

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.

```
root@ip-172-31-12-67:~# mkdir custom-nginx && cd custom-nginx
root@ip-172-31-12-67:~/custom-nginx# mkdir site-content
root@ip-172-31-12-67:~/custom-nginx# touch site-content/index.html
root@ip-172-31-12-67:~/custom-nginx# echo '<h1>Hello from /var/opt/nginx</h1>' > site-content/index.html
root@ip-172-31-12-67:~/custom-nginx# nano nginx.conf'
```

```
root@ip-172-31-12-67:~/custom-nginx# docker login -u ashok070
```

i 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-172-31-12-67:~/custom-nginx# docker push ashok070/custom-nginx:1.0
The push refers to repository [docker.io/ashok070/custom-nginx]
f62eb32901aa: Pushed
bc8c5794520b: Pushed
640e06e412a9: Mounted from library/nginx
bd66bdd2f47f: Mounted from library/nginx
4f313ed230a0: Mounted from library/nginx
36acb230000e: Mounted from library/nginx
2aacff968bc: Mounted from library/nginx
bbbd2d1aea89: Mounted from library/nginx
7b97c641cb43: Mounted from library/nginx
fd2758d7a50e: Mounted from library/nginx
```

[illegible]

```
root@ip-172-31-12-67:~/custom-nginx# docker build -t ashok070/custom-nginx:v1.0 .
[+] Building 5.3s (8/8) FINISHED
=> [internal] load build definition from Dockerfile
=> => transferring Dockerfile: 363B
=> [internal] load metadata for docker.io/library/nginx:alpine
=> [internal] load .dockerignore
=> => transferring context: 2B
=> [internal] load build context
=> => transferring context: 514B
=> [1/3] FROM docker.io/library/nginx:alpine@sha256:b2e814d28359e77bd0aa5fed1939620075e4ffa0eb2:
=> resolve docker.io/library/nginx:alpine@sha256:b2e814d28359e77bd0aa5fed1939620075e4ffa0eb2:
=> sha256:6544c2d67a89f0b31a6e54c8c877e7a71d53e8d4a07c49ddccc0ef0e47aa3e0 2.50kB / 2.50kB
=> sha256:3b7062d09e02c4d2f2b05e76286341d9b23a6942b9ec3d2a269115a200bc86 1.81MB / 1.81MB
=> sha256:b2e814d28359e77bd0aa5fed1939620075e4ffa0eb2042c3e5b735b5c14ad 10.33kB / 10.33kB
=> sha256:7765642d77009bf47cd4a952cb1a1f0a09c5b15736478bdfb399af09e8e41 10.78kB / 10.78kB
=> sha256:f07624b16882247c3539e8d6a5ff37a76139ec25d38dbdb08c69a14cd73236 3.30MB / 3.80MB
=> sha256:bf746e72516f99f0b4f5204c47f8c2aa325a4a9d075769800c042548fe772b25d 627B / 627B
=> extracting sha256:f07624b16882247c3539e8d6a5ff37a76139ec25d38dbdb08c69a14cd73236
=> sha256:a9f9fbaf1741d1f2a4a5df1b4b2f0993138cblag201f23a01cb295e0274768 955B / 955B
=> extracting sha256:3b7062d09e02c4d2f2b05e76286341d9b23a6942b9ec3d2a269115a200bc86
=> sha256:2c127093dfc74845aae28bdc3d96936bdc03be36c43eeb756d070e43337fc 404B / 404B
=> extracting sha256:bf746e72516f99f0b4f5204c47f8c2aa325a4a9d075769800c042548fe772b25d
=> extracting sha256:a9f9fbaf1741d1f2a4a5df1b4b2f0993138cblag201f23a01cb295e0274768
=> sha256:92971aeb101e5e1df5759e2cc239bdc76c34c09f356f428f42560a039caf2 16.78MB / 16.78MB
```

```

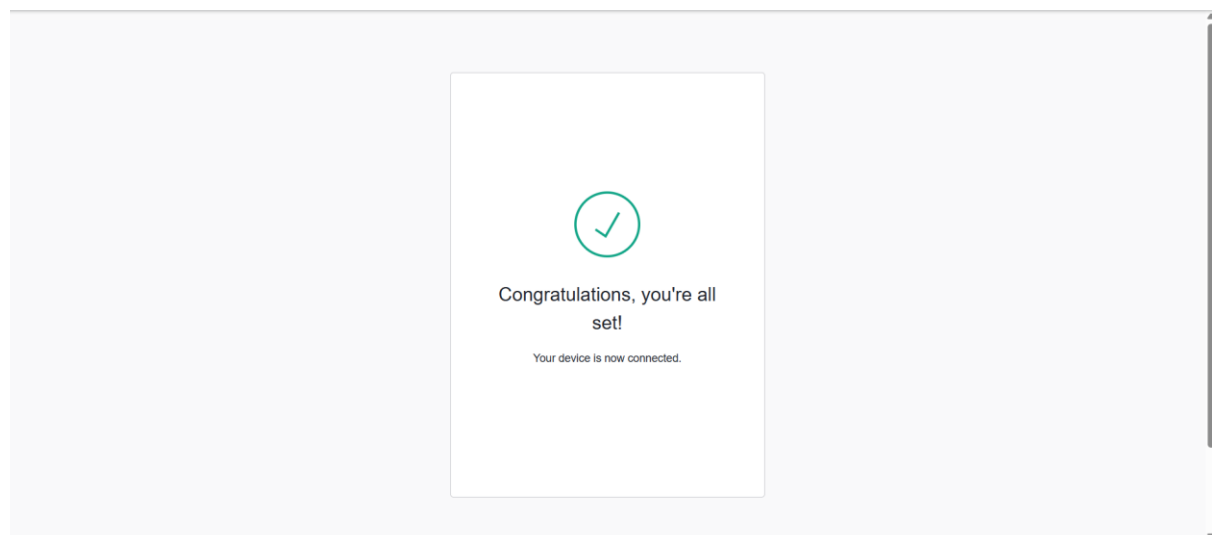
root@ip-172-31-12-67:~/custom-nginx# sudo usermod -aG docker $USER
root@ip-172-31-12-67:~/custom-nginx# nano Dockerfile
root@ip-172-31-12-67:~/custom-nginx# .dockerignore
.dockerignore: command not found
root@ip-172-31-12-67:~/custom-nginx# cd site-content
root@ip-172-31-12-67:~/custom-nginx/site-content# .git
Command '.git' not found, did you mean:
  command 'git' from deb git (1:2.43.0-lubuntu7.2)
  command 'dgit' from deb dgit (11.5)
  command 'ggit' from deb ggit (2.10-2)
  command 'jgit' from deb jgit-cli (4.11.9-2)
Try: apt install <deb name>
root@ip-172-31-12-67:~/custom-nginx/site-content# apt install git
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
git is already the newest version (1:2.43.0-lubuntu7.2).

```

```

root@ip-172-31-12-67:~/custom-nginx# sudo apt install docker-ce -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  containerd.io docker-buildx-plugin docker-ce-cli docker-ce-rootless-extras docker-compose-plugin libltdl7 libslirp0 pigz slurp4netns
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 libltdl7 libslirp0 pigz slurp4netns
0 upgraded, 10 newly installed, 0 to remove and 26 not upgraded.
Need to get 103 MB of archives.
After this operation, 429 MB of additional disk space will be used.
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 libltdl7 amd64 2.4.7-7build1 [40.3 kB]
Get:3 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble/main amd64 libslirp0 amd64 4.7.0-lubuntu3 [63.8 kB]
Get:4 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 slurp4netns amd64 1.2.1-1build2 [34.9 kB]
Get:5 https://download.docker.com/linux/ubuntu noble/stable amd64 containerd.io amd64 1.7.27-1 [30.5 MB]
Get:6 https://download.docker.com/linux/ubuntu noble/stable amd64 docker-ce-cli amd64 5:28.3.0-1~ubuntu.24.04~noble [16.5 MB]
Get:7 https://download.docker.com/linux/ubuntu noble/stable amd64 docker-ce amd64 5:28.3.0-1~ubuntu.24.04~noble [19.7 MB]
Get:8 https://download.docker.com/linux/ubuntu noble/stable amd64 docker-buildx-plugin amd64 0.25.0-1~ubuntu.24.04~noble [15.6 MB]
Get:9 https://download.docker.com/linux/ubuntu noble/stable amd64 docker-ce-rootless-extras amd64 5:28.3.0-1~ubuntu.24.04~noble [6480 kB]
Get:10 https://download.docker.com/linux/ubuntu noble/stable amd64 docker-compose-plugin amd64 2.37.3-1~ubuntu.24.04~noble [14.2 MB]
Fetched 103 MB in 1s (75.4 MB/s)
Selecting previously unselected package containerd.io.

```



```

root@ip-172-31-12-67:~/custom-nginx# docker compose up -d
WARN[0000] /root/custom-nginx/docker-compose.yml: the attribute `version` is obsolete, it will be ignored, please remove it to avoid potential confusion
unable to get image '<YOUR_DOCKERHUB_USER>/custom-nginx:1.0': Error response from daemon: invalid reference format
root@ip-172-31-12-67:~/custom-nginx#

```

```

    }
}
}
root@ip-172-31-12-67:~/custom-nginx# docker push ashok070/custom-nginx:1.0
The push refers to repository [docker.io/ashok070/custom-nginx]
f62eb32901aa: Preparing
bc8c5794520b: Preparing
640e06e412a9: Preparing
bd66bdd2f47f: Preparing
4f313ed230a0: Preparing
36acb230000e: Waiting
2aaacff968bc: Waiting
bbbd2d1aea89: Waiting
7b97c641cb43: Waiting
fd2758d7a50e: Waiting
denied: requested access to the resource is denied
bc8c5794520b: Pushed
640e06e412a9: Mounted from library/nginx
bd66bdd2f47f: Mounted from library/nginx
4f313ed230a0: Mounted from library/nginx
36acb230000e: Mounted from library/nginx
2aaacff968bc: Mounted from library/nginx
bbbd2d1aea89: Mounted from library/nginx
7b97c641cb43: Mounted from library/nginx
fd2758d7a50e: Mounted from library/nginx
1.0: digest: sha256:d194f0466491c13b48e8c49b556f801f0ba31fa5ee8b1eaf9df5c3fdd033307f size: 2403
root@ip-172-31-12-67:~/custom-nginx# nano docker-compose.yml
root@ip-172-31-12-67:~/custom-nginx# docker compose up -d
WARN[0000] /root/custom-nginx/docker-compose.yml: the attribute `version` is obsolete, it will be ignored, please remove it to
unable to get image '<YOUR_DOCKERHUB_USER>/custom-nginx:1.0': Error response from daemon: invalid reference format
root@ip-172-31-12-67:~/custom-nginx# nano docker-compose.yml
root@ip-172-31-12-67:~/custom-nginx# docker compose up -d
WARN[0000] /root/custom-nginx/docker-compose.yml: the attribute `version` is obsolete, it will be ignored, please remove it to
[+] Running 2/2
  ✓ Network custom-nginx default Created
  ✓ Container custom-nginx-web-1 Started
root@ip-172-31-12-67:~/custom-nginx# docker compose ps
WARN[0000] /root/custom-nginx/docker-compose.yml: the attribute `version` is obsolete, it will be ignored, please remove it to

```

NAME	IMAGE	COMMAND	SERVICE	CREATED	STATUS	PORTS
custom-nginx-web-1	ashok070/custom-nginx:1.0	"/docker-entrypoint...."	web	26 seconds ago	Up 25 seconds	0.0.0.0:80

```

root@ip-172-31-12-67:~/custom-nginx# ~

```

Hello from /var/opt/nginx