Dockerization

Note 1: Install docker through the link:

https://www.digitalocean.com/community/tutorials/how-to-install-and-use-docker-on-ubuntu-20-04

Note 1.1 : This above link is for Ubuntu 20.04, if you have different version you can change the version as an option is provided in the webpage of the above link.

Note 1.2 : In step 2 of installation in the above link do not change the command as '**${USER}**' will automatically take your username.

1. Make a directory for docker

mkdir DockerFiles

2. Navigate to this directory
cd Documents/DockerFiles

3. Make a Dockerfile
touch Dockerfile

4. Write Dockerfile
vim Dockerfile (open the Dockerfile in vim editor and mention the flags like Base Image, Maintainer, RUN, CMD etc... and save the file)

5. Build the docker image
docker build -t <imagename> .
Or
docker build .

6. check the image by listing all the images
docker images

7. Run the docker container
docker run - -name <container name> <image name or imageid>

8. check the container by listing all the containers
docker ps -a

9. Always remember to delete your container after it is executed
docker rm <container name or container id>

10. To delete docker image:
docker rmi <image name or image id>

Dockerization of a Flask App

1. Make a directory for Flask app

mkdir FlaskApp

2. Navigate to this directory
cd Documents/FlaskApp

3. Create files

- app.py
- Dockerfile
- requirements.txt

touch Dockerfile app.py requirements.txt

4. Write the instructions in the above files through vim editor
vim Dockerfile
vim app.py
vim requirements.txt

5. Build the docker image
   docker build -t <imagename> .
   Or
   docker build .

6. check the image by listing all the images
   docker images

7. Run the docker container
   docker run - -name <container name> --p x:y <image name or imageid>

8. check the container by listing all the containers
   docker ps -a

9. Always remember to delete your container after it is executed
   docker rm <container name or container id>

10. To delete docker image:
docker rmi <image name or image id>

To do Tasks:

1. Make your account on docker hub.
2. Push the images built by you on your docker hub account.