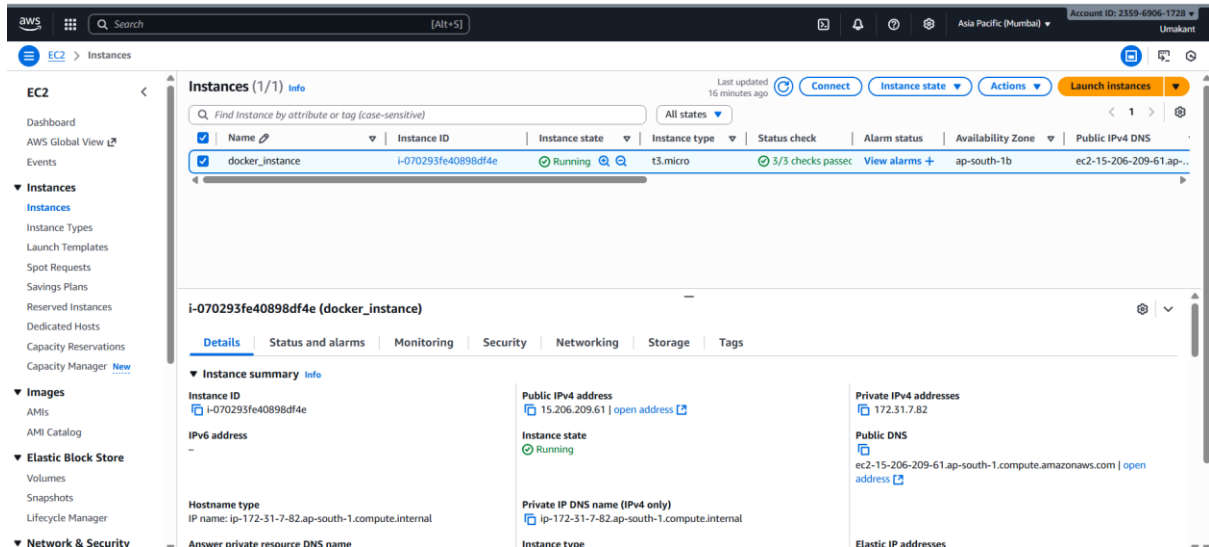


Docker Assignment

Step : Create Ec2 Instance



Step : Install Docker on Ec2 server

```
root@ip-172-31-7-82:~# # Add Docker's official GPG key:
sudo apt-get update
sudo apt-get install ca-certificates curl
sudo install -m 0755 -d /etc/apt/keyrings
sudo curl -fsSL https://download.docker.com/linux/ubuntu/gpg -o /etc/apt/keyrings/docker.asc
sudo chmod a+r /etc/apt/keyrings/docker.asc

# Add the repository to Apt sources:
echo \
"deb [arch=$(dpkg --print-architecture) signed-by=/etc/apt/keyrings/docker.asc] https://download.docker.com/linux/ubuntu \
$/. /etc/os-release && echo "${UBUNTU_CODENAME:-$VERSION_CODENAME}" stable" | \
sudo tee /etc/apt/sources.list.d/docker.list > /dev/null
sudo apt-get update
Hit:1 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble InRelease
Hit:2 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates InRelease
Hit:3 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-backports InRelease
Hit:4 http://security.ubuntu.com/ubuntu noble-security InRelease
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
ca-certificates is already the newest version (20240203).
ca-certificates set to manually installed.
curl is already the newest version (8.5.0-2ubuntu10.6).
curl set to manually installed.
0 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
Hit:1 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble InRelease
Hit:2 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates InRelease
Hit:3 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-backports InRelease
Get:4 https://download.docker.com/linux/ubuntu noble InRelease [48.5 kB]
Hit:5 http://security.ubuntu.com/ubuntu noble-security InRelease
Get:6 https://download.docker.com/linux/ubuntu noble/stable amd64 Packages [33.5 kB]
```

```
root@ip-172-31-7-82:~# sudo apt-get install docker-ce docker-ce-cli containerd.io docker-buildx-plugin docker-compose-plugin
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
docker-ce-rootless-extras libslirp0 pigz slirp4netns
Suggested packages:
cgroupfs-mount | cgroup-lite docker-model-plugin
The following NEW packages will be installed:
containerd.io docker-buildx-plugin docker-ce docker-ce-cli docker-ce-rootless-extras docker-compose-plugin libslirp0 pigz slirp4netns
0 upgraded, 9 newly installed, 0 to remove and 9 not upgraded.
Need to get 105 MB of archives.
After this operation, 437 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 pigz amd64 2.8-1 [65.6 kB]
Get:2 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble/main amd64 libslirp0 amd64 4.7.0-1ubuntu3 [63.8 kB]
Get:3 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 slirp4netns amd64 1:2.1-1build2 [34.9 kB]
Get:4 https://download.docker.com/linux/ubuntu noble/stable amd64 containerd.io amd64 1.7.28-1-ubuntu.24.04-noble [31.9 MB]
Get:5 https://download.docker.com/linux/ubuntu noble/stable amd64 docker-ce-cli amd64 5:28.5.1-1-ubuntu.24.04-noble [16.5 MB]
Get:6 https://download.docker.com/linux/ubuntu noble/stable amd64 docker-ce amd64 5:28.5.1-1-ubuntu.24.04-noble [19.7 MB]
Get:7 https://download.docker.com/linux/ubuntu noble/stable amd64 docker-buildx-plugin amd64 0.29.1-1-ubuntu.24.04-noble [15.9 MB]
Get:8 https://download.docker.com/linux/ubuntu noble/stable amd64 docker-ce-rootless-extras amd64 5:28.5.1-1-ubuntu.24.04-noble [6481 kB]
Get:9 https://download.docker.com/linux/ubuntu noble/stable amd64 docker-compose-plugin amd64 2.40.3-1-ubuntu.24.04-noble [14.3 MB]
Fetched 105 MB in 1s (84.3 MB/s)
Selecting previously unselected package containerd.io.
(Reading database ... 71735 files and directories currently installed.)
Preparing to unpack .../0-containerd.io_1.7.28-1-ubuntu.24.04-noble_amd64.deb ...
Unpacking containerd.io (1.7.28-1-ubuntu.24.04-noble) ...
Selecting previously unselected package docker-ce-cli.
Preparing to unpack .../1-docker-ce-cli_5%3a28.5.1-1-ubuntu.24.04-noble_amd64.deb ...
Unpacking docker-ce-cli (5:28.5.1-1-ubuntu.24.04-noble) ...
Selecting previously unselected package docker-ce.
Preparing to unpack .../2-docker-ce_5%3a28.5.1-1-ubuntu.24.04-noble_amd64.deb ...
Unpacking docker-ce (5:28.5.1-1-ubuntu.24.04-noble) ...
Selecting previously unselected package pigz.
Preparing to unpack .../3-pigz_2.8-1_amd64.deb ...
Unpacking pigz (2.8-1) ...
Selecting previously unselected package docker-buildx-plugin.
Preparing to unpack .../4-docker-buildx-plugin_0.29.1-1-ubuntu.24.04-noble_amd64.deb ...
Unpacking docker-buildx-plugin (0.29.1-1-ubuntu.24.04-noble) ...
```

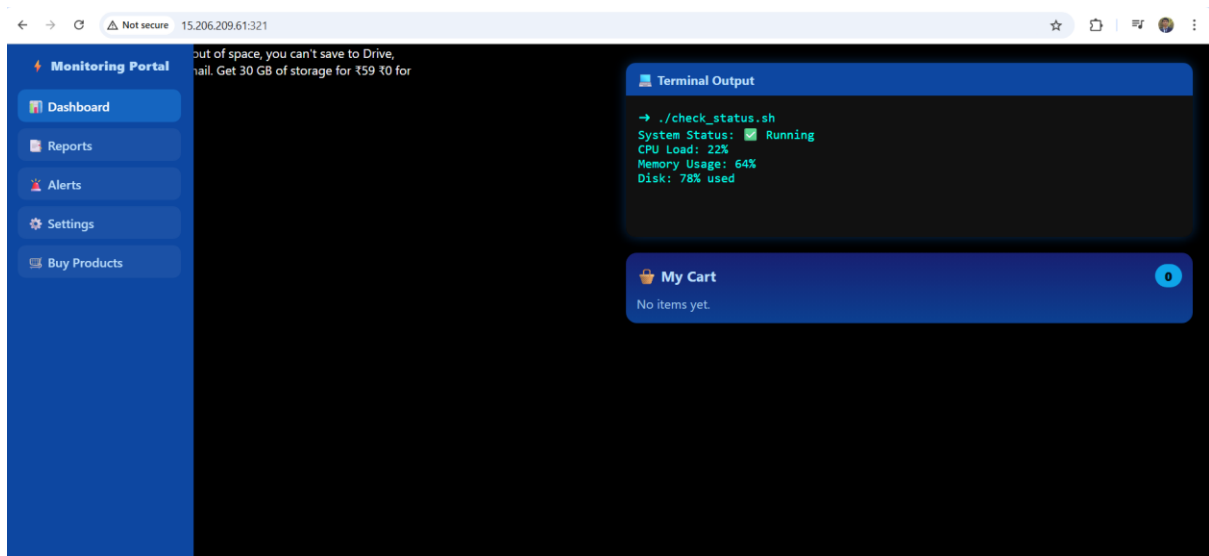
Step : Pull Docker image nginx

```
root@ip-172-31-7-82:~# docker pull nginx
Using default tag: latest
latest: Pulling from library/nginx
38513bd72563: Pull complete
a0a6ab141558: Pull complete
0e86847a3920: Pull complete
1bace2083289: Pull complete
89df300a082a: Pull complete
35fb9ffa6621: Pull complete
5545b08f9d26: Pull complete
Digest: sha256:f547e3d0d5d02f7009737b284abc87d808e4252b42dceea361811e9fc606287f
Status: Downloaded newer image for nginx:latest
docker.io/library/nginx:latest
root@ip-172-31-7-82:~#
```

Run docker image nginx

```
root@ip-172-31-7-82:~# docker images
REPOSITORY TAG IMAGE ID CREATED SIZE
nginx latest 9d0e6f6199dc 5 days ago 152MB
root@ip-172-31-7-82:~# docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
root@ip-172-31-7-82:~# docker run -d -P nginx
46000d17764e04e4bf633a22ac28e2336edb1e506743c2647d33bb3c37cbb14
root@ip-172-31-7-82:~# docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
46000d17764e nginx "/docker-entrypoint..." 7 seconds ago Up 6 seconds 0.0.0.0:32768->80/tcp, [::]:32768->80/tcp elated_cartwright
root@ip-172-31-7-82:~#
```

Output



Step: Push Image on docker hub

```

root@2bab876be4c2:/usr/share/nginx/html# cd..
bash: cd..: command not found
root@2bab876be4c2:/usr/share/nginx/html# cd
root@2bab876be4c2:~# exit
exit
root@ip-172-31-7-82:~# docker images
REPOSITORY    TAG       IMAGE ID       CREATED        SIZE
nginx         latest    9d0e6f6199dc   5 days ago    152MB
root@ip-172-31-7-82:~# docker tag 9d0e6f6199dc jayvant1988/nginx:newpush
root@ip-172-31-7-82:~# docker images
REPOSITORY    TAG       IMAGE ID       CREATED        SIZE
jayvant1988/nginx  newpush   9d0e6f6199dc   5 days ago    152MB
nginx         latest    9d0e6f6199dc   5 days ago    152MB
root@ip-172-31-7-82:~# docker commit 9d0e6f6199dc jayvant1988/nginx:newpush
Error response from daemon: No such container: 9d0e6f6199dc
root@ip-172-31-7-82:~# docker ps
CONTAINER ID   IMAGE      COMMAND                  CREATED        STATUS        PORTS                               NAMES
2bab876be4c2   9d0e6f6199dc  "/docker-entrypoint..."  22 minutes ago  Up 22 minutes  0.0.0.0:321->80/tcp, [::]:321->80/tcp  kind_euler
46008d17764e   nginx      "/docker-entrypoint..."  27 minutes ago  Up 27 minutes  0.0.0.0:32768->80/tcp, [::]:32768->80/tcp  elated_cartwright
root@ip-172-31-7-82:~# docker commit 2bab876be4c2 jayvant1988/nginx:newpush
sha256:6fdd61c4e5d467ae0168759fdd8661a7f1edd9a4dca98719ffa10ef0b4991f52
root@ip-172-31-7-82:~#

```

```

root@ip-172-31-7-82:~# docker login -u jayvant1988

Info → A Personal Access Token (PAT) can be used instead.
To create a PAT, visit https://app.docker.com/settings

Password:

WARNING! Your credentials are stored unencrypted in '/root/.docker/config.json'.
Configure a credential helper to remove this warning. See
https://docs.docker.com/go/credential-store/

Login Succeeded
root@ip-172-31-7-82:~# docker push jayvant1988/nginx:newpush
The push refers to repository [docker.io/jayvant1988/nginx]
055876981405: Pushed
984a99e4023d: Mounted from library/nginx
02e74660b2c7: Mounted from library/nginx
4472d7fdefad: Mounted from library/nginx
1909d702c244: Mounted from library/nginx
7ed28343b40e: Mounted from library/nginx
133e431f4bd3: Mounted from library/nginx
d7c97cb6f1fe: Mounted from library/nginx
newpush: digest: sha256:5c02dd6e4c9dc5ebd5e82526c136490ae09de959fe9d74830e961b6cb6503c86 size: 1986
root@ip-172-31-7-82:~#

```

Output

← → ↻ 🌐 hub.docker.com/repositories/jayvant1988?_gl=1*1k0xtfu*_gd_au*MTg2MTMyOTIzMTk4NzYyMTQyNjgw*_ga*MTk4OTQ0Njc1LjE3NjE3NTcwNDM.*_ga_XjWPGMJYHQ*czE3NjIxNDU4OTak... ☆ 📄 🗑️ 🌐 🌐 🌐 🌐 🌐

New Docker + F2B. A new partnership bringing trust to AI development. Learn more. →

hub Explore My Hub 🔍 Search Docker Hub CtrlK 🔔 🌐 ⚙️ 👤 J

🏠 jayvant1988 Docker Personal ▾

⚙️ Repositories

🔒 Hardened Images

👤 Collaborations

⚙️ Settings ▾

🔒 Default privacy

🔔 Notifications

💰 Billing

📊 Usage ▾

📈 Pulls

💾 Storage

Repositories

All repositories within the jayvant1988 namespace.

🔍 Search by repository name

All content ▾

Create a repository

Name	Last Pushed ↑	Contains	Visibility	Scout
jayvant1988/nginx	1 minute ago	IMAGE	Public	Inactive

1-1 of 1 < >

← → ↻ 🌐 hub.docker.com/repository/docker/jayvant1988/nginx/general ☆ 📄 🗑️ 🌐 🌐 🌐 🌐 🌐

jayvant1988 Docker Personal ▾

⚙️ Repositories

🔒 Hardened Images

👤 Collaborations

⚙️ Settings ▾

🔒 Default privacy

🔔 Notifications

💰 Billing

📊 Usage ▾

📈 Pulls

💾 Storage

Repositories / nginx / General

jayvant1988/nginx 📄

Last pushed 1 minute ago · ☆ 0 · 📄 0

Add a description ✎ ⓘ

Add a category ✎ ⓘ

General

Tags

Image Management BETA

Collaborators

Webhooks

Settings 🔔

Tags

🔒 DOCKER SCOUT INACTIVE [Activate](#)

This repository contains 1 tag(s).

Tag	OS	Type	Pulled	Pushed
newpush	🐧	Image	less than 1 day	2 minutes

[See all](#)

Repository overview ⓘ INCOMPLETE

An overview describes what your image does and how to run it. It displays in [the public view of your repository](#) once you have pushed some content.

[Add overview](#)

Using 0 of 1 private repositories.

Docker commands

To push a new tag to this repository:

```
docker push jayvant1988/nginx:tagname
```

[Public view](#)

buildcloud

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