

Section 4

Tuesday, 19 December 2023

5:45 PM

21) DOCKER IMAGES

Manual application setup:

- 1) Os- ubuntu
- 2) update apt repo
- 3) install dependencies
- 4) copy source to /opt folder
- 5) run the web server

Using docker file:

```
-----  
FROM Ubuntu  
RUN apt-get update && apt-get -y install python  
RUN pip install flask flask-mysql  
COPY . /opt/source-code  
ENTRYPOINT FLASK_APP=/opt/source-code/app.py flask run  
-----  
docker build . -f Dockerfile -t mmumshad/my-custom-app  
docker push mmumshad/my-custom-app
```

<INSTRUCTION> <ARGUMENT>

22) Demo - Creating a new Docker Image

manual

```
-----  
docker run -it ubuntu bash  
apt-get update  
apt-get install -y python  
apt-get install python-pip  
pip install flask  
cat > /opt/app.py
```

```
FLASK_APP=app.py flask run --host=0.0.0.0
```

push docker image

docker build . -t mmumshad/my-simpleapp

docker images

docker login

docker push mmumshad/my-simpleapp

24) Environmnt Variables

Web App -> app.py

```
color = os.environment.get('APP_COLOR')
```

```
export APP_COLOR=blue; python app.py
```

```
docker run -e APP_COLOR=blue simple-webap-color
```

```
docker run -e APP_COLOR=redsimple-webap-color
```

26) Command vs EntryPoint

```
CMD["command","param1"]
```

```
CMD ["sleep" , "5"]
```

```
docker run ubuntu-sleeper sleep 10
```

Command at Srtartup: sleep 10

```
ENNPOINT["sleep"]
```

```
docker run ubuntu-sleeper 10
```

command at startup: sleep 10