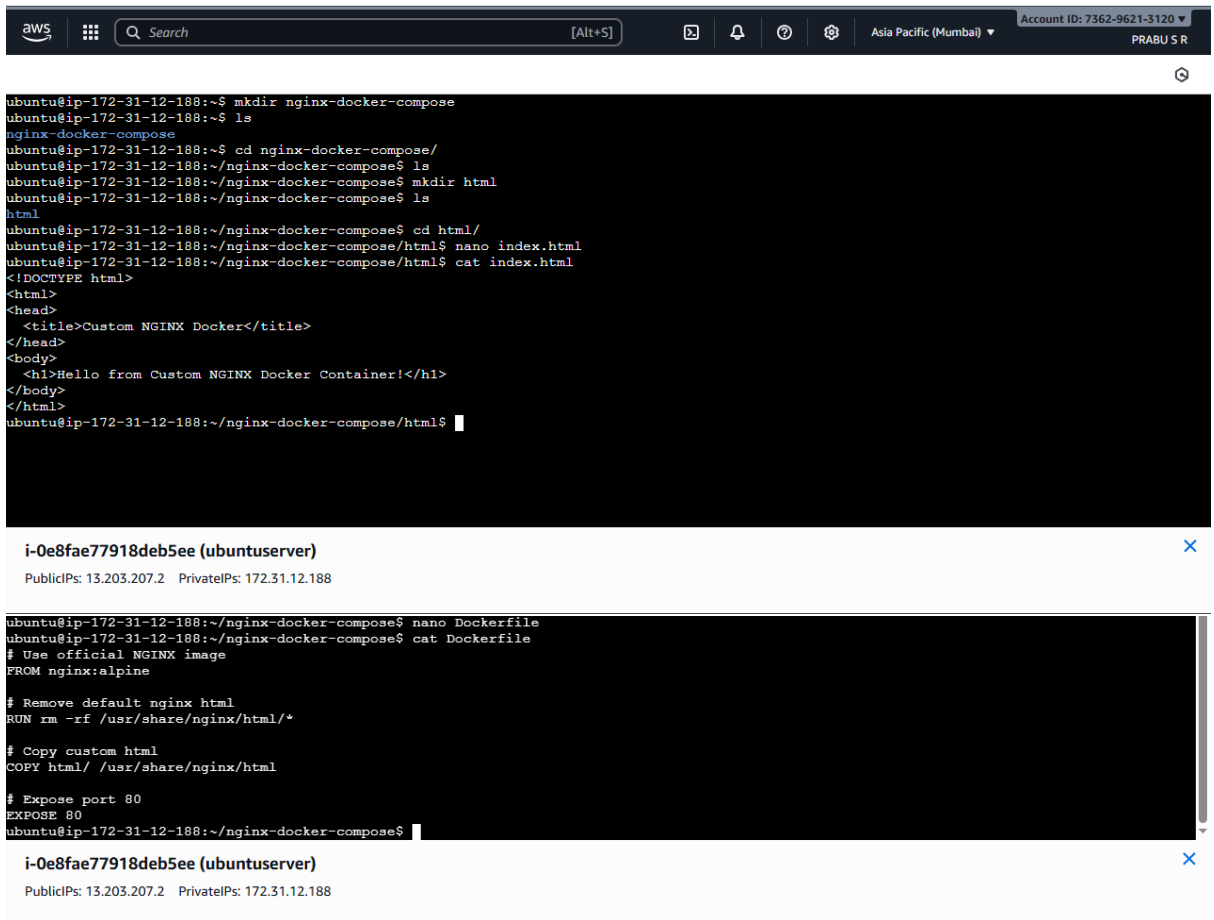


Docker Task -3

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.

Created a custom NGINX Docker image



```
aws [Search] [Alt+S] Asia Pacific (Mumbai) Account ID: 7362-9621-3120 PRABU S R

ubuntu@ip-172-31-12-188:~$ mkdir nginx-docker-compose
ubuntu@ip-172-31-12-188:~$ ls
nginx-docker-compose
ubuntu@ip-172-31-12-188:~$ cd nginx-docker-compose/
ubuntu@ip-172-31-12-188:~/nginx-docker-compose$ ls
ubuntu@ip-172-31-12-188:~/nginx-docker-compose$ mkdir html
ubuntu@ip-172-31-12-188:~/nginx-docker-compose$ ls
html
ubuntu@ip-172-31-12-188:~/nginx-docker-compose$ cd html/
ubuntu@ip-172-31-12-188:~/nginx-docker-compose/html$ nano index.html
<!DOCTYPE html>
<html>
<head>
  <title>Custom NGINX Docker</title>
</head>
<body>
  <h1>Hello from Custom NGINX Docker Container!</h1>
</body>
</html>
ubuntu@ip-172-31-12-188:~/nginx-docker-compose/html$

i-0e8fae77918deb5ee (ubuntuserver)
PublicIPs: 13.203.207.2 PrivateIPs: 172.31.12.188

ubuntu@ip-172-31-12-188:~/nginx-docker-compose$ nano Dockerfile
ubuntu@ip-172-31-12-188:~/nginx-docker-compose$ cat Dockerfile
# Use official NGINX image
FROM nginx:alpine

# Remove default nginx html
RUN rm -rf /usr/share/nginx/html/*

# Copy custom html
COPY html/ /usr/share/nginx/html

# Expose port 80
EXPOSE 80
ubuntu@ip-172-31-12-188:~/nginx-docker-compose$

i-0e8fae77918deb5ee (ubuntuserver)
PublicIPs: 13.203.207.2 PrivateIPs: 172.31.12.188
```

```
ubuntu@ip-172-31-12-188:~/nginx-docker-compose$ nano docker-compose.yml
ubuntu@ip-172-31-12-188:~/nginx-docker-compose$ cat docker-compose.yml
version: '3.8'

services:
  nginx:
    build: .
    image: yourdockerhubusername/custom-nginx:latest
    ports:
      - "8080:80"
    volumes:
      - /var/opt/nginx:/usr/share/nginx/html
ubuntu@ip-172-31-12-188:~/nginx-docker-compose$
```

i-0e8fae77918deb5ee (ubuntuserver)

PublicIPs: 13.203.207.2 PrivateIPs: 172.31.12.188

I Set up a bind mount to /var/opt/nginx

```
ubuntu@ip-172-31-12-188:~/nginx-docker-compose$ cd
ubuntu@ip-172-31-12-188:~$ ls
nginx-docker-compose
ubuntu@ip-172-31-12-188:~$ pwd
/home/ubuntu
ubuntu@ip-172-31-12-188:~$ sudo mkdir -p /var/opt/nginx
ubuntu@ip-172-31-12-188:~$ sudo chmod -R 777 /var/opt/nginx
ubuntu@ip-172-31-12-188:~$ echo "<h1>Serving from /var/opt/nginx</h1>" | sudo tee /var/opt/nginx/index.html
<h1>Serving from /var/opt/nginx</h1>
ubuntu@ip-172-31-12-188:~$
```

i-0e8fae77918deb5ee (ubuntuserver)

PublicIPs: 13.203.207.2 PrivateIPs: 172.31.12.188

Used Docker Compose to deploy



```
ubuntu@ip-172-31-12-188:~/nginx-docker-compose$ docker compose up -d --build
WARN[0000] /home/ubuntu/nginx-docker-compose/docker-compose.yml: the attribute `version` is obsolete, it will be ignored, please remove it t
e avoid potential confusion
[*] Building 3.7s (5/8)
=> [internal] load local bake definitions
=> => reading from stdin 556s
=> [internal] load build definition from Dockerfile
=> => transferring dockerfile: 229B
=> [internal] load metadata for docker.io/library/nginx:alpine
=> [internal] load .dockerignore
=> => transferring context: 2B
=> [1/2] FROM docker.io/library/nginx:alpine@sha256:61e01287e546aac28a3f56839c136b31f590273f3b41187a36f46f6a03bbfe22
=> => resolve docker.io/library/nginx:alpine@sha256:61e01287e546aac28a3f56839c136b31f590273f3b41187a36f46f6a03bbfe22
=> sha256:61e01287e546aac28a3f56839c136b31f590273f3b41187a36f46f6a03bbfe22 10.33kB / 10.33kB
=> sha256:b03cc0b7431a2e3172f50bae96d82bd7929305f33ecb88fbf2940559e475745c4e 2.50kB / 2.50kB
=> sha256:2d35ebdb57d9971fea0ca1582aa78935adf8058b2cc32db163c98822e5dfafb 3.80MB / 3.80MB
=> sha256:5e7abccd20216bbeedf1369529564ffd60f830ed3540c477938ca580b645dff5 10.78kB / 10.78kB
=> sha256:f80aba050eadb732c9571d549167ce0f71adce202ac619ae8786fe6c9eec3374 1.81MB / 1.81MB
=> sha256:621a5197ed7f4a65a432aaf124c21292fd986ed107e731f860572233073798 0B / 627B
=> extracting sha256:621a5197ed7f4a65a432aaf124c21292fd986ed107e731f860572233073798 0.1s
=> sha256:09a63848f2091b607f5b9744492240182874f6b2d3554c9e9a94455203a03950 954B / 954B
=> sha256:83ce83cd996042dd16a6124be94e6046da71a9c6b59a6cc48704f6cfffca76d7d 0B / 403B
=> extracting sha256:f80aba050eadb732c9571d549167ce0f71adce202ac619ae8786fe6c9eec3374 0.1s
=> sha256:e2d0ea5d3690e523d1c4fc7f288e0b98b6c405d5880fa11d1637483fd5afc74c 0B / 1.21kB
=> [internal] load build context
=> => transferring context: 223B
```

i-0e8fae77918deb5ee (ubuntuserver)

PublicIPs: 13.203.207.2 PrivateIPs: 172.31.12.188

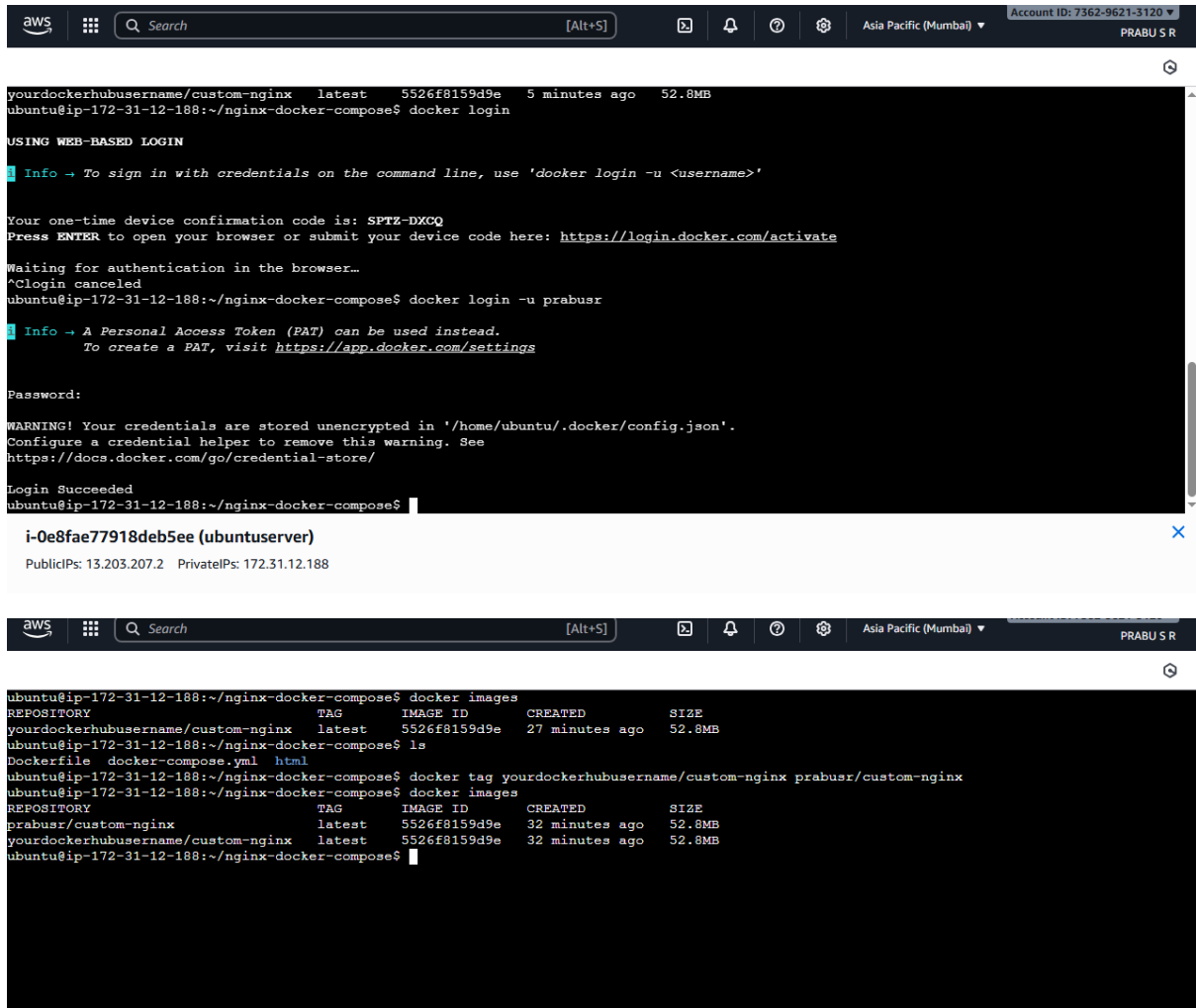
```
> => writing image sha256:5b2f819939a39a16487900e0db3a36e06eb7f15bb2551a79da13063cc06
=> => naming to docker.io/yourdockerhubusername/custom-nginx:latest
=> resolving provenance for metadata file
[*] Running 3/3
✓ yourdockerhubusername/custom-nginx:latest Built
✓ Network nginx-docker-compose default Created
✓ Container nginx-docker-compo5e-nginx-1 Started
ubuntu@ip-172-31-12-188:~/nginx-docker-compose$
```

i-0e8fae77918deb5ee (ubuntuserver)

PublicIPs: 13.203.207.2 PrivateIPs: 172.31.12.188



Pushed my docker image to Docker Hub



```
ubuntu@ip-172-31-12-188:~/nginx-docker-compose$ docker images
REPOSITORY          TAG                 IMAGE ID            CREATED             SIZE
yourdockerhubusername/custom-nginx   latest             5526f8159d9e       27 minutes ago     52.8MB
ubuntu@ip-172-31-12-188:~/nginx-docker-compose$ ls
Dockerfile  docker-compose.yml  html
ubuntu@ip-172-31-12-188:~/nginx-docker-compose$ docker tag yourdockerhubusername/custom-nginx prabusr/custom-nginx
ubuntu@ip-172-31-12-188:~/nginx-docker-compose$ docker images
REPOSITORY          TAG                 IMAGE ID            CREATED             SIZE
prabusr/custom-nginx   latest             5526f8159d9e       32 minutes ago     52.8MB
yourdockerhubusername/custom-nginx   latest             5526f8159d9e       32 minutes ago     52.8MB
ubuntu@ip-172-31-12-188:~/nginx-docker-compose$ docker push prabusr/custom-nginx
Using default tag: latest
The push refers to repository [docker.io/prabusr/custom-nginx]
f6c235789c1f: Pushed
e60513e3f4f1: Pushed
e9a265592751: Pushed
1704e5a3d8da: Pushed
dc45aec6c902da: Pushed
3e4655a3887b: Pushed
abbeef7f88314: Pushed
ed6be5e2fd33: Pushed
1967fcedbe5e: Pushed
256f393e029f: Pushing [=====>]  8.607MB
```

i-0e8fae77918deb5ee (ubuntuserver)

PublicIPs: 13.203.207.2 PrivateIPs: 172.31.12.188

hub Explore My Hub Search Docker Hub CtrlK

prabusr Docker Personal

Repositories

All repositories within the prabusr namespace.

Search by repository name All content Create a repository

Name	Last Pushed	Contains	Visibility	Scout
prabusr/custom-nginx	1 minute ago	IMAGE	Public	Inactive
prabusr/mydockerhub	3 days ago		Public	Inactive

1-2 of 2