Pratik Chandrakant Borge CDEC B24

PythonDjango in docker

Step 1:- Create an EC2 instance
Ports:22, 8000

Step 2:- Connect to EC2 instance

Step 3:- Install Docker Engine latest version
https://docs.docker.com/engine/install/ubuntu/ (for ubuntu)

Step 4:- Clone Git Repo

git clone https://github.com/PratikBorge/cf-example-python-django.git

Step 5:- Create dockerfile

```
FROM python:3.6-slim

RUN mkdir /code
WORKDIR /code
RUN pip install --upgrade pip
COPY requirements.txt /code/
RUN pip install -r requirements.txt
COPY . /code/
EXPOSE 8000
CMD ["python", "manage.py", "runserver", "0.0.0.0:8000"]
```

Step 6:- Build image from dockerfile

```
root@ip-172-31-30-167:~/cf-example-python-django# docker build .
[+] Building 19.0s (13/13) FINISHED
 => [internal] load build definition from Dockerfile
 => => transferring dockerfile: 272B
 => [internal] load metadata for docker.io/library/python:3.6-slim
 => [auth] library/python:pull token for registry-1.docker.io
 => [internal] load .dockerignore
 => => transferring context: 2B
 => [1/7] FROM docker.io/library/python:3.6-slim@sha256:2cfebc27956e6a55f78606864d91fe527696f9e32a724e6f9702b5f9602d0474
 => => resolve docker.io/library/python:3.6-slim@sha256:2cfebc27956e6a55f78606864d91fe527696f9e32a724e6f9702b5f9602d0474
 => => sha256:a2abf6c4d29d43a4bf9fbb769f524d0fb36a2edab49819c1bf3e76f409f953ea 31.36MB / 31.36MB
 => => sha256:625294dad115cba7d8e323b53306f6daaa85d021e1e19c78970e24bd181ba689 1.08MB / 1.08MB
 => => sha256:838e3a5a04bfd2abf562bafe0dddb30d987cd9fd4c3a666a18ecdeb0f04a3645 9.74MB / 9.74MB
 => => sha256:2cfebc27956e6a55f78606864d91fe527696f9e32a724e6f9702b5f9602d0474 1.86kB / 1.86kB
 => => sha256:28028f6c3ce569a6405909ca76e85469fbb85c9ee93acd2fe5fe13f5e5e2c412 1.37kB / 1.37kB
 => => sha256:c1e40b69532f47ed3e92fabda2e711725befc34f118bd4dcbc4dec9f74a1e10c 8.54kB / 8.54kB
 => => extracting sha256:a2abf6c4d29d43a4bf9fbb769f524d0fb36a2edab49819c1bf3e76f409f953ea
 => => sha256:e93b4e59b6895b037b9248ef23a300776f9bb80eb0425c99608253489717da9c 235B / 235B
 => => sha256:c4401b8c7f9e459a19eeaabd706ebb31c186a79e3aebf3ce8317b08dd0a8e7eb 2.50MB / 2.50MB
 => => extracting sha256:625294dad115cba7d8e323b53306f6daaa85d021e1e19c78970e24bd181ba689
 => => extracting sha256:838e3a5a04bfd2abf562bafe0dddb30d987cd9fd4c3a666a18ecdeb0f04a3645
 => => extracting sha256:e93b4e59b6895b037b9248ef23a300776f9bb80eb0425c99608253489717da9c
 => => extracting sha256:c4401b8c7f9e459a19eeaabd706ebb31c186a79e3aebf3ce8317b08dd0a8e7eb
 => [internal] load build context
 => => transferring context: 134.40kB
 => [2/7] RUN mkdir /code
 => [3/7] WORKDIR /code
 => [4/7] RUN pip install --upgrade pip
 => [5/7] COPY requirements.txt /code/
 => [6/7] RUN pip install -r requirements.txt
 => [7/7] COPY . /code/
 => exporting to image
 => => exporting layers
 => => writing image sha256:8da79b80ee5ea9936ba868f09416a1b8cf5f565fe78cf672d7fcb371b9fd7ae3
root@ip-172-31-30-167:~/cf-example-python-django# docker images
REPOSITORY   TAG       IMAGE ID       CREATED          SIZE
<none>       <none>    8da79b80ee5e   38 seconds ago   176MB
```

Step 7:- Create container from image

docker run -d -p 8000:8000 <imageID>

```
root@ip-172-31-30-167:~/cf-example-python-django# docker ps
CONTAINER ID   IMAGE     COMMAND                  CREATED         STATUS         PORTS                                       NAMES
65ebfbece717   8da       "python manage.py ru…"   3 seconds ago   Up 2 seconds   0.0.0.0:8000->8000/tcp, :::8000->8000/tcp   hardcore_newton
```

Step 8:- Copy instanceIP with port_number and paste into browser