**Overview Docker Run**

* Docker run: Tag
* Default tag is Latest

$ docker run ubuntu: 17.04

* Docker run - **Attach and Detach** mode
* Detach mode: You can be back to the prompt, with -d

$ docker run -d mmumshad/simple-webapp

* You can also set **Port Mapping** with Docker
* **Networking and Bridge networking**: You access an internal IP from within Docker with 172.17.0.2:5000.
* Port mapping:

$ docker run -p 80:5000 mmumshad/simple-webapp

$ docker run -p 8000:5000 mmumshad/simple-webapp

A screenshot of a cell phone

Description automatically generated

* Docker run – Volume mapping.
* Docker container has its own isolated file system-.

$ docker run mysql

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* If you delete the Docker container, you will lose MySQL data too!

$ docker stop mysql

docker rm mysql

* To keep your data, you need to **map a directory on the Docker host, outside the docker container.**

$ docker run -v opt/datadir:/var/lib/mysql mysql

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* **Advanced options (Jenkins- Map a port and volume )**
* To run docker in a detached mode:

$ docker run -d ubuntu sleep 1500

* Run **Jenkins** as a container

$ docker run Jenkins

* Get the **@Ip** of Jenkins

$ docker inspect <ID\_JENKINS>

* Run Jenkins on Browser using port mapping

$ docker run -p 8080:8080 -p 50000:50000 jenkins

* Use localhost:8080 or your mac-machine-IP-address:8080 from the browser.
* The 172.17.0.2 is docker machine IP address which is not accessible from outside.
* Default run will This will store the workspace in /**var/jenkins\_home**. All Jenkins data lives in there - including plugins and configuration. You will probably want to make that a persistent volume (recommended):

$ docker run -p 8080:8080 -p 50000:50000 **-v** /your/home:/var/jenkins\_home jenkins

* This will store the jenkins data in /your/home on the host. Ensure that /your/home is accessible by the jenkins user in container (jenkins user - uid 1000) or use -u some\_other\_user parameter with docker run.
* You can also use a volume container:

$ docker run --name myjenkins -p 8080:8080 -p 50000:50000 -v /var/jenkins\_home jenkins

* Then **myjenkins** container has the volume (please do read about docker volume handling to find out more).