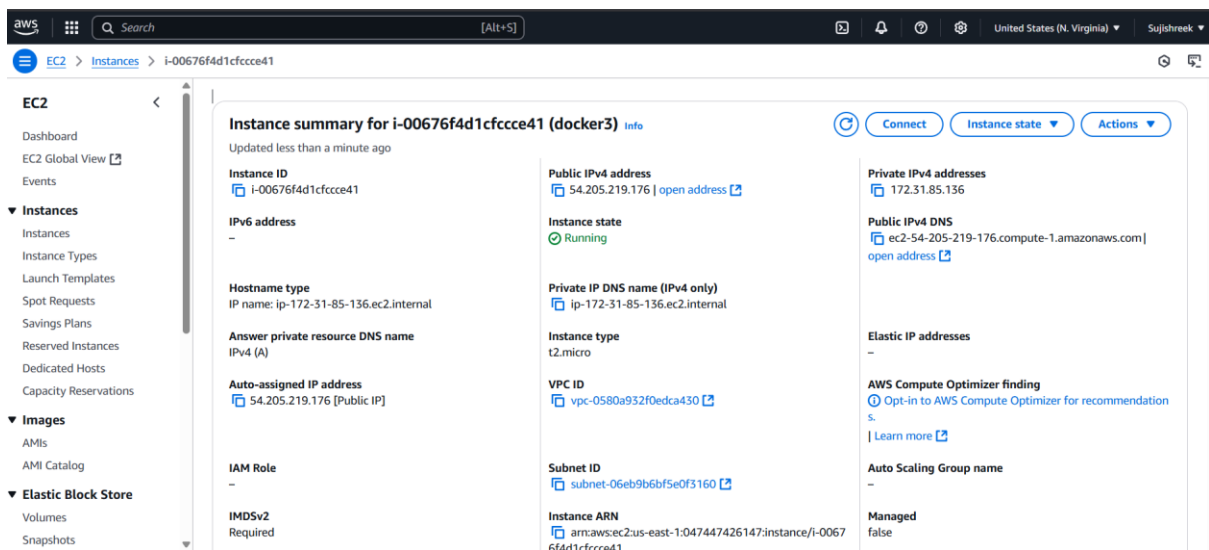# Docker Task -3

Task Description:

Create a custom docker image for nginx and deploy it using docker compose, where the volume bind mount should be at /var/opt/nginx location. Push the created custom docker image to your docker-hub.

Tech stacks need to be used:

- AWS EC2
- Docker
- Docker Compose

SCREENSHORTS:

--EC2 LAUNCH USING UBUNTU

--AFTER THIS DOING CONNECT AND INSTALLING DOCKER AND DOCKER COMPOSE, THEN RELOADING

```
Setting up python3-compose (1.29.2-6ubuntu1) ...
Setting up docker-compose (1.29.2-6ubuntu1) ...
Processing triggers for dbus (1.14.10-4ubuntu4.1) ...
Processing triggers for man-db (2.12.0-4build2) ...
Scanning processes...
Scanning linux images...

Running kernel seems to be up-to-date.

No services need to be restarted.

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No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.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-172-31-85-136:~$ sudo systemctl start docker
ubuntu@ip-172-31-85-136:~$ sudo systemctl enable docker
ubuntu@ip-172-31-85-136:~$ sudo usermod -aG docker ubuntu
ubuntu@ip-172-31-85-136:~$ history
    1  sudo apt update
    2  sudo apt install -y docker.io docker-compose
    3  sudo systemctl start docker
    4  sudo systemctl enable docker
    5  sudo usermod -aG docker ubuntu
    6  history
ubuntu@ip-172-31-85-136:~$
```

```
Last login: Thu Apr 24 15:05:08 2025 from 18.206.107.27
ubuntu@ip-172-31-85-136:~$ history
    1  sudo apt update
    2  sudo apt install -y docker.io docker-compose
    3  sudo systemctl start docker
    4  sudo systemctl enable docker
    5  sudo usermod -aG docker ubuntu
    6  history
    7  exit
    8  mkdir nginx-custom && cd nginx-custom
    9  touch Dockerfile
   10  nano Dockerfile
   11  mkdir html
   12  <html>
   13  nano html/index.html
   14  ocker build -t sujishreek/nginx-custom:latest .
   15  docker build -t sujishreek/nginx-custom:latest .
   16  docker run -d -p 8080:80 sujishreek/nginx-custom:latest
   17  docker ps
   18  docker login
   19  history
ubuntu@ip-172-31-85-136:~$ docker login
Log in with your Docker ID or email address to push and pull images from Docker Hub. If you don't have a Docker ID, head over to https://hub.docker.com/ to create one.
You can log in with your password or a Personal Access Token (PAT). Using a limited-scope PAT grants better security and is required for organizations using SSO. Learn
 more at https://docs.docker.com/go/access-tokens/
```

DOCKERFILE:

```
  GNU nano 7.2                                                Dockerfile
FROM nginx:latest

COPY ./html /usr/share/nginx/html
```

```
                                          [ Wrote 3 lines ]
^G Help          ^O Write Out   ^W Where Is   ^K Cut         ^T Execute   ^C Location    M-U Undo    M-A Set Mark   M-] To Bracket   M-Q Previous
^X Exit          ^R Read File   ^\ Replace    ^U Paste       ^J Justify   ^_ Go To Line  M-E Redo    M-6 Copy       ^Q Where Was     M-W Next
```

i-00676f4d1cfccce41 (docker3)

PublicIPs: 54.205.219.176   PrivateIPs: 172.31.85.136

Html/index.html:

TESTING PORT 8080:

Docker-compose.yml:

```
ubuntu@ip-172-31-85-136:~$ docker login
Log in with your Docker ID or email address to push and pull images from Docker Hub. If you don't have a Docker ID, head over to https://hub.docker.com/ to create one.
You can log in with your password or a Personal Access Token (PAT). Using a limited-scope PAT grants better security and is required for organizations using SSO. Learn
 more at https://docs.docker.com/go/access-tokens/

Username: sujishreek
Password:
WARNING! Your password will be stored unencrypted in /home/ubuntu/.docker/config.json.
Configure a credential helper to remove this warning. See
https://docs.docker.com/engine/reference/commandline/login/#credentials-store

Login Succeeded
ubuntu@ip-172-31-85-136:~$ docker tag sujishreek/nginx-custom:latest sujishreek/nginx-custom:latest
ubuntu@ip-172-31-85-136:~$ docker push sujishreek/nginx-custom:latest
The push refers to repository [docker.io/sujishreek/nginx-custom]
f5bb6251e08d: Pushed
d1e3e4dd1aaa: Mounted from library/nginx
ccc5aac17fc4: Mounted from library/nginx
8d83f6b79143: Mounted from library/nginx
9e3c6e8c1e25: Mounted from library/nginx
9aad78ecf380: Mounted from library/nginx
bd903131a05e: Mounted from library/nginx
ea680fbff095: Mounted from library/nginx
latest: digest: sha256:6d88a4bd46d744f3ff9fd31a351bff206256b0be59ecfd3eb5f6b7a347f949b3 size: 1985
ubuntu@ip-172-31-85-136:~$ nano docker-compose.yml
ubuntu@ip-172-31-85-136:~$ docker-compose up -d
Creating network "ubuntu_default" with the default driver
```

```
latest: digest: sha256:6d88a4bd46d744f3ff9fd31a351bff206256b0be59ecfd3eb5f6b7a347f949b3 size: 1985
ubuntu@ip-172-31-85-136:~$ nano docker-compose.yml
ubuntu@ip-172-31-85-136:~$ docker-compose up -d
Creating network "ubuntu_default" with the default driver
Creating ubuntu_nginx_1 ... done
ubuntu@ip-172-31-85-136:~$ docker ps
CONTAINER ID   IMAGE                           COMMAND                 CREATED           STATUS            PORTS                                       NAMES
b63b4257665e   sujishreek/nginx-custom:latest  "/docker-entrypoint…"   About a minute ago  Up About a minute  0.0.0.0:80->80/tcp, :::80->80/tcp          ubuntu_nginx_
1
779305ea1339   sujishreek/nginx-custom:latest  "/docker-entrypoint…"   20 minutes ago    Up 20 minutes     0.0.0.0:8080->80/tcp, :::8080->80/tcp      elastic_wrigh
t
ubuntu@ip-172-31-85-136:~$
```

⊙   Suji's Site   ✕   +

←   C   ⚠ Not secure | 54.205.219.176

Hello, I'm Suji!

Email: sujishreek2002@gmail.com

BATCH 15 DOCKER TASK3

OVERALL COMMANDS:

```
ubuntu@ip-172-31-85-136:~$ history
    1  sudo apt update
    2  sudo apt install -y docker.io docker-compose
    3  sudo systemctl start docker
    4  sudo systemctl enable docker
    5  sudo usermod -aG docker ubuntu
    6  history
    7  exit
    8  mkdir nginx-custom && cd nginx-custom
    9  touch Dockerfile
   10  nano Dockerfile
   11  mkdir html
   12  <html>
   13  nano html/index.html
   14  ocker build -t sujishreek/nginx-custom:latest .
   15  docker build -t sujishreek/nginx-custom:latest .
   16  docker run -d -p 8080:80 sujishreek/nginx-custom:latest
   17  docker ps
   18  docker login
   19  history
   20  docker login
   21  docker tag sujishreek/nginx-custom:latest sujishreek/nginx-custom:latest
   22  docker push sujishreek/nginx-custom:latest
   23  nano docker-compose.yml
   24  docker-compose up -d
   25  docker ps
   26  history
```