

Python Django in docker

Step 1:- Create an EC2 instance Ports:22,
8001

Step 2:- Connect to EC2 instance

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

Step 4:- Create dockerfile

```
FROM ubuntu:22.04
LABEL engg="pratik"

USER root
RUN apt update
RUN apt install -y python3 python3-pip git
RUN pip install virtualenv
RUN mkdir envs
RUN virtualenv ./envs/
RUN . envs/bin/activate
RUN git clone https://github.com/PratikBorge/simple-django-project.git
WORKDIR /simple-django-project/
RUN apt-get install -y python3-dev default-libmysqlclient-dev libxml2-dev libxslt1-dev build-essential libffi-dev
RUN pip install -r requirements.txt
RUN pip install mysql-connector-python
RUN pip install django==3.2 django-haystack==3.0
RUN /usr/bin/python3 manage.py makemigrations
RUN /usr/bin/python3 manage.py migrate
EXPOSE 8001
CMD ["/usr/bin/python3", "manage.py", "runserver", "0.0.0.0:8001"]
```

Step 5:- Build image from dockerfile

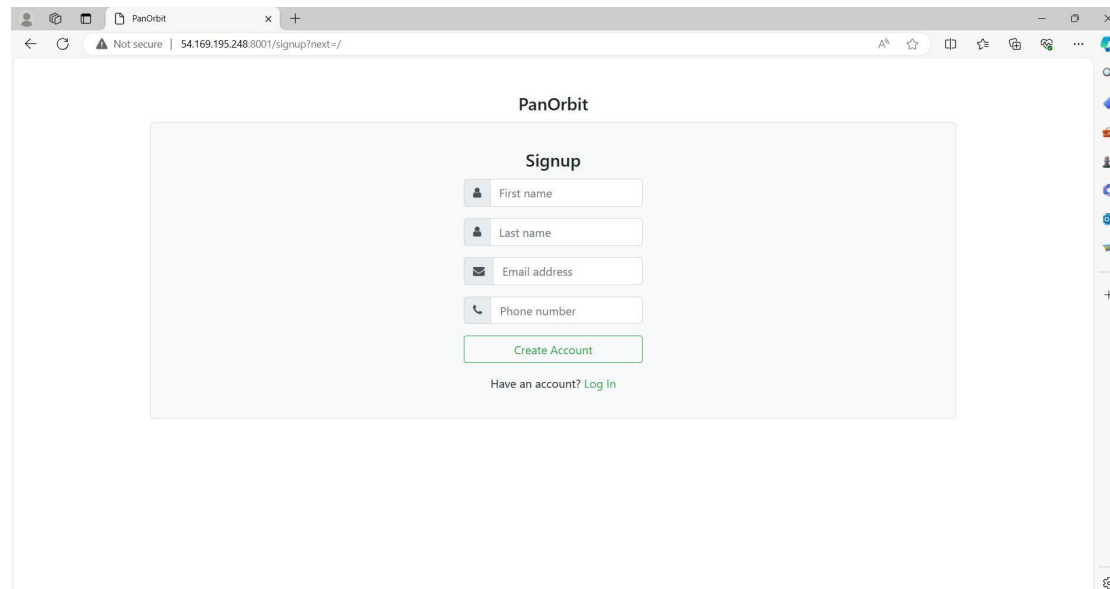
```
root@ip-172-31-30-167:~/simple_django# docker build .
[*] Building 26.9s (20/20) FINISHED
-> [internal] load build definition from Dockerfile
-> => transferring dockerfile: 740B
-> [internal] load metadata for docker.io/library/ubuntu:22.04
-> [auth] library/ubuntu:pull token for registry-1.docker.io
-> [internal] load .dockerignore
-> => transferring context: 2B
-> [1/15] FROM docker.io/library/ubuntu:22.04@sha256:77906da86b60585ce12215807090eb327e7386c8fafb5402369e421f44eff17e
-> CACHED [2/15] RUN apt update
-> CACHED [3/15] RUN apt install -y python3 python3-pip git
-> CACHED [4/15] RUN pip install virtualenv
-> CACHED [5/15] RUN mkdir envs
-> CACHED [6/15] RUN virtualenv ./envs/
-> CACHED [7/15] RUN . envs/bin/activate
-> CACHED [8/15] RUN git clone https://github.com/PratikBorge/simple-django-project.git
-> CACHED [9/15] WORKDIR /simple-django-project/
-> CACHED [10/15] RUN apt-get install -y python3-dev default-libmysqlclient-dev libxml2-dev libxslt1-dev build-essential libffi-dev
-> CACHED [11/15] RUN pip install -r requirements.txt
-> CACHED [12/15] RUN pip install mysql-connector-python
-> CACHED [13/15] RUN pip install django==3.2 django-haystack==3.0
-> CACHED [14/15] RUN /usr/bin/python3 manage.py makemigrations
-> [15/15] RUN /usr/bin/python3 manage.py migrate
-> exporting to image
-> writing image sha256:2847bc326acb733b595f53372a77d1bf7bf5d12ebc29cb9851b19f1bd442b8af
root@ip-172-31-30-167:~/simple_django# docker ps
```

Step 6:- Create container from image

docker run -d -p 8001:8001 <imageID>

```
root@ip-172-31-30-167:~/simple_django# docker images
REPOSITORY          TAG                 IMAGE ID            CREATED             SIZE
<none>              <none>             2847bc326acb        About 2 minutes ago  966MB
mysql               latest             019814493c7a        2 months ago       632MB
mysql               8.0.15            7bb2586065cd        4 years ago         477MB
root@ip-172-31-30-167:~/simple_django# docker run -d -p 8001:8001 284
0a2645f12a5131454dd52481c6efe363dd3cf7b7720b59aad1a7c706058b571c
root@ip-172-31-30-167:~/simple_django# docker ps
CONTAINER ID        IMAGE               COMMAND                  CREATED             STATUS             PORTS
0a2645f12a51        284                "/usr/bin/python3 ma..." 6 seconds ago       Up 5 seconds      0.0.0.0:8001->8001/tcp, :::8001->8001/tcp
37e8a79f8ece        mysql:8.0.15       "docker-entrypoint.s..." 10 minutes ago     Up 10 minutes     0.0.0.0:3306->3306/tcp, :::3306->3306/tcp, 33060/tcp
root@ip-172-31-30-167:~/simple_django# docker ps -a
```

Step 7:- Copy instanceIP with port_number and paste into browser



PanOrbit

Signup

First name

Last name

Email address

Phone number

Create Account

Have an account? [Log In](#)