

Docker Task -2

Task Description:

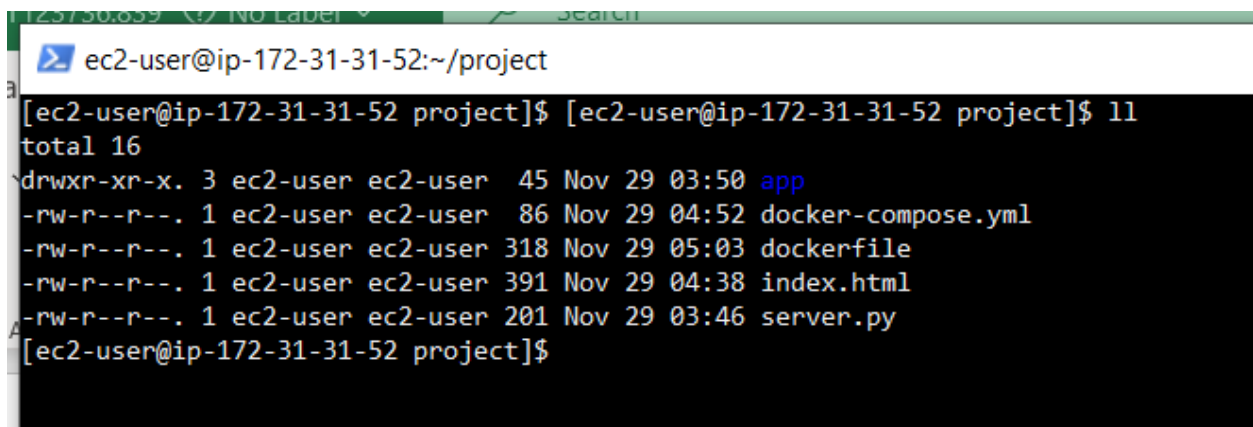
Create a dockerfile, docker-compose file which when executed must display your basic details in the website.

Techstacks needs to be used :

- AWS EC2
- Docker

Step1

- Create directory as below
 - project/
 - docker file
 - server.py
 - docker-compose.yml
 - index.html
 - app/



```
ec2-user@ip-172-31-31-52:~/project
[ec2-user@ip-172-31-31-52 project]$ ll
total 16
drwxr-xr-x. 3 ec2-user ec2-user 45 Nov 29 03:50 app
-rw-r--r--. 1 ec2-user ec2-user 86 Nov 29 04:52 docker-compose.yml
-rw-r--r--. 1 ec2-user ec2-user 318 Nov 29 05:03 dockerfile
-rw-r--r--. 1 ec2-user ec2-user 391 Nov 29 04:38 index.html
-rw-r--r--. 1 ec2-user ec2-user 201 Nov 29 03:46 server.py
[ec2-user@ip-172-31-31-52 project]$
```

- Create dockerfile

```
ec2-user@ip-172-31-31-52:~/project
[ec2-user@ip-172-31-31-52 project]$ cat dockerfile
FROM ubuntu
RUN mkdir -p /app/templates
COPY server.py /app/server.py
COPY index.html /app/templates/index.html
WORKDIR /app/templates
WORKDIR /app
RUN apt-get update -y
RUN apt-get install -y python3
RUN apt-get install -y python3-pip
RUN pip3 install Flask --break-system-packages
EXPOSE 5000
CMD python3 server.py

[ec2-user@ip-172-31-31-52 project]$
```

- Create docker-compose.yml

```
ec2-user@ip-172-31-31-52:~/project
[ec2-user@ip-172-31-31-52 project]$ cat docker-compose.yml
version: "3"

services:
  web:
    image: satthya
    ports:
      - "8080:5000"

[ec2-user@ip-172-31-31-52 project]$
```

Step2

- Run dockerbuild
 - sudo docker build . -t satthya

```
ec2-user@ip-172-31-31-52:~/project
[ec2-user@ip-172-31-31-52 project]$ sudo docker build . -t satthya
[+] Building 1.7s (13/13) FINISHED
-> [internal] load build definition from dockerfile
-> > transferring dockerfile: 310B
-> [internal] load metadata for docker.io/library/ubuntu:latest
-> [auth] library/ubuntu:pull token for registry-1.docker.io
-> [internal] load .dockerignore
-> > transferring context: 2B
-> [internal] load build context
-> > transferring context: 90B
-> [1/7] FROM docker.io/library/ubuntu:latest@sha256:278628f08d4979f9af9ead44277dbc9c92c2465922310916ad8c46ec9999295
-> CACHED [2/7] COPY server.py /app/
-> CACHED [3/7] WORKDIR /app
-> CACHED [4/7] RUN apt update -y
-> CACHED [5/7] RUN apt-get install -y python3
-> CACHED [6/7] RUN apt-get install -y python3-pip
-> CACHED [7/7] RUN pip3 install Flask --break-system-packages
-> exporting to image
-> > exporting layers
-> > writing image sha256:92261e0c7949e3432fe9da288ff6f21476a1094d55af08bb0cd276c7a8066b
-> > naming to docker.io/library/satthya
[ec2-user@ip-172-31-31-52 project]$ sudo docker images
REPOSITORY TAG IMAGE ID CREATED SIZE
satthya latest 92261e0c7949 8 minutes ago 566MB
[ec2-user@ip-172-31-31-52 project]$
```

- Run docker compose
 - sudo docker-compose up
 - this will help to manage multiple containers. Ensure the container is up and running

