**Docker Volumes**

**Recap:**

* A container is created through an image which is made up of different layers, and on top of all the layers we have a writable layer where it stores our customized data.
* But the data which was there in writable layer is temporary🡪if the container is down/stopped/restarted the data in the writable layer will be lost.
* To make present the data permanently even if the container is stopped, we use docker volumes.

**Docker Volumes:**

1. To view list of volumes available: ***docker volume ls***
2. To inspect any volume: ***docker volume inspect <volName>***

By defaut all the docker volumes will be stored at ***/var/lib/docker/volumes/<volName>/\_data*** in the host machine. If you get into the ***cd <volName>/\_data*** you can see the data which is used by the container.

1. To remove docker volumes: ***docker volume rm <volName>***
2. To remove unused/ideal docker volumes: ***docker volume prume***
3. To create a docker volume : ***docker volume create <volName>***
4. To mount/map a docker volume to a container :

***docker run -d --name <containerName> -p <hostport>:<containerPort>***

***--mount source=<hostVolPath>,destination=<containerVolPath> <image>:<version>***

OR

***docker run -d --name <containerName> -p <hostport>:<containerPort>***

***-v <hostVolPath>:<containerVolPath> <image>:<version>***

***<hostVolPath> = /var/lib/docker/volumes/<volName>***

1. Copy a docker volume from a container to another :

***docker run -d --name <containerName> -p <hostport>:<containerPort>***

***--volumes-from <container1> --name <container2>***

1. Instead of creating a volume separately with ***docker volume create <volName>*** we can make/turn a directory in host machine as a volume:

***docker run -d --name <containerName> -p <hostport>:<containerPort>***

***-v <hostVolPath>:<containerVolPath> <image>:<version>***

***<hostVolPath> = /home/ec2-user/<directory>***