E/15/385

Docker Lab 01

1.)

Docker container-Complete isolated environment which can have own network interfaces own processes for services which share same OS. Docker Container is a standardized unit which can be created to deploy a particular application or environment.

Docker image- Basically Docker Image is a template of instructions which is used to create containers. The file system and configuration of our application which are used to create containers.

Basically a container is nothing but a running process, with some added encapsulation features applied to it in order to keep it isolated from the host and from other containers.

One of the most important aspects of container isolation is that each container interacts with its own private filesystem; this filesystem is provided by a Docker **image**. An image includes everything needed to run an application - the code or binary, runtimes, dependencies, and any other filesystem objects required.

2.)

```
Using default tag: latest

latest: Pulling from library/nginx
```

```
123275d6e508: Pull complete

6cd6a943ce27: Pull complete

a50b5ac4a7fb: Pull complete

Digest: sha256:d81f010955749350ef31a119fb94b180fde8b2f157da351ff5667ae037968b28

Status: Downloaded newer image for nginx:latest

docker.io/library/nginx:latest
```

3.)

```
REPOSITORY     TAG        IMAGE ID        CREATED      SIZE

nginx                 latest     e791337790a6       4 days ago    127MB
```

purpose of tag

T*ag is used as a version number*: A specific image within a repository. If you do not specify a tag, docker will default to the tag name "latest". This is the part after the final colon, and is often used for a version number

4.)

```
/var/lib/docker/
```

I am using ubuntu os

5.)

1e1e6f49d53dacf4c09b55d850b2b3e33aa230e5a995cf385b1b5d95a40db3bf

6.)

Container id

1e1e6f49d53dacf4c09b55d850b2b3e33aa230e5a995cf385b1b5d95a40db3bf

-d (detach) makes container run in background theresore this is what shown in the console.

7.)

This is basically port mapping.We can bind a container’s ports to a specific port using the `-p` flag. Here port 8080of the host is mapped to port 80 of the container

8.)

busy_villani

9.)

```
docker container stop busy_villani
```

Added the previously noted container name(busy_villani)

10.)

Adding -a shows all the containers running or not. That is running and previously exited containers.

ex:

```
1e1e6f49d53d nginx "nginx -g 'daemon of…" About an hour ago Exited (0) 3 minutes ago


busy_villani
```

11.)

```
docker logs -t <container name>
```

eg: `docker logs -t busy_villani`

12.)

```
docker restart <container name>.
```

Find the name of the stopped container using *docker pa -a.*

ex:docker restart busy_villani

13.)

```
docker rmi <IMAGE ID>
```

in console type *docker images* and get image id

eg: docker rmi e791337790a6

14.)

Error Message occurs as follows.

```
Error response from daemon: conflict: unable to delete d123f4e55e12 (cannot be
forced) - image is being used by running container 0f1262bd1285
```