

Docker Task -2

Task Description:

Create a dockerfile, docker-compose file which when executed must display your basic details in the website.

```
ubuntu@ip-172-31-12-192: ~
'whiteboard4th session.pdf'
winzip77-mf.exe
junaid@LAPTOP-GU5B805P:/mnt/c/Users/Junaid$ cp /mnt/c/Users/Junaid/Downloads/TEST1.pem ~/cp: cannot create regular file '/home/junaid/TEST1.pem': Permission denied
junaid@LAPTOP-GU5B805P:/mnt/c/Users/Junaid$ sudo cp /mnt/c/Users/Junaid/Downloads/TEST1.pem /home/junaid/
[sudo] password for junaid:
junaid@LAPTOP-GU5B805P:/mnt/c/Users/Junaid$ sudo chmod 400 /home/junaid/TEST1.pem
sudo chown junaid:junaid /home/junaid/TEST1.pem
junaid@LAPTOP-GU5B805P:/mnt/c/Users/Junaid$ ls -l /home/junaid/TEST1.pem
-r----- 1 junaid junaid 1678 Jan 23 20:05 /home/junaid/TEST1.pem
junaid@LAPTOP-GU5B805P:/mnt/c/Users/Junaid$ ssh -i ~/TEST1.pem ubuntu@3.16.68.13
Welcome to Ubuntu 24.04.3 LTS (GNU/Linux 6.14.0-1018-aws x86_64)

 * Documentation: https://help.ubuntu.com
 * Management: https://landscape.canonical.com
 * Support: https://ubuntu.com/pro

System information as of Fri Jan 23 20:06:30 UTC 2026

System load: 0.32 Temperature: -273.1 C
Usage of /: 57.5% of 6.71GB Processes: 120
Memory usage: 45% Users logged in: 0
Swap usage: 0% IPv4 address for ens5: 172.31.12.192

Expanded Security Maintenance for Applications is not enabled.

28 updates can be applied immediately.
To see these additional updates run: apt list --upgradable

1 additional security update can be applied with ESM Apps.
Learn more about enabling ESM Apps service at https://ubuntu.com/esm

Last login: Thu Jan 22 16:38:13 2026 from 115.97.79.95
ubuntu@ip-172-31-12-192:~$ sudo apt update -y
Hit:1 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble InRelease
Get:2 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
Get:3 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble-backports InRelease [126 kB]
Get:4 http://security.ubuntu.com/ubuntu noble-security InRelease [126 kB]
Get:5 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 Packages [1699 kB]
Get:6 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble-updates/main Translation-en [314 kB]
Get:7 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 Components [175 kB]
Get:8 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 c-n-f Metadata [16.0 kB]
Get:9 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble-updates/universe amd64 Packages [1519 kB]
Get:10 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble-updates/universe amd64 Components [386 kB]
Get:11 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble-updates/restricted amd64 Packages [2498 kB]
Get:12 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble-updates/restricted Translation-en [573 kB]
Get:13 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble-updates/restricted amd64 Components [212 B]
Get:14 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble-updates/restricted amd64 c-n-f Metadata [512 B]
```

```
ubuntu@ip-172-31-12-192:~$ sudo apt install docker.io -y
sudo systemctl start docker
sudo systemctl enable docker
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
docker.io is already the newest version (28.2.2-0ubuntu1~24.04.1).
0 upgraded, 0 newly installed, 0 to remove and 30 not upgraded.
ubuntu@ip-172-31-12-192:~$ sudo usermod -aG docker ubuntu
newgrp docker
ubuntu@ip-172-31-12-192:~$ docker --version
Docker version 28.2.2, build 28.2.2-0ubuntu1~24.04.1
ubuntu@ip-172-31-12-192:~$ 
ubuntu@ip-172-31-12-192:~$ docker --version
Docker version 28.2.2, build 28.2.2-0ubuntu1~24.04.1
ubuntu@ip-172-31-12-192:~$ mkdir docker-task-2
cd docker-task-2
ubuntu@ip-172-31-12-192:~/docker-task-2$ pwd
/home/ubuntu/docker-task-2
ubuntu@ip-172-31-12-192:~/docker-task-2$ cat <<EOF > index.html
<!DOCTYPE html>
<html>
<head>
    <title>Docker Task 2</title>
</head>
<body style="text-align:center; font-family:Arial;">
    <h1>Docker Task - 2</h1>
    <h2>Name: Junaid Ahmed</h2>
    <h3>Role: DevOps Engineer</h3>
    <h3>Email: junaid@example.com</h3>
    <h3>Tech Stack: AWS EC2 | Docker</h3>
</body>
</html>
EOF
ubuntu@ip-172-31-12-192:~/docker-task-2$ cat index.html
<!DOCTYPE html>
<html>
<head>
    <title>Docker Task 2</title>
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<body style="text-align:center; font-family:Arial;">
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    <h3>Tech Stack: AWS EC2 | Docker</h3>
</body>
</html>
ubuntu@ip-172-31-12-192:~/docker-task-2$ cat <<EOF > Dockerfile
FROM nginx:latest
COPY index.html /usr/share/nginx/html/index.html
EXPOSE 80
EOF
ubuntu@ip-172-31-12-192:~/docker-task-2$ cat dockerfile
cat: dockerfile: No such file or directory
ubuntu@ip-172-31-12-192:~/docker-task-2$ cat Dockerfile
FROM nginx:latest
COPY index.html /usr/share/nginx/html/index.html
EXPOSE 80
ubuntu@ip-172-31-12-192:~/docker-task-2$ cat <<EOF > docker-compose.yml
version: '3'
services:
  web:
    build: .
```

```
ubuntu@ip-172-31-12-192:~/docker-task-2$ docker-compose up -d
Command 'docker-compose' not found, but can be installed with:
sudo snap install docker      # version 28.4.0, or
sudo apt  install docker-compose # version 1.29.2-6
See 'snap info docker' for additional versions.
ubuntu@ip-172-31-12-192:~/docker-task-2$ sudo apt update -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
30 packages can be upgraded. Run 'apt list --upgradable' to see them.
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  python3-compose python3-docker python3-dockerpty python3-docopt python3-dotenv python3-texttable
  python3-websocket
The following NEW packages will be installed:
  docker-compose python3-compose python3-docker python3-dockerpty python3-docopt python3-dotenv
  python3-texttable python3-websocket
0 upgraded, 8 newly installed, 0 to remove and 30 not upgraded.
Need to get 297 kB of archives.
After this operation, 1589 kB of additional disk space will be used.
Get:1 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 python3-websocket all 1.7.0-1
[38.1 kB]
Get:2 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble-updates/universe amd64 python3-docker all 5.0
..3-1ubuntu1.1 [89.1 kB]
Get:3 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 python3-dockerpty all 0.4.1-5
[11.4 kB]
Get:4 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 python3-docopt all 0.6.2-6 [26
.1 kB]
Get:5 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 python3-dotenv all 1.0.1-1 [22
.3 kB]
Get:6 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 python3-texttable all 1.6.7-1
[11.0 kB]
Get:7 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 python3-compose all 1.29.2-6ub
untu1 [84.6 kB]
Get:8 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 docker-compose all 1.29.2-6ubu
ntu1 [14.0 kB]
Fetched 297 kB in 0s (8981 kB/s)
Selecting previously unselected package python3-websocket.
(Reading database ... 87673 files and directories currently installed.)
Preparing to unpack .../0-python3-websocket_1.7.0-1_all.deb ...
Unpacking python3-websocket (1.7.0-1) ...
Selecting previously unselected package python3-docker.
Preparing to unpack .../1-python3-docker_5.0.3-1ubuntu1.1_all.deb ...
Unpacking python3-docker (5.0.3-1ubuntu1.1) ...
```

```
ubuntu@ip-172-31-12-192: ~/docker-task-2
Setting up python3-websocket (1.7.0-1) ...
Setting up python3-dockerpty (0.4.1-5) ...
Setting up python3-docker (5.0.3-1ubuntu1.1) ...
Setting up python3-compose (1.29.2-6ubuntu1) ...
Setting up docker-compose (1.29.2-6ubuntu1) ...
Processing triggers for man-db (2.12.0-4build2) ...
Scanning processes...
Scanning candidates...
Scanning linux images...

Running kernel seems to be up-to-date.

Restarting services...

Service restarts being deferred:
  systemctl restart networkd-dispatcher.service
  systemctl restart unattended-upgrades.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-172-31-12-192:~/docker-task-2$ docker-compose --version
docker-compose version 1.29.2, build unknown
ubuntu@ip-172-31-12-192:~/docker-task-2$ docker-compose up -d
Creating network "docker-task-2_default" with the default driver
Building web
DEPRECATED: The legacy builder is deprecated and will be removed in a future release.
  Install the buildx component to build images with BuildKit:
    https://docs.docker.com/go/buildx/

Sending build context to Docker daemon 4.096kB
Step 1/3 : FROM nginx:latest
--> 4af177a024eb
Step 2/3 : COPY index.html /usr/share/nginx/html/index.html
--> ad16fdb54e5
Step 3/3 : EXPOSE 80
--> Running in 723d671ce6b8
--> Removed intermediate container 723d671ce6b8
--> 60cb88a821b0
Successfully built 60cb88a821b0
Successfully tagged docker-task-2_web:latest
WARNING: Image for service web was built because it did not already exist. To rebuild this image you must use `docker-compose build` or `docker-compose up --build`.
Creating docker-task-2_web_1 ... done
ubuntu@ip-172-31-12-192:~/docker-task-2$ docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS
 NAMES
3a222f7ab44a docker-task-2_web "/docker-entrypoint...." 10 seconds ago Up 10 seconds 0.0.0.0:80->80/tcp, [::]:80->80/tcp docker-task-2_web_1
ubuntu@ip-172-31-12-192:~/docker-task-2$
```

