:29:22.152 Attempting publickey authentication. Testing client key 'Global 1' for acceptance.
12:29:22.419 Authentication failed. The key has been rejected. Remaining authentication
             methods: 'publickey'.
12:29:26.503 Attempting publickey authentication. Testing client key 'Global 1' for acceptance.
12:29:26.503 The client key 'Global 1' has been accepted.
12:29:26.503 Attempting publickey authentication. Signing with client key 'Global 1' using
             rsa-sha2-512.
12:29:26.690 Authentication completed.
12:29:28.364 Host key has been saved to the global database. Algorithm: ECDSA/nistp256,
             size: 256 bits, SHA-256 fingerprint:
             L3tXvfaLmAa4bNft3HEJScWRPUwTYKtJW0236kqT9p0.
12:29:28.364 Host key has been saved to the global database. Algorithm: Ed25519, size: 255
             bits, SHA-256 fingerprint: mind2YVxb5OEXuQA4ctrhd0GMLsvLgFu6skTT71Xbfw.
12:29:28.364 Host key synchronization completed with 2 keys saved to global settings. Number
             of keys received: 3.
```

5. Now Click on New Terminal Console option in the Left Sidebar of the Bitvise Client.

6. A terminal window will open and in it type the following commands:-

 sudo apt-get update && sudo apt-get upgrade

(After few steps of progression, in case of any prompts asking (Y/N) press ‘y’ button and then press ‘Enter’ to

continue. At the last stages if a UI appears on the screen, just press ‘Enter’ to continue. After the whole process

is complete enter the next command as mentioned below)

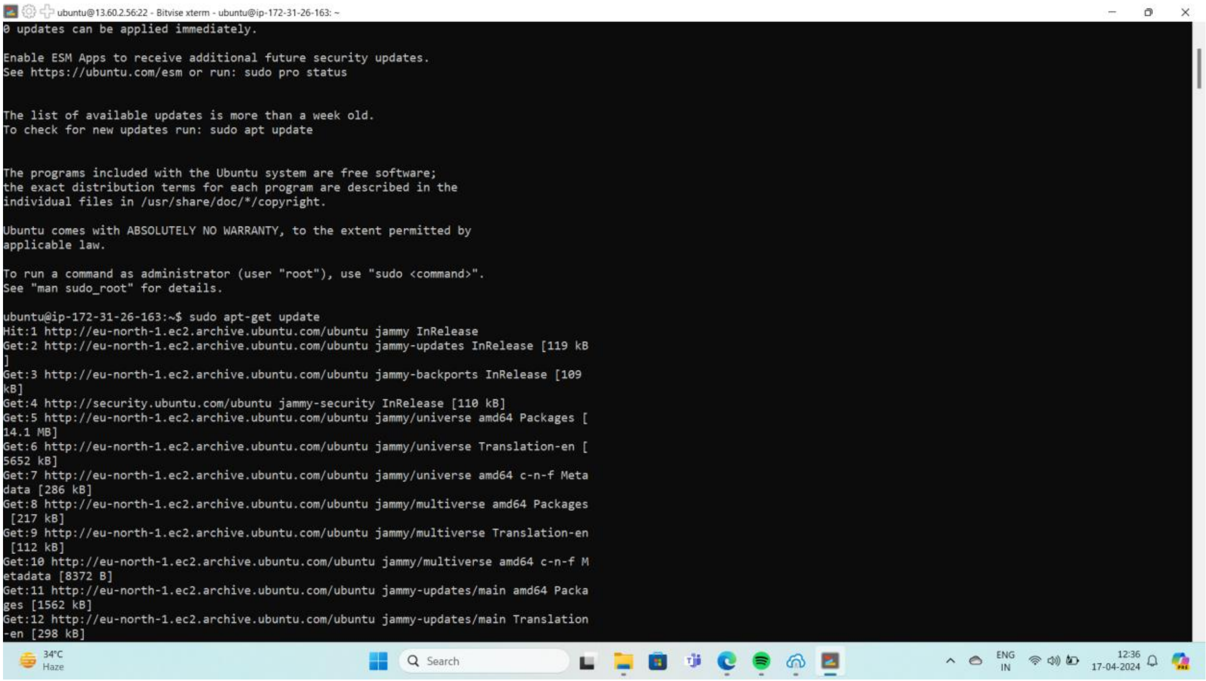
 sudo apt-get install nginx

(After few steps of progression, in case of any prompts asking (Y/N) press ‘y’ button and then press ‘Enter’ to

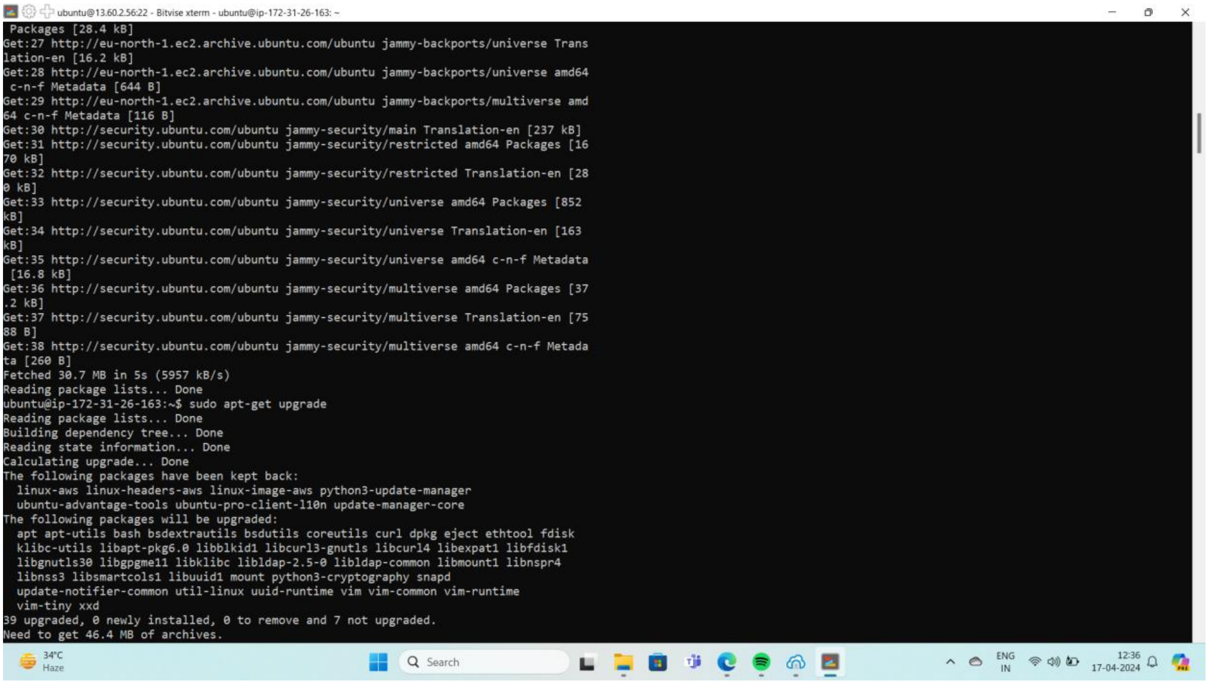
continue. At the last stages if a UI appears on the screen, just press ‘Enter’ to continue. After the whole process

is complete enter the next command as mentioned below)

 nginx -v


ubuntu@13.60.2.56:22 - Bitvise xterm - ubuntu@ip-172-31-26-163: ~
34°C
Haze
Search
ENG
IN
12:36
17-04-2024

```
0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status


The list of available updates is more than a week old.
To check for new updates run: sudo apt update


The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

ubuntu@ip-172-31-26-163:~$ sudo apt-get update
Hit:1 http://eu-north-1.ec2.archive.ubuntu.com/ubuntu jammy InRelease
Get:2 http://eu-north-1.ec2.archive.ubuntu.com/ubuntu jammy-updates InRelease [119 kB
]
Get:3 http://eu-north-1.ec2.archive.ubuntu.com/ubuntu jammy-backports InRelease [109
kB]
Get:4 http://security.ubuntu.com/ubuntu jammy-security InRelease [110 kB]
Get:5 http://eu-north-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 Packages [
14.1 MB]
Get:6 http://eu-north-1.ec2.archive.ubuntu.com/ubuntu jammy/universe Translation-en [
5652 kB]
Get:7 http://eu-north-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 c-n-f Meta
data [286 kB]
Get:8 http://eu-north-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse amd64 Packages
 [217 kB]
Get:9 http://eu-north-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse Translation-en
 [112 kB]
Get:10 http://eu-north-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse amd64 c-n-f M
etadata [8372 B]
Get:11 http://eu-north-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packa
ges [1562 kB]
Get:12 http://eu-north-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main Translation
-en [298 kB]
```



ubuntu@13.60.2.56:22 - Bitvise xterm - ubuntu@ip-172-31-26-163: ~
34°C
Haze
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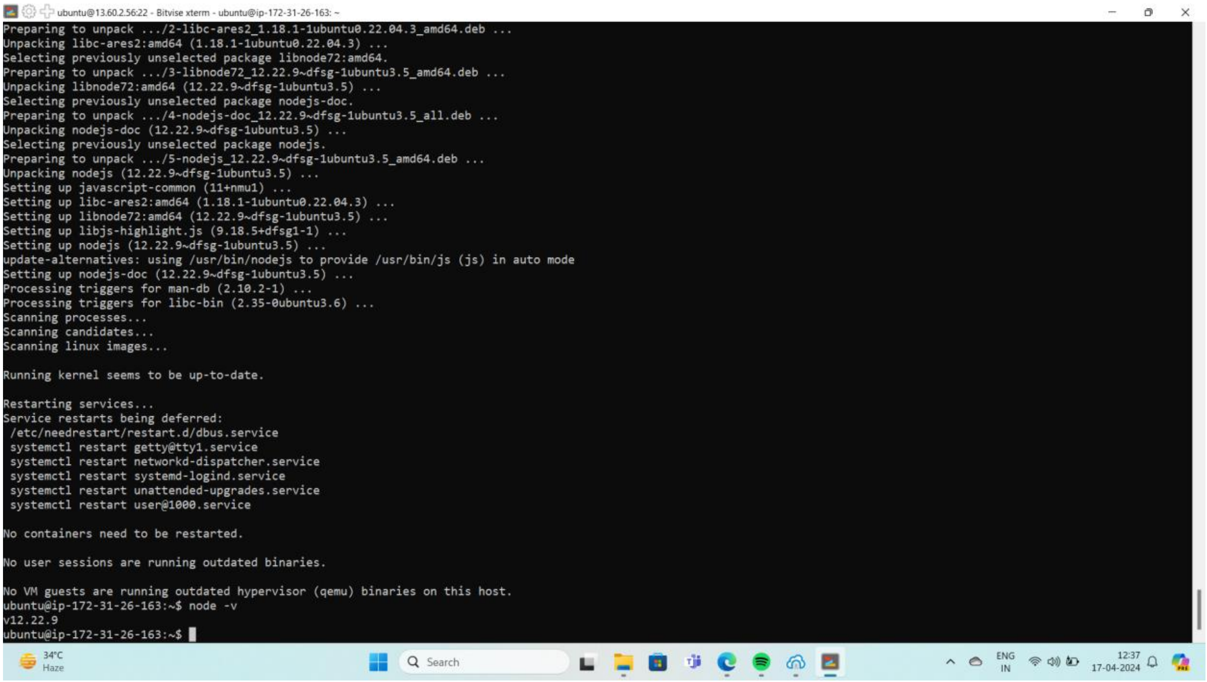
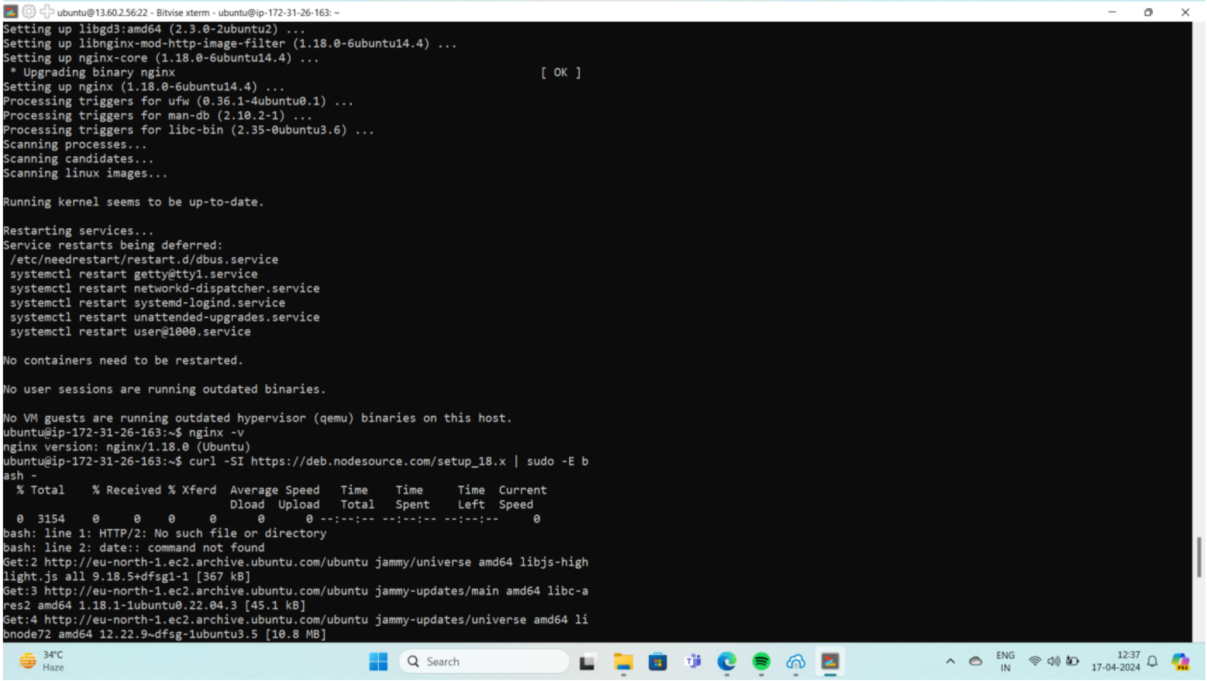
17-04-2024

```
 Packages [28.4 kB]
Get:27 http://eu-north-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe Trans
lation-en [16.2 kB]
Get:28 http://eu-north-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe amd64
 c-n-f Metadata [644 B]
Get:29 http://eu-north-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/multiverse amd
64 c-n-f Metadata [116 B]
Get:30 http://security.ubuntu.com/ubuntu jammy-security/main Translation-en [237 kB]
Get:31 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 Packages [16
70 kB]
Get:32 http://security.ubuntu.com/ubuntu jammy-security/restricted Translation-en [28
0 kB]
Get:33 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 Packages [852
kB]
Get:34 http://security.ubuntu.com/ubuntu jammy-security/universe Translation-en [163
kB]
Get:35 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 c-n-f Metadata
 [16.8 kB]
Get:36 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 Packages [37
.2 kB]
Get:37 http://security.ubuntu.com/ubuntu jammy-security/multiverse Translation-en [75
88 B]
Get:38 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 c-n-f Metada
ta [260 B]
Fetched 30.7 MB in 5s (5957 kB/s)
Reading package lists... Done
ubuntu@ip-172-31-26-163:~$ sudo apt-get upgrade
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Calculating upgrade... Done
The following packages have been kept back:
  linux-aws linux-headers-aws linux-image-aws python3-update-manager
  ubuntu-advantage-tools ubuntu-pro-client-l10n update-manager-core
The following packages will be upgraded:
  apt apt-utils bash bsdextrautils bsdutils coreutils curl dpkg eject ethtool fdisk
  klibc-utils libapt-pkg6.0 libblkid1 libcurl3-gnutls libcurl4 libexpat1 libfdisk1
  libgnutls30 libgpgme11 libklibc libldap-2.5-0 libldap-common libmount1 libnspr4
  libnss3 libsmartcols1 libuuid1 mount python3-cryptography snapd
  update-notifier-common util-linux uuid-runtime vim vim-common vim-runtime
  vim-tiny xxd
39 upgraded, 0 newly installed, 0 to remove and 7 not upgraded.
Need to get 46.4 MB of archives.
```


ubuntu@13.60.2.56:22 - Bitvise xterm - ubuntu@ip-172-31-26-163: ~
34°C
Haze
Search
ENG
IN
12:37
17-04-2024

```
Preparing to unpack .../2-libc-ares2_1.18.1-1ubuntu0.22.04.3_amd64.deb ...
Unpacking libc-ares2:amd64 (1.18.1-1ubuntu0.22.04.3) ...
Selecting previously unselected package libnode72:amd64.
Preparing to unpack .../3-libnode72_12.22.9~dfsg-1ubuntu3.5_amd64.deb ...
Unpacking libnode72:amd64 (12.22.9~dfsg-1ubuntu3.5) ...
Selecting previously unselected package nodejs-doc.
Preparing to unpack .../4-nodejs-doc_12.22.9~dfsg-1ubuntu3.5_all.deb ...
Unpacking nodejs-doc (12.22.9~dfsg-1ubuntu3.5) ...
Selecting previously unselected package nodejs.
Preparing to unpack .../5-nodejs_12.22.9~dfsg-1ubuntu3.5_amd64.deb ...
Unpacking nodejs (12.22.9~dfsg-1ubuntu3.5) ...
Setting up javascript-common (11+nmu1) ...
Setting up libc-ares2:amd64 (1.18.1-1ubuntu0.22.04.3) ...
Setting up libnode72:amd64 (12.22.9~dfsg-1ubuntu3.5) ...
Setting up libjs-highlight.js (9.18.5+dfsg1-1) ...
Setting up nodejs (12.22.9~dfsg-1ubuntu3.5) ...
update-alternatives: using /usr/bin/nodejs to provide /usr/bin/js (js) in auto mode
Setting up nodejs-doc (12.22.9~dfsg-1ubuntu3.5) ...
Processing triggers for man-db (2.10.2-1) ...
Processing triggers for libc-bin (2.35-0ubuntu3.6) ...
Scanning processes...
Scanning candidates...
Scanning linux images...

Running kernel seems to be up-to-date.

Restarting services...
Service restarts being deferred:
 /etc/needrestart/restart.d/dbus.service
 systemctl restart getty@tty1.service
 systemctl restart networkd-dispatcher.service
 systemctl restart systemd-logind.service
 systemctl restart unattended-upgrades.service
 systemctl restart user@1000.service

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-172-31-26-163:~$ node -v
v12.22.9
ubuntu@ip-172-31-26-163:~$ ▌
```


ubuntu@13.60.2.56:22 - Bitvise xterm - ubuntu@ip-172-31-26-163: ~
34°C
Haze
Search
ENG
IN
12:37
17-04-2024

```
Setting up libgd3:amd64 (2.3.0-2ubuntu2) ...
Setting up libnginx-mod-http-image-filter (1.18.0-6ubuntu14.4) ...
Setting up nginx-core (1.18.0-6ubuntu14.4) ...
 * Upgrading binary nginx                                            [ OK ]
Setting up nginx (1.18.0-6ubuntu14.4) ...
Processing triggers for ufw (0.36.1-4ubuntu0.1) ...
Processing triggers for man-db (2.10.2-1) ...
Processing triggers for libc-bin (2.35-0ubuntu3.6) ...
Scanning processes...
Scanning candidates...
Scanning linux images...

Running kernel seems to be up-to-date.

Restarting services...
Service restarts being deferred:
 /etc/needrestart/restart.d/dbus.service
 systemctl restart getty@tty1.service
 systemctl restart networkd-dispatcher.service
 systemctl restart systemd-logind.service
 systemctl restart unattended-upgrades.service
 systemctl restart user@1000.service

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-172-31-26-163:~$ nginx -v
nginx version: nginx/1.18.0 (Ubuntu)
ubuntu@ip-172-31-26-163:~$ curl -SI https://deb.nodesource.com/setup_18.x | sudo -E b
ash -
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
  0  3154    0     0    0     0      0      0 --:--:-- --:--:-- --:--:--     0
bash: line 1: HTTP/2: No such file or directory
bash: line 2: date:: command not found
Get:2 http://eu-north-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 libjs-high
light.js all 9.18.5+dfsg1-1 [367 kB]
Get:3 http://eu-north-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libc-a
res2 amd64 1.18.1-1ubuntu0.22.04.3 [45.1 kB]
Get:4 http://eu-north-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 li
bnode72 amd64 12.22.9~dfsg-1ubuntu3.5 [10.8 MB]
```

(This command displays the nginx version installed in the server system)

- curl -Sl https://deb.nodesource.com/setup_18.x | sudo -E bash -

(This command downloads NodeJS files with all dependencies in our server system)

- sudo apt install nodejs

(Press ‘Enter’ to continue when any UI appears on screen)

(This command installs NodeJS in our server system)

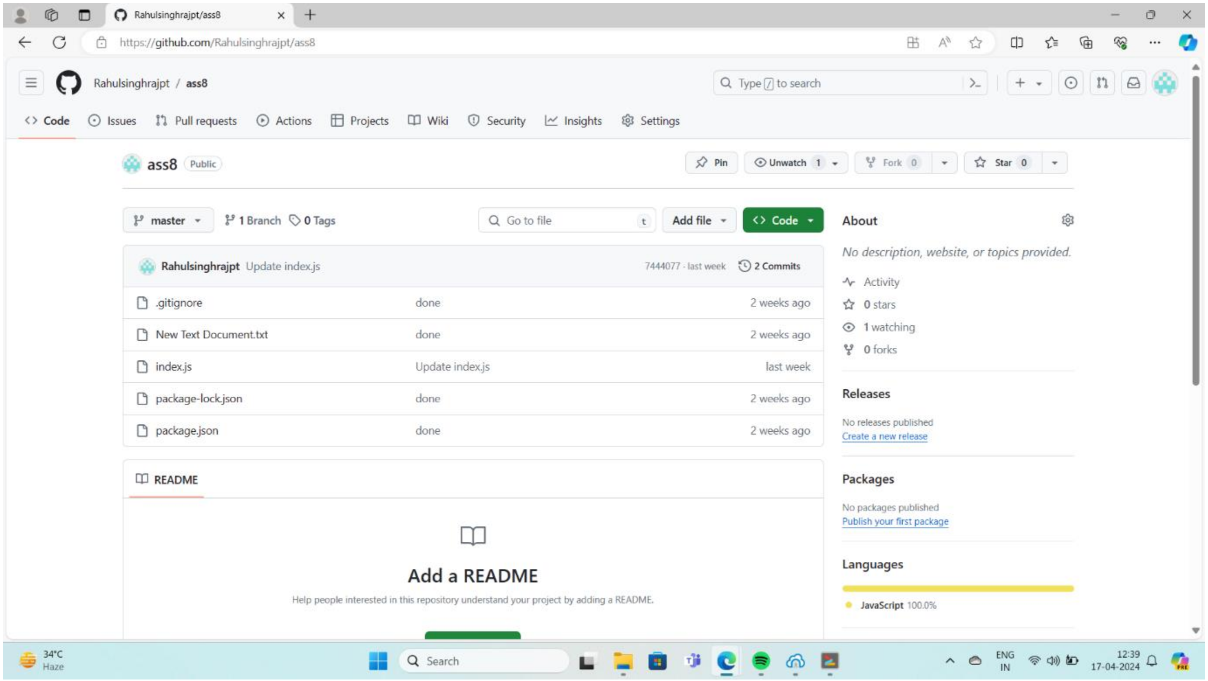
- node -v

(This command displays the version of NodeJS installed in our server system)

Now, minimize the terminal window. Go to the browser where our GitHub is Logged-In.

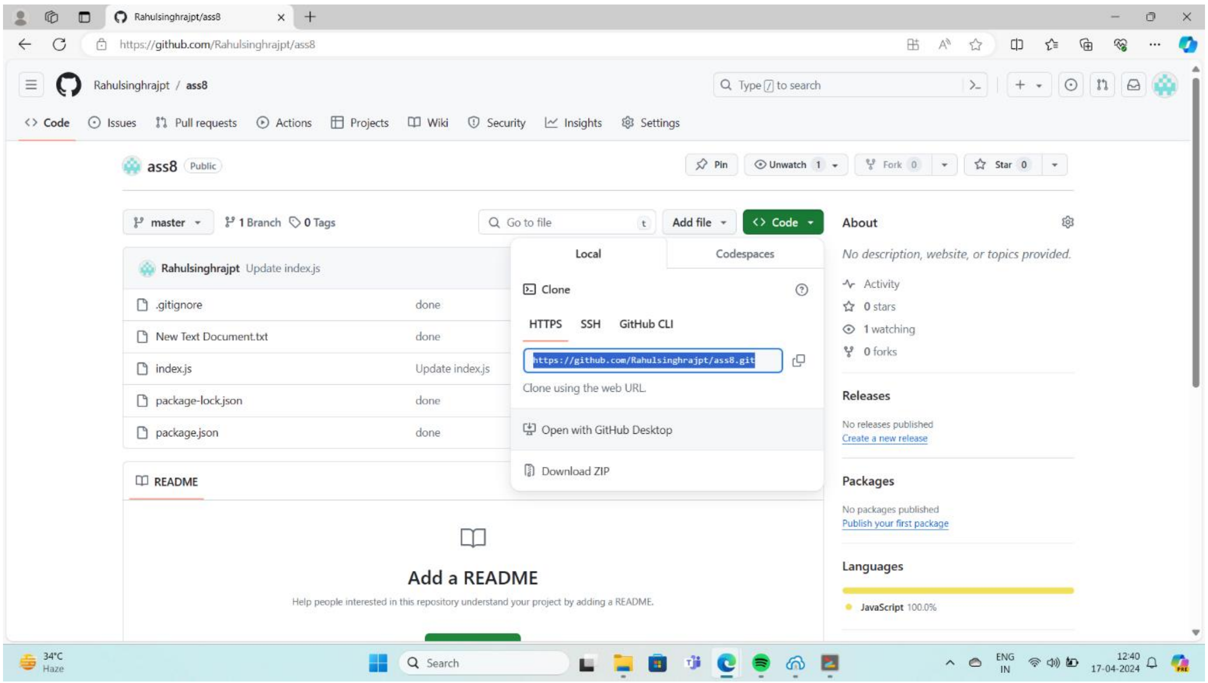
7. Go to your GitHub Repository which you want to upload in your EC2 server.

8. Click on the code button (in green color).



Rahulsinghrajpt Update index.js		7444077 · last week 2 Commits
.gitignore	done	2 weeks ago
New Text Document.txt	done	2 weeks ago
index.js	Update index.js	last week
package-lock.json	done	2 weeks ago
package.json	done	2 weeks ago

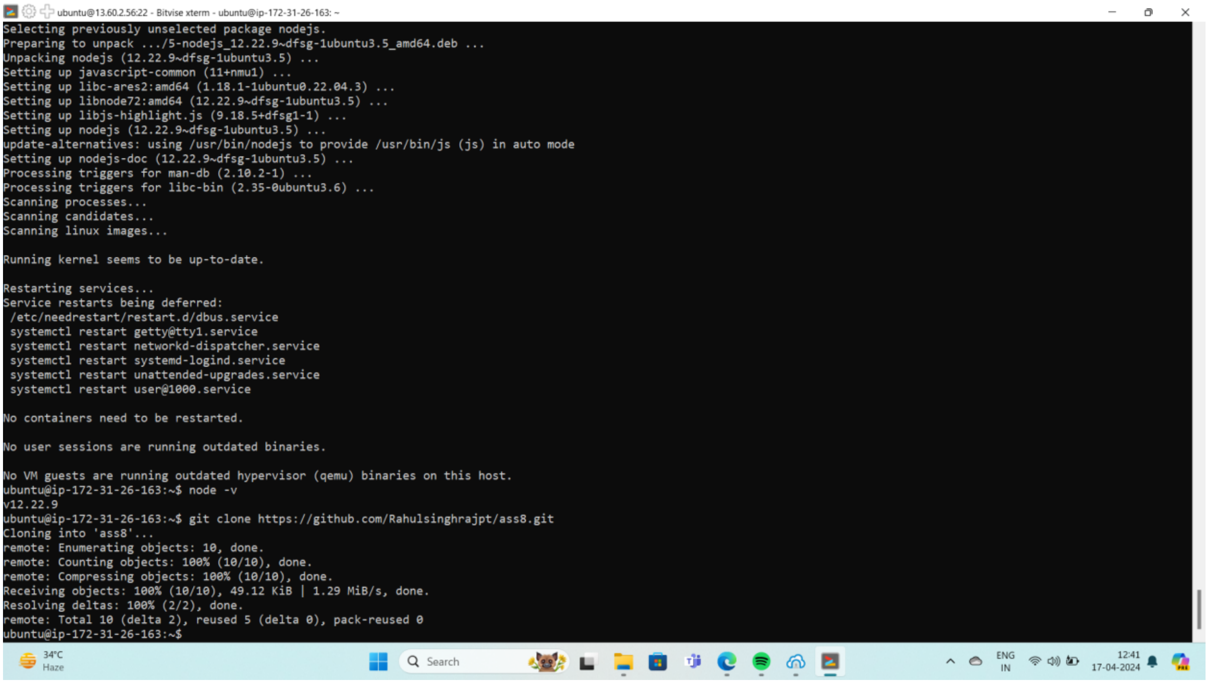
9. Now copy the HTTPS address of your Repository



https://github.com/Rahulsinghrajpt/ass8.git

10. Now return to the minimized terminal window and enter the following commands:-

 git clone https-address-you-just-copied-in-step-10



ubuntu@13.60.2.56:22 - Bitvise xterm - ubuntu@ip-172-31-26-163: ~
34°C
Haze
Search
ENG
IN
12:41
17-04-2024

```
Selecting previously unselected package nodejs.
Preparing to unpack .../5-nodejs_12.22.9~dfsg-1ubuntu3.5_amd64.deb ...
Unpacking nodejs (12.22.9~dfsg-1ubuntu3.5) ...
Setting up javascript-common (11+nmu1) ...
Setting up libc-ares2:amd64 (1.18.1-1ubuntu0.22.04.3) ...
Setting up libnode72:amd64 (12.22.9~dfsg-1ubuntu3.5) ...
Setting up libjs-highlight.js (9.18.5+dfsg1-1) ...
Setting up nodejs (12.22.9~dfsg-1ubuntu3.5) ...
update-alternatives: using /usr/bin/nodejs to provide /usr/bin/js (js) in auto mode
Setting up nodejs-doc (12.22.9~dfsg-1ubuntu3.5) ...
Processing triggers for man-db (2.10.2-1) ...
Processing triggers for libc-bin (2.35-0ubuntu3.6) ...
Scanning processes...
Scanning candidates...
Scanning linux images...

Running kernel seems to be up-to-date.

Restarting services...
Service restarts being deferred:
 /etc/needrestart/restart.d/dbus.service
 systemctl restart getty@tty1.service
 systemctl restart networkd-dispatcher.service
 systemctl restart systemd-logind.service
 systemctl restart unattended-upgrades.service
 systemctl restart user@1000.service

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-172-31-26-163:~$ node -v
v12.22.9
ubuntu@ip-172-31-26-163:~$ git clone https://github.com/Rahulsinghrajpt/ass8.git
Cloning into 'ass8'...
remote: Enumerating objects: 10, done.
remote: Counting objects: 100% (10/10), done.
remote: Compressing objects: 100% (10/10), done.
Receiving objects: 100% (10/10), 49.12 KiB | 1.29 MiB/s, done.
Resolving deltas: 100% (2/2), done.
remote: Total 10 (delta 2), reused 5 (delta 0), pack-reused 0
ubuntu@ip-172-31-26-163:~$
```

(Remember to paste your own https address that you copied in the above command in place of the one given in

the screenshot)

(As shown in the screenshot, you will be asked to enter your username for GitHub. So mention your username

there.

After that you will be requested to provide your password. However, you have to enter your Account Token you

generated instead of your password. If you don’t have a Account Token then refer to Ass7 and create one for

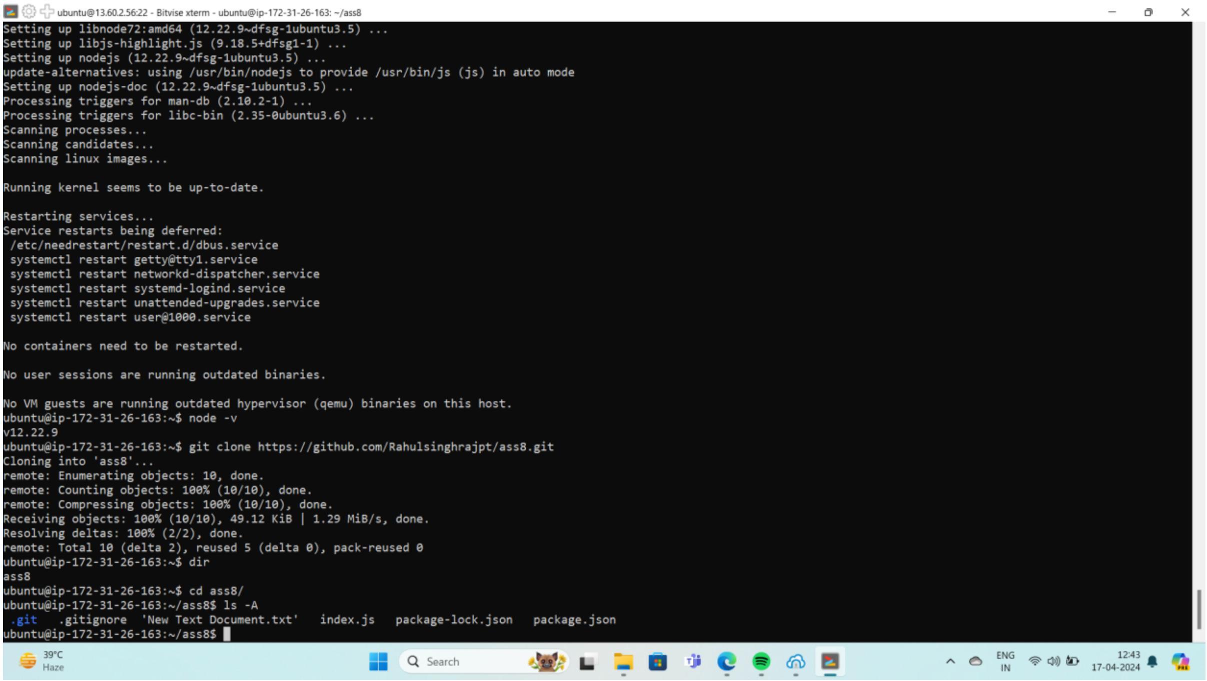
your GitHub account. Now copy-paste the Account Token (from the text file you haved saved it) where it wants

to mention your password. For pasting just Right click for a single time on the terminal where you want to paste)

(Note you won’t be able to see your pasted token on the terminal as it is hidden by default. So just press ‘Enter’

to continue)

dir



ubuntu@13.60.2.56:22 - Bitvise xterm - ubuntu@ip-172-31-26-163: ~/ass8

```
Setting up libnode72:amd64 (12.22.9~dfsg-1ubuntu3.5) ...
Setting up libjs-highlight.js (9.18.5+dfsg1-1) ...
Setting up nodejs (12.22.9~dfsg-1ubuntu3.5) ...
update-alternatives: using /usr/bin/nodejs to provide /usr/bin/js (js) in auto mode
Setting up nodejs-doc (12.22.9~dfsg-1ubuntu3.5) ...
Processing triggers for man-db (2.10.2-1) ...
Processing triggers for libc-bin (2.35-0ubuntu3.6) ...
Scanning processes...
Scanning candidates...
Scanning linux images...

Running kernel seems to be up-to-date.

Restarting services...
Service restarts being deferred:
 /etc/needrestart/restart.d/dbus.service
 systemctl restart getty@tty1.service
 systemctl restart networkd-dispatcher.service
 systemctl restart systemd-logind.service
 systemctl restart unattended-upgrades.service
 systemctl restart user@1000.service

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-172-31-26-163:~$ node -v
v12.22.9
ubuntu@ip-172-31-26-163:~$ git clone https://github.com/Rahulsinghrajpt/ass8.git
Cloning into 'ass8'...
remote: Enumerating objects: 10, done.
remote: Counting objects: 100% (10/10), done.
remote: Compressing objects: 100% (10/10), done.
Receiving objects: 100% (10/10), 49.12 KiB | 1.29 MiB/s, done.
Resolving deltas: 100% (2/2), done.
remote: Total 10 (delta 2), reused 5 (delta 0), pack-reused 0
ubuntu@ip-172-31-26-163:~$ dir
ass8
ubuntu@ip-172-31-26-163:~$ cd ass8/
ubuntu@ip-172-31-26-163:~/ass8$ ls -A
 .git   .gitignore  'New Text Document.txt'   index.js   package-lock.json   package.json
ubuntu@ip-172-31-26-163:~/ass8$
```

(As seen this is the name of our cloned repository. This means a new directory has been created in our present

working directory which has been named automatically to match the name of our Repository.)

cd myRepoV1/

(Now we enter into the directory)

ls -A

(This command displays all the files in the current directory)

(We observe that we have all the files that we have in our Repository has been cloned in our directory in the

server system)

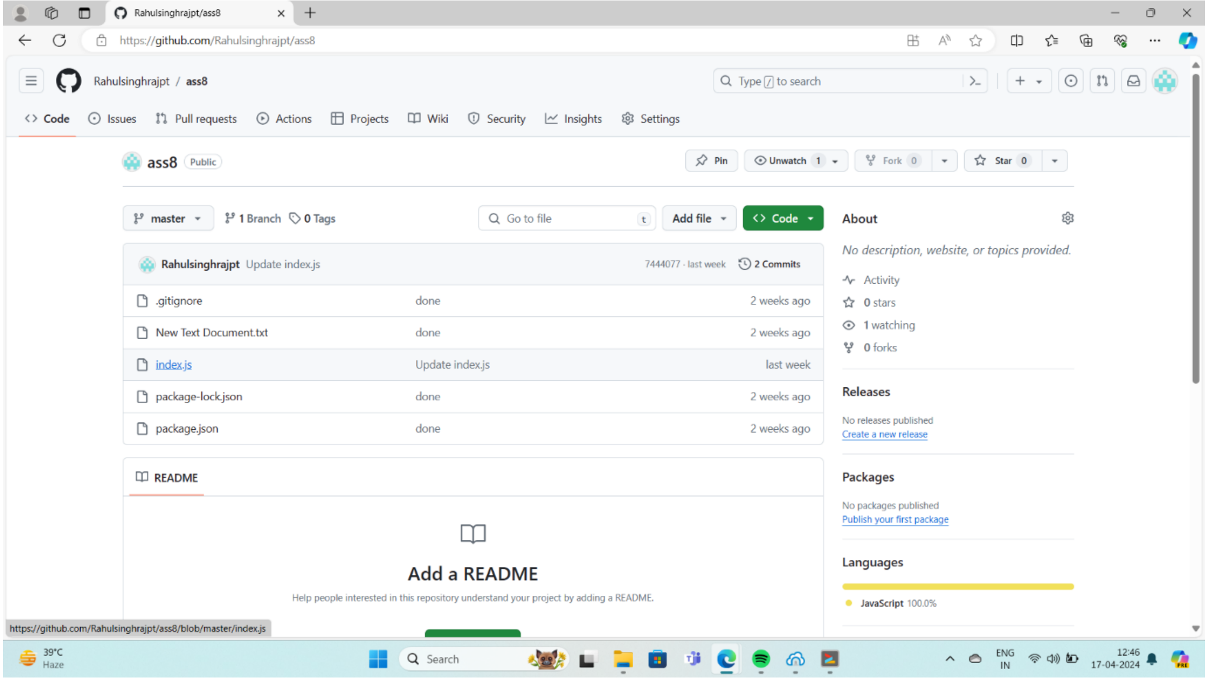
 npm install

(This command installs the npm package manager)

Now before proceeding further we need to return back to GitHub. Minimize the terminal for now.

11. Go back to your Repository in Github.

12. Open your “index.js” file



Rahulsinghrajpt Update index.js 7444077 · last week 2 Commits

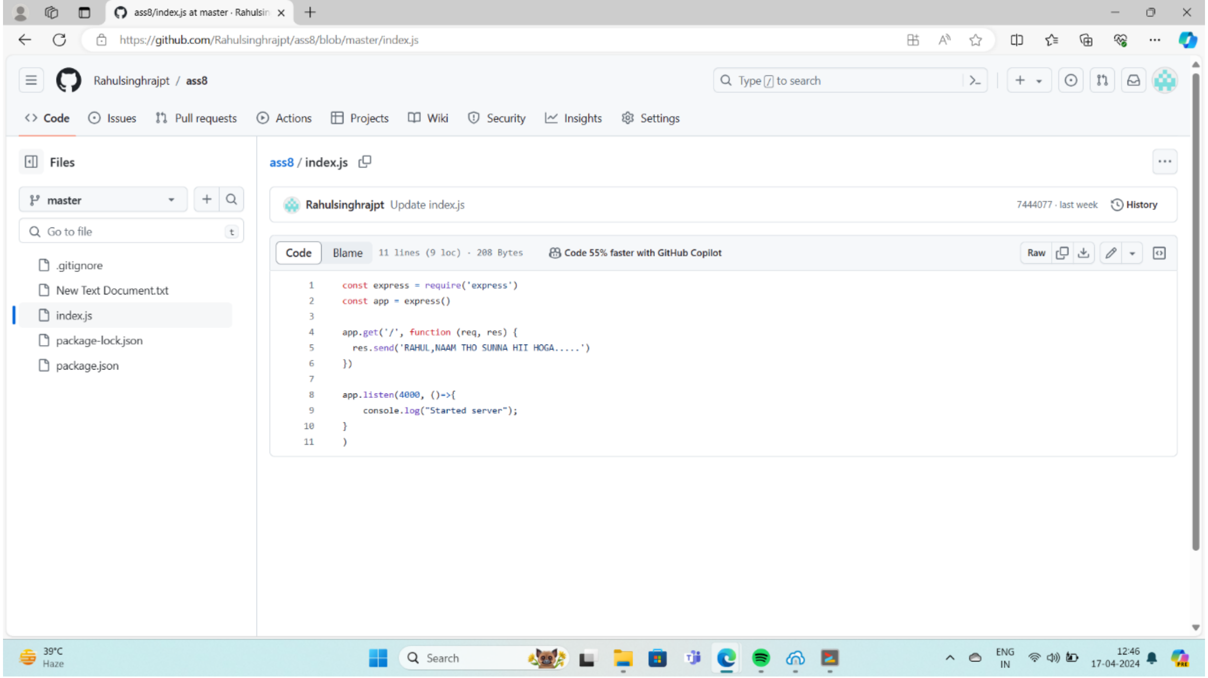
.gitignore	done	2 weeks ago
New Text Document.txt	done	2 weeks ago
index.js	Update index.js	last week
package-lock.json	done	2 weeks ago
package.json	done	2 weeks ago

README

Add a README

Help people interested in this repository understand your project by adding a README.

13. Check the port no. specified in the program. It is specified in the app.listen() method as the first parameter. Here it is



ass8 / index.js

Rahulsinghrajpt Update index.js 7444077 · last week

11 lines (9 loc) · 208 Bytes

```
const express = require('express')
const app = express()

app.get('/', function (req, res) {
  res.send('RAHUL,NAAM THO SUNNA HII HOGA.....')
})

app.listen(4000, ()=>{
    console.log("Started server");
}
)
```

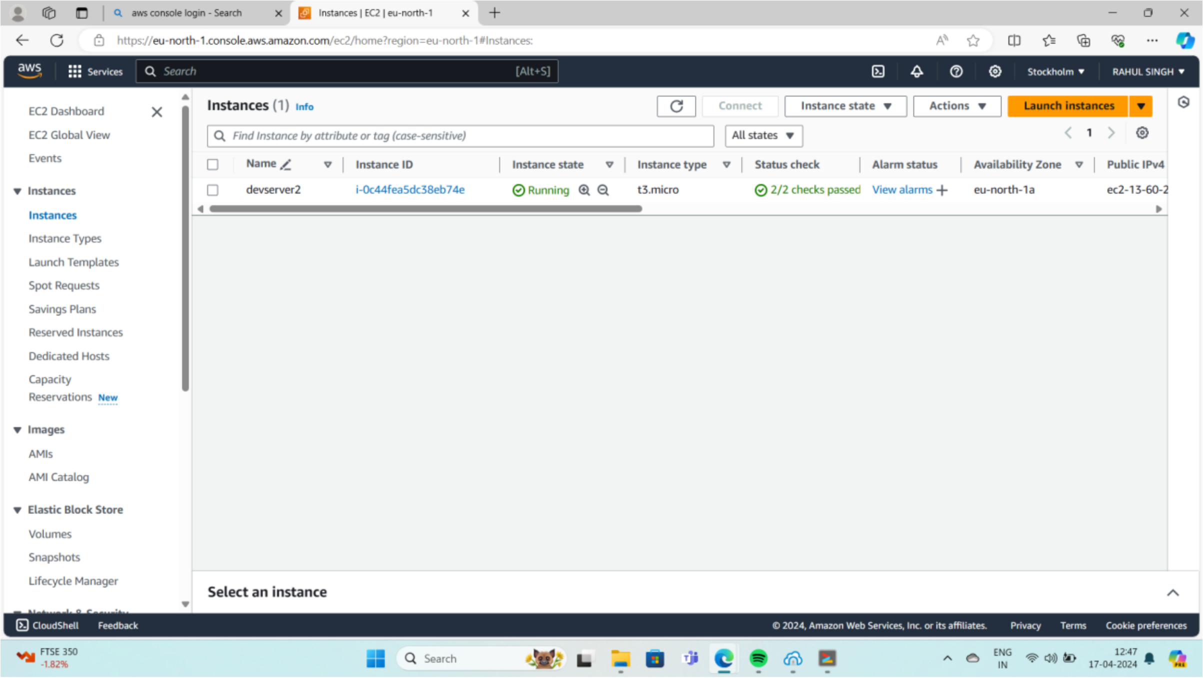
‘4000’. Copy or remember this no. as it is the port no. and will be required to connect to our website.

We have to add this port no. to our EC2 instance security group rule otherwise we won’t be able to access the

website from anywhere.

14. Now go back to your AWS EC2 instances page.

15. Click on the instance that is being used.



aws console login - Search | Instances | EC2 | eu-north-1

https://eu-north-1.console.aws.amazon.com/ec2/home?region=eu-north-1#Instances:

Services | Search [Alt+S] | Stockholm ▼ | RAHUL SINGH ▼

EC2 Dashboard
EC2 Global View
Events
▼ Instances
Instances
Instance Types
Launch Templates
Spot Requests
Savings Plans
Reserved Instances
Dedicated Hosts
Capacity Reservations New
▼ Images
AMIs
AMI Catalog
▼ Elastic Block Store
Volumes
Snapshots
Lifecycle Manager

Instances (1) Info | Connect | Instance state ▼ | Actions ▼ | Launch instances ▼

Find Instance by attribute or tag (case-sensitive) | All states ▼

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4
devserver2	i-0c44fea5dc38eb74e	Running	t3.micro	2/2 checks passed	View alarms +	eu-north-1a	ec2-13-60-2

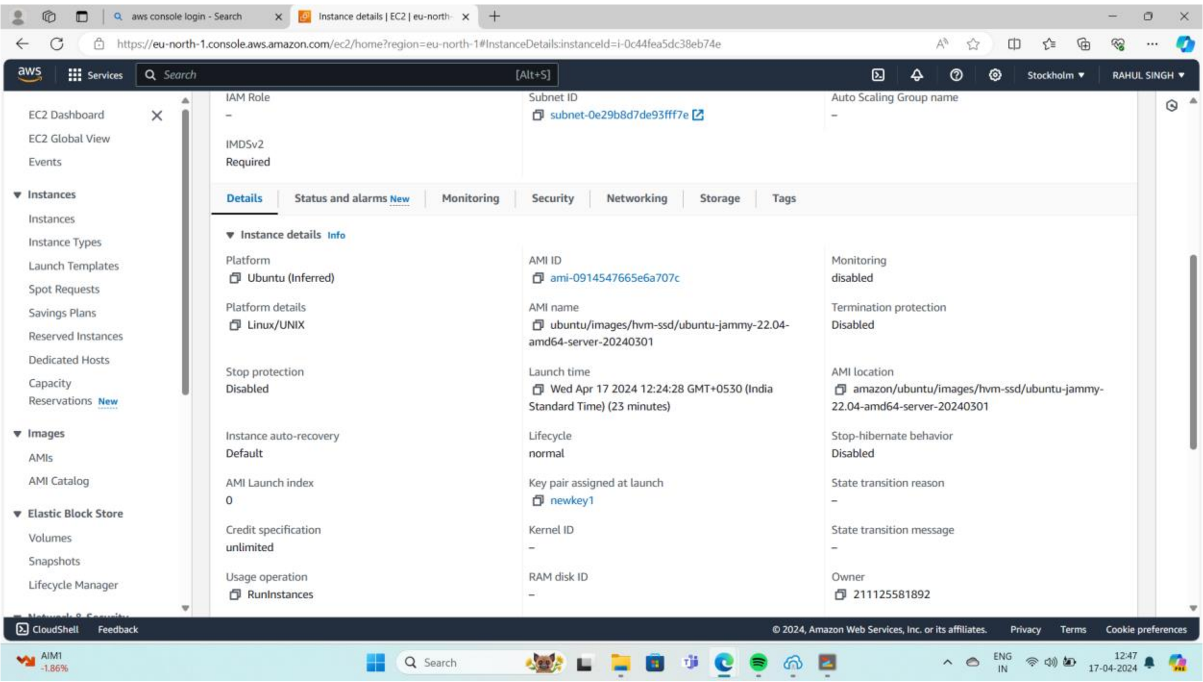
Select an instance

CloudShell Feedback © 2024, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences

FTSE 350 -1.82% | Search | ENG IN | 12:47 17-04-2024

16. Scroll down until you find a section bar where by default the details option is selected. Select the Security option. It

is beside the Details option (in blue).



aws console login - Search | Instance details | EC2 | eu-north-

https://eu-north-1.console.aws.amazon.com/ec2/home?region=eu-north-1#InstanceDetails:instanceId=i-0c44fea5dc38eb74e

IAM Role
–

Subnet ID
subnet-0e29b8d7de93fff7e

Auto Scaling Group name
–

IMDSv2
Required

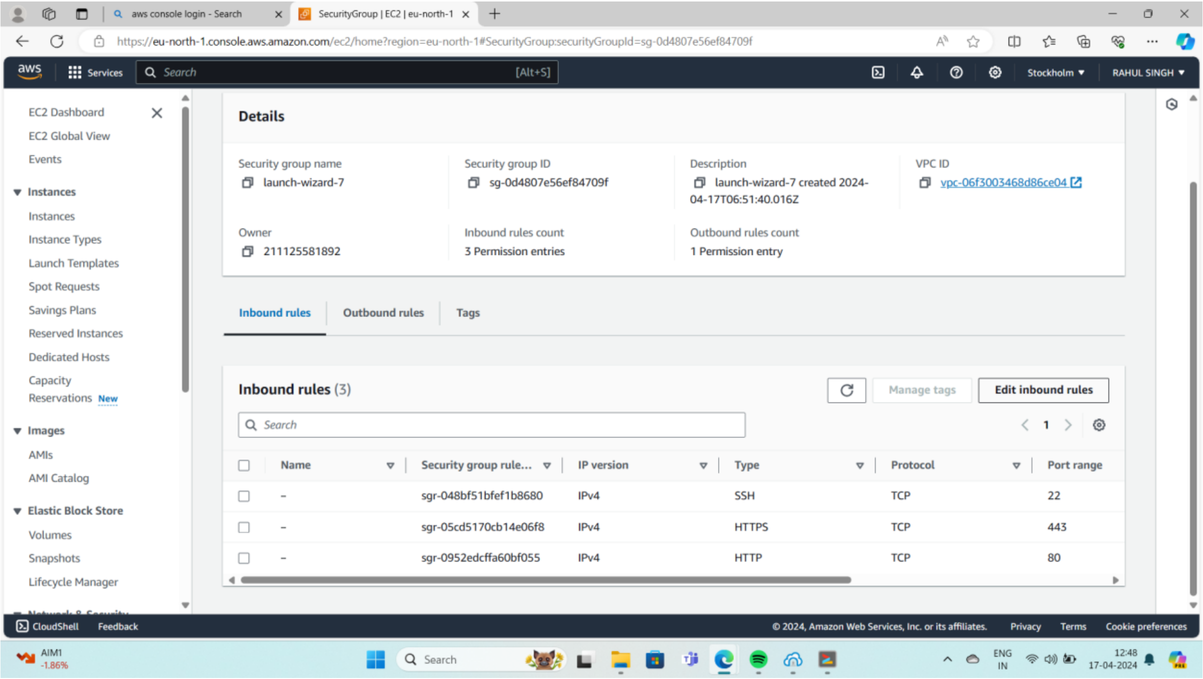
Details | Status and alarms New | Monitoring | Security | Networking | Storage | Tags

▼ Instance details Info

Platform Ubuntu (Inferred)	AMI ID ami-0914547665e6a707c	Monitoring disabled
Platform details Linux/UNIX	AMI name ubuntu/images/hvm-ssd/ubuntu-jammy-22.04-amd64-server-20240301	Termination protection Disabled
Stop protection Disabled	Launch time Wed Apr 17 2024 12:24:28 GMT+0530 (India Standard Time) (23 minutes)	AMI location amazon/ubuntu/images/hvm-ssd/ubuntu-jammy-22.04-amd64-server-20240301
Instance auto-recovery Default	Lifecycle normal	Stop-hibernate behavior Disabled
AMI Launch index 0	Key pair assigned at launch newkey1	State transition reason –
Credit specification unlimited	Kernel ID –	State transition message –
Usage operation RunInstances	RAM disk ID –	Owner 211125581892

AIM1 -1.86% | 12:47 17-04-2024

17. Then click on the security groups link under security groups



Details

Security group name: launch-wizard-7

Security group ID: sg-0d4807e56ef84709f

Description: launch-wizard-7 created 2024-04-17T06:51:40.016Z

VPC ID: vpc-06f3003468d86ce04

Owner: 211125581892

Inbound rules count: 3 Permission entries

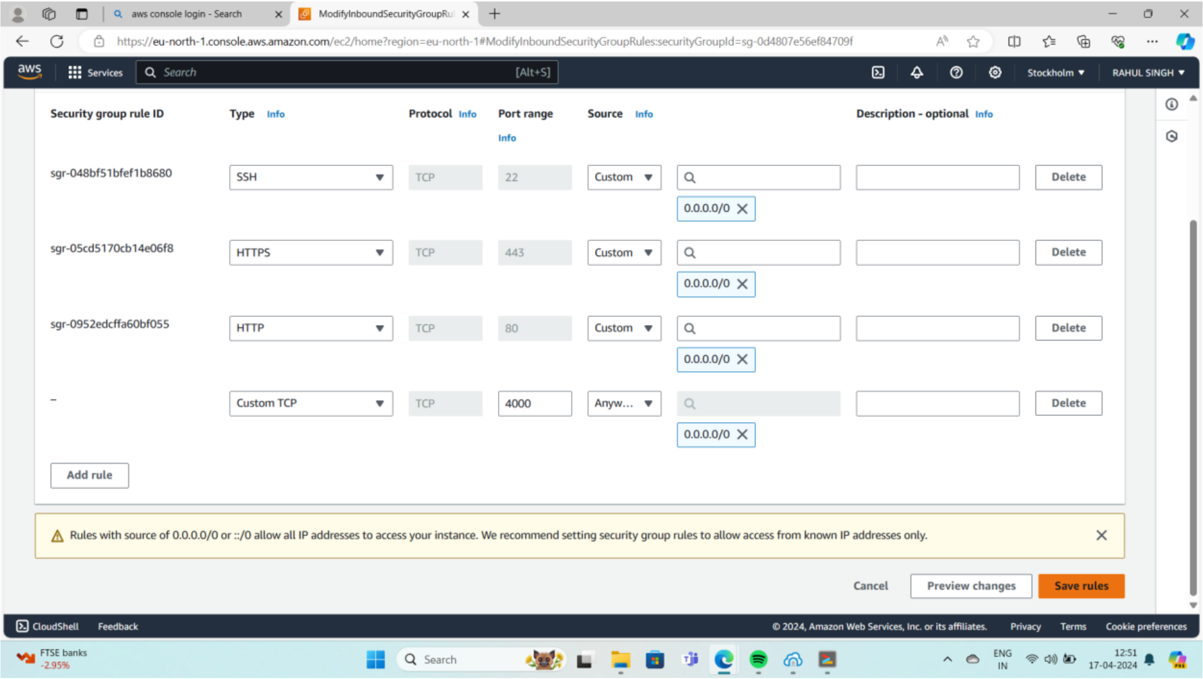
Outbound rules count: 1 Permission entry

Inbound rules | Outbound rules | Tags

Inbound rules (3)

	Name	Security group rule...	IP version	Type	Protocol	Port range
□	–	sgr-048bf51bfef1b8680	IPv4	SSH	TCP	22
□	–	sgr-05cd5170cb14e06f8	IPv4	HTTPS	TCP	443
□	–	sgr-0952edcffa60bf055	IPv4	HTTP	TCP	80

18. Then click on Edit Inbound Rules button.


https://eu-north-1.console.aws.amazon.com/ec2/home?region=eu-north-1#ModifyInboundSecurityGroupRules:securityGroupId=sg-0d4807e56ef84709f
Stockholm
RAHUL SINGH
Add rule
Cancel
Preview changes
Save rules

Security group rule ID	Type	Protocol	Port range	Source		Description - optional	
sgr-048bf51bfef1b8680	SSH	TCP	22	Custom	0.0.0.0/0		Delete
sgr-05cd5170cb14e06f8	HTTPS	TCP	443	Custom	0.0.0.0/0		Delete
sgr-0952edcffa60bf055	HTTP	TCP	80	Custom	0.0.0.0/0		Delete
–	Custom TCP	TCP	4000	Anyw...	0.0.0.0/0		Delete

Rules with source of 0.0.0.0/0 or ::/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only.

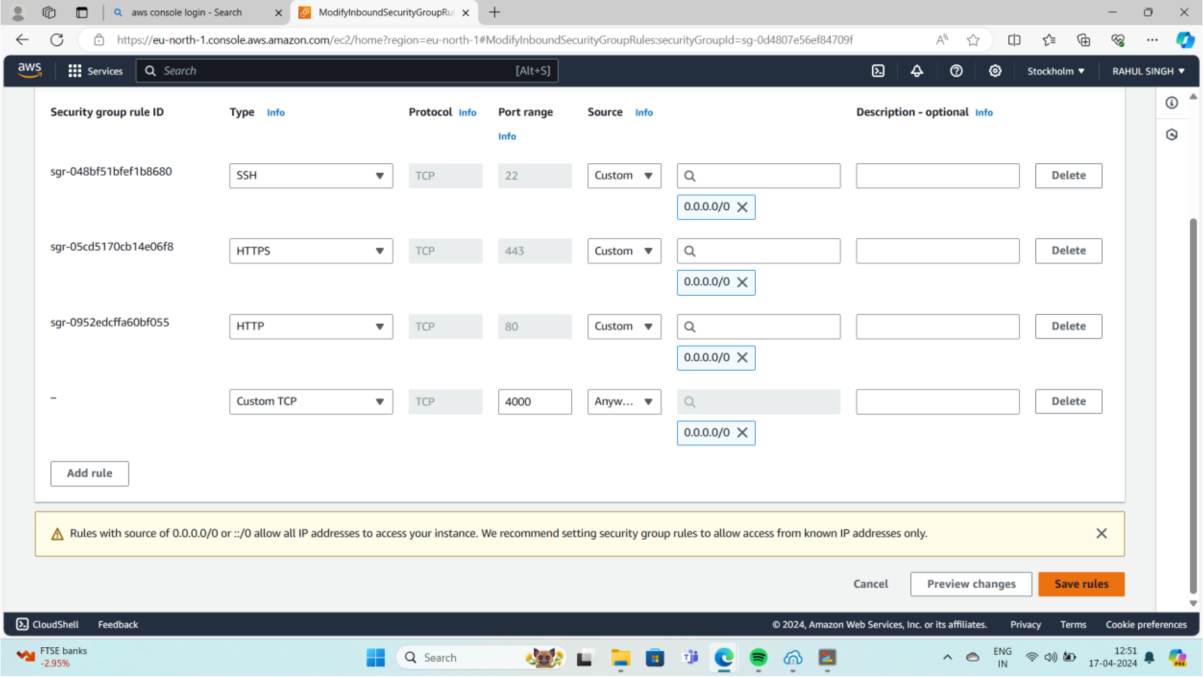
19. Click on the Add Rule button.

20. A new Row will be generated. Let the type remain Custom TCP. Under Port Range write your Port no. you want to

open. In this case we have 4000 port no. as we found out earlier in our index.js code. Next in source click on the

search box and the first option with value 0.0.0.0/0 should be selected.

21. Now click on the save rules button.



Security group rule ID	Type	Protocol	Port range	Source		Description - optional
sgr-048bf51bfef1b8680	SSH	TCP	22	Custom	0.0.0.0/0	
sgr-05cd5170cb14e06f8	HTTPS	TCP	443	Custom	0.0.0.0/0	
sgr-0952edcffa60bf055	HTTP	TCP	80	Custom	0.0.0.0/0	
–	Custom TCP	TCP	4000	Anyw...	0.0.0.0/0	

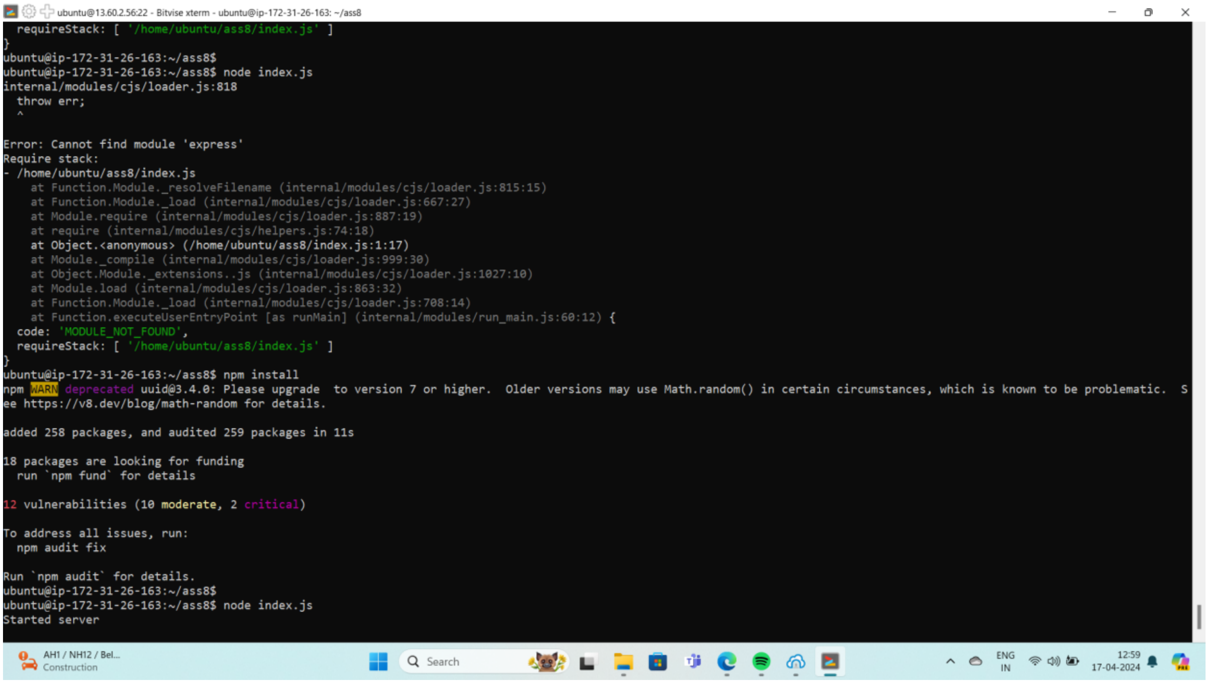
⚠ Rules with source of 0.0.0.0/0 or ::/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only.

We have successfully added the Port No. to our Inbound rules. Now we can access the our website. But first we need

to start our server.

22. We return back to the terminal and type:-

 node index.js

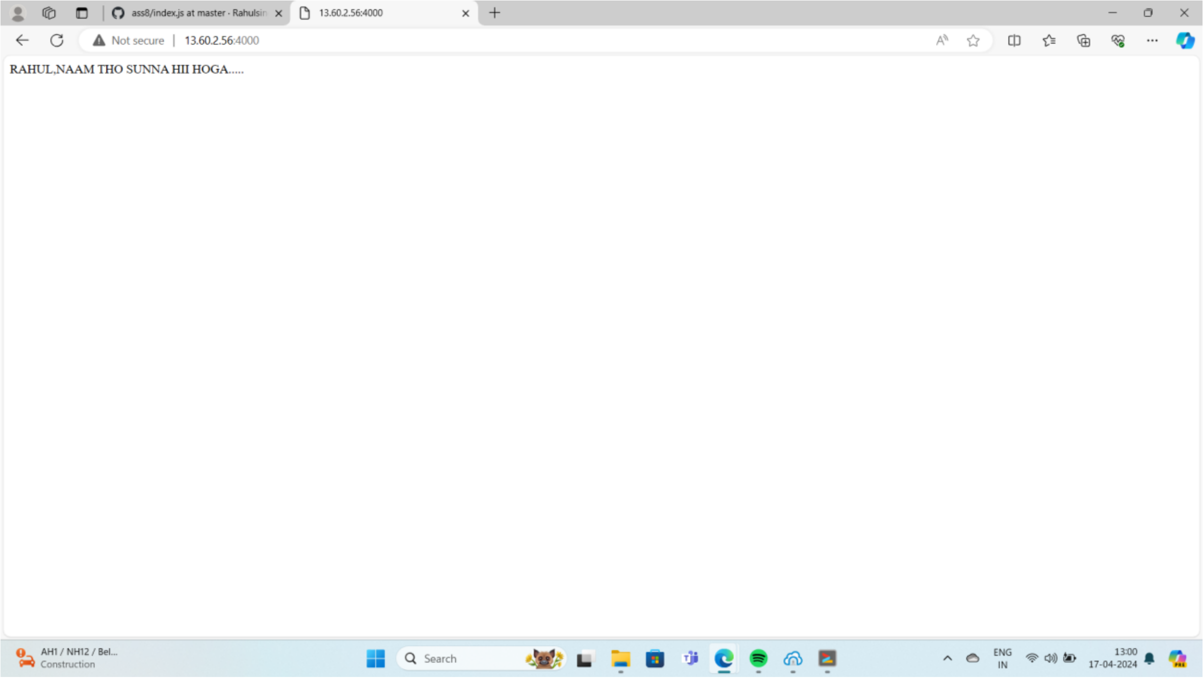


```
  requireStack: [ '/home/ubuntu/ass8/index.js' ]
}
ubuntu@ip-172-31-26-163:~/ass8$
ubuntu@ip-172-31-26-163:~/ass8$ node index.js
internal/modules/cjs/loader.js:818
  throw err;
  ^

Error: Cannot find module 'express'
Require stack:
- /home/ubuntu/ass8/index.js
    at Function.Module._resolveFilename (internal/modules/cjs/loader.js:815:15)
    at Function.Module._load (internal/modules/cjs/loader.js:667:27)
    at Module.require (internal/modules/cjs/loader.js:887:19)
    at require (internal/modules/cjs/helpers.js:74:18)
    at Object.<anonymous> (/home/ubuntu/ass8/index.js:1:17)
    at Module._compile (internal/modules/cjs/loader.js:999:30)
    at Object.Module._extensions..js (internal/modules/cjs/loader.js:1027:10)
    at Module.load (internal/modules/cjs/loader.js:863:32)
    at Function.Module._load (internal/modules/cjs/loader.js:708:14)
    at Function.executeUserEntryPoint [as runMain] (internal/modules/run_main.js:60:12) {
  code: 'MODULE_NOT_FOUND',
  requireStack: [ '/home/ubuntu/ass8/index.js' ]
}
ubuntu@ip-172-31-26-163:~/ass8$ npm install
npm WARN deprecated uuid@3.4.0: Please upgrade  to version 7 or higher.  Older versions may use Math.random() in certain circumstances, which is known to be problematic.  S
ee https://v8.dev/blog/math-random for details.

added 258 packages, and audited 259 packages in 11s

18 packages are looking for funding
  run `npm fund` for details

12 vulnerabilities (10 moderate, 2 critical)

To address all issues, run:
  npm audit fix

Run `npm audit` for details.
ubuntu@ip-172-31-26-163:~/ass8$
ubuntu@ip-172-31-26-163:~/ass8$ node index.js
Started server
```

Our server has started and it is also reflected by the terminal prompt. Now to check we need to open another browser and type in the IPv4 address of our EC2 server to access our website.

23.We now have to Refresh our browser where we have our website open.

The changes have been successfully reflected. This is how we have to edit and update our project if required.



RAHUL,NAAM THO SUNNA HII HOGA.....

We have successfully completed our task of Deploying our project from GitHub to our EC2 server.