

Module 3: Docker Part 1 Assignment - 3

1. Use the saved image in the previous assignment.

Solution:-

```
# docker commit 1161179e756c secnod_img_ubuntu_e756c
# docker images
```

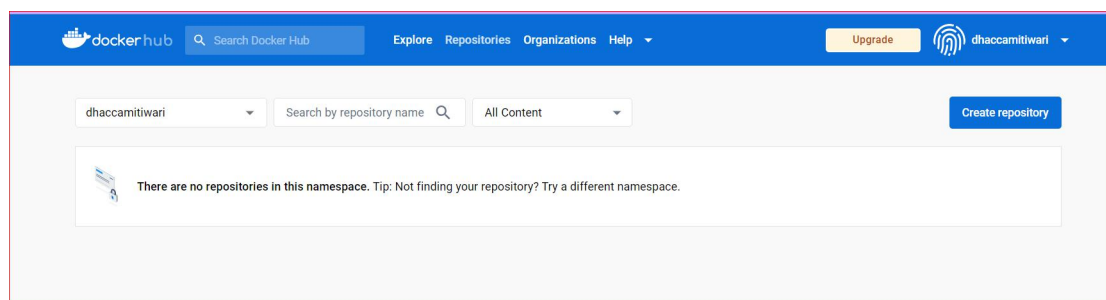
```
root@ip-172-31-93-148:/home/ubuntu# docker commit 1161179e756c secnod_img_ubuntu_e756c
sha256:a56cb3889f45a1ed0112ade6c0faf342836967358823d47e970afb0e6a05a99b
root@ip-172-31-93-148:/home/ubuntu# docker images
REPOSITORY          TAG                 IMAGE ID            CREATED             SIZE
secnod_img_ubuntu_e756c  latest             a56cb3889f45       3 seconds ago      228MB
first_img_ubuntu_8502e  latest             f142d6136f7b       About an hour ago  228MB
ubuntu               latest             5a81c4b8502e       5 weeks ago        77.8MB
hello-world          latest             9c7a54a9a43c       3 months ago       13.3kB
```

2. Upload this image on Docker Hub.

Solution:-

* Docker hub account:-

<https://hub.docker.com/repositories/dhaccamitiwari>



```
# docker login
```

```
root@ip-172-31-93-148:/home/ubuntu# docker login
Login with your Docker ID 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.
Username: dhaccamitiwari
Password:
WARNING! Your password will be stored unencrypted in /root/.docker/config.json.
Configure a credential helper to remove this warning. See
https://docs.docker.com/engine/reference/commandline/login/#credentials-store

Login Succeeded
```

```
# docker tag second_img_ubuntu_e756c
dhaccamitiwari/assignment-3
# docker push dhaccamitiwari/assignment-3
```

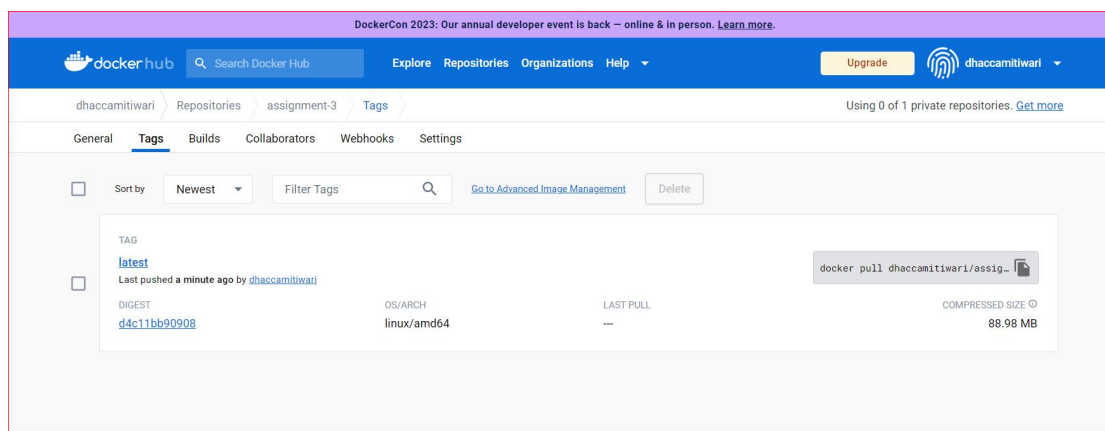
```

root@ip-172-31-93-148:/home/ubuntu# docker tag secnod_img_ubuntu_e756c dhaccamitiwari/assignment-3
root@ip-172-31-93-148:/home/ubuntu# docker push dhaccamitiwari/assignment-3
Using default tag: latest
The push refers to repository [docker.io/dhaccamitiwari/assignment-3]
02dec353063d: Pushed
3af2ae7c0fc5: Pushed
59c56aeel1fb4: Mounted from library/ubuntu
latest: digest: sha256:d4c11bb9090894659a8644e664fb2dbf7432011e6820bf1f43ed1f24738c06d8 size: 949

```

* Docker hub link of dhaccamitiwari/assignment-3 image.

<https://hub.docker.com/repository/docker/dhaccamitiwari/assignment-3/general>



3. On a separate machine pull this Docker Hub image and launch it on port 80.

Solution:- Now I created second ec2 instance and run these commands:-

apt update

```

root@ip-172-31-84-192:/home/ubuntu# apt update -y
Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy InRelease
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates InRelease [119 kB]
Get:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports InRelease [108 kB]
Get:4 http://security.ubuntu.com/ubuntu jammy-security InRelease [110 kB]
Get:5 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 Packages [14.1 MB]

```

```
# apt install docker.io -y
```

```
root@ip-172-31-84-192:/home/ubuntu# apt install docker.io -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  bridge-utils containerd dns-root-data dnsmasq-base pigz runc ubuntu-fan
Suggested packages:
  ifupdown aufs-tools cgroupfs-mount | cgroup-lite debootstrap docker-doc
  rinse zfs-fuse | zfsutils
The following NEW packages will be installed:
  bridge-utils containerd dns-root-data dnsmasq-base docker.io pigz runc
  ubuntu-fan
0 upgraded, 8 newly installed, 0 to remove and 95 not upgraded.
Need to get 74.0 MB of archives.
After this operation, 293 MB of additional disk space will be used.
Get:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 pigz a
md64 2.6-1 [63.6 kB]
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 bridge-uti
```

```
# docker pull dhaccamitiwari/assignment-3:latest
```

```
ubuntu@ip-172-31-84-192:~$ sudo su
root@ip-172-31-84-192:/home/ubuntu# docker pull dhaccamitiwari/assignment-3:late
st
latest: Pulling from dhaccamitiwari/assignment-3
3153aa388d02: Pull complete
022d73f29eb4: Pull complete
2b67f253ab05: Pull complete
Digest: sha256:d4c11bb9090894659a8644e664fb2dbf7432011e6820bf1f43ed1f24738c06d8
Status: Downloaded newer image for dhaccamitiwari/assignment-3:latest
docker.io/dhaccamitiwari/assignment-3:latest
root@ip-172-31-84-192:/home/ubuntu# docker images
REPOSITORY          TAG          IMAGE ID          CREATED          SIZE
dhaccamitiwari/assignment-3  latest      a56cb3889f45     55 minutes ago   228MB
```

```
# docker run -td --name first_con_dh_pulled -p 80:80
dhaccamitiwari/assignment-3 /bin/bash
# docker ps
```

```
root@ip-172-31-84-192:/home/ubuntu# docker run -td --name first_con_dh_pulled -p
80:80 dhaccamitiwari/assignment-3 /bin/bash
25986c98ee85500484a28fdc314bcc12a45825b36d73ee05b42f17850ef54859
root@ip-172-31-84-192:/home/ubuntu# docker ps
CONTAINER ID   IMAGE                      COMMAND                  CREATED          STAT
US            PORTS
25986c98ee85   dhaccamitiwari/assignment-3  "/bin/bash"            45 seconds ago   Up 4
4 seconds    0.0.0.0:80->80/tcp, :::80->80/tcp   first_con_dh_pulled
```

4. Start the Apache2 service.

Solution:-

```
# docker exec -it 25986c98ee85 /bin/bash
# service apache2 start && service apache2 status
```

```
root@ip-172-31-84-192:/home/ubuntu# docker exec -it 25986c98ee85 /bin/bash
root@25986c98ee85:/# service apache2 status
* apache2 is not running
root@25986c98ee85:/# service apache2 start && service apache2 status
* Starting Apache httpd web server apache2
AH00558: apache2: Could not reliably determine the server's fully qualified domain name, using 172.17.0.2. Set the 'ServerName' directive globally to suppress this message
*
* apache2 is running
```

5. Verify if you are able to see the Apache2 service

Solution:-

<http://3.82.100.85:80/>

