SOME DISCOVERY ABOUT DOCKER

* Cross platform, docker image saved on windows can run on linux.
* IF daemon/docker is not connecting, follow the docker restart process ABOVE.
* When building an image, always have all the libraries required for the app on the requirements text.
* On Dockerfile, Expose port 80
* With flask app.... use host: 0.0.0.0 port: 80 (same port you are using for exposing docker on Dockerfile)
* Prevent running on proxy server.
* Docker uses hyper-v and vmware/virtualbox do not work when hyper-v is turned on.

Docker Commands

List Docker CLI commands

Docker  
docker container --help

Display Docker version and info

docker –version  
docker version  
docker info

Execute Docker image

docker run hello-world

Build Docker image

Docker build –tag=image\_name .

Build Docker image FROM parent folders

sudo docker build --tag=image\_name -f ./path/to/Dockerfile .

List Docker images

docker image ls

List Docker containers (running, all, all in quiet mode)

docker container ls  
docker container ls –all  
docker container ls -aq

Run the app, mapping your machine’s port 4000 to the container’s published port 80 using -p

docker run -p 4000:80 friendlyhello

To remove the image… force remove

docker rmi imageID  
docker rmi imageID - -force

End the process, using the CONTAINER ID, and remove the container

docker container stop CONTAINER ID

To remove the container… force remove

docker rm containerID  
docker rm containerID - -force

Docker Volume

**When specifying a host path and a container-path**

--volume /path/on/host:/path/in/container

Then docker;

1. looks for /path/on/host on the host that the daemon runs
2. if /path/on/host doesn't exist, creates an empty directory
3. bind-mounts /path/on/host at /path/in/container in the container

Note that in this case, data is *not* copied from the container to /path/on/host; when bind-mounting a host directory, the files/directories on the *host* are leading; even if that directory is empty

Example

Host directory SICD : /home/rrs/Desktop/MessageManager/webmm/SICD  
Container SICD Directory : /app/SICD

sudo docker run --volume /home/rrs/Desktop/MessageManager/webmm/SICD:/app/SICD -p 4000:80 mms2

for more info: https://github.com/moby/moby/issues/30647#issuecomment-276882545