CDEC B24

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Hosting Python Flask App Using Docker

Step 1.

Login to AWS Console. Start your docker instance.

Connect the aws docker instance.

Step 2.

Clone the project from the git repo

-git clone<repo urel>

```
root@ip-172-31-26-198:~# git clone  https://github.com/Mayur2905/FlaskApp.git
Cloning into 'FlaskApp'...
remote: Enumerating objects: 29, done.
remote: Counting objects: 100% (29/29), done.
remote: Compressing objects: 100% (23/23), done.
remote: Total 29 (delta 3), reused 27 (delta 2), pack-reused 0
Receiving objects: 100% (29/29), 1.31 MiB | 9.08 MiB/s, done.
Resolving deltas: 100% (3/3), done.
root@ip-172-31-26-198:~# ls
FlaskApp  snap
```

Step 3.

Create a Dockerfile in the project repository.

-cd FlaskApp

```
root@ip-172-31-26-198:~# cd FlaskApp/
```

-vim Dockerfile

```
root@ip-172-31-26-198:~/FlaskApp# vim Dockerfile
```

Step 4.

Add the following code in the Dockerfile

```
FROM python:3.8
LABEL Folder="FlaskApp"
LABEL Author="Vaibhav"
COPY . .
RUN pip install -r requirements.txt
EXPOSE 5000
CMD ["flask" ,"run" ,"--host","0.0.0.0"]
```

Step 5.

Create a docker image using docker build.

-docker build .

```
root@ip-172-31-26-198:~/FlaskApp# docker build .
[+] Building 77.4s (8/8) FINISHED
 => [internal] load build definition from Dockerfile
 => => transferring dockerfile: 201B
 => [internal] load metadata for docker.io/library/python:3.8
 => [internal] load .dockerignore
 => => transferring context: 2B
 => [internal] load build context
 => => transferring context: 2.91MB
 => [1/3] FROM docker.io/library/python:3.8@sha256:23e62414c3310930888bb1690b7f723f52f7ab3a26ff9671e9747f60d169ee96
 => => resolve docker.io/library/python:3.8@sha256:23e62414c3310930888bb1690b7f723f52f7ab3a26ff9671e9747f60d169ee96
 => => sha256:23e62414c3310930888bb1690b7f723f52f7ab3a26ff9671e9747f60d169ee96 1.86kB / 1.86kB
 => => sha256:d6b065a56b258584b27245bf1db1fe6a4714184d349f1fbc910a0c89d3f153ea 2.01kB / 2.01kB
 => => sha256:71215d55680cf0ab2dcc0e1dd65ed76414e3fb0c294249b5b9319a8fa7c398e4 49.55MB / 49.55MB
 => => sha256:22c5bcf0d5e7e36298568c4c3c596dd5993e68f6478cefb13c9f65a9cb41b935 7.38kB / 7.38kB
 => => sha256:3cb8f9c23302e175d87a827f0a1c376bd59b1f6949bd3bc24ab8da0d669cdfa0 24.05MB / 24.05MB
 => => sha256:5f899db30843f8330d5a40d1acb26bb00e93a9f21bff253f31c20562fa264767 64.14MB / 64.14MB
 => => sha256:d68cd2123173935e339e3feb56980a0aefd7364ad43ca2b9750699e60fbf74c6 6.39MB / 6.39MB
 => => sha256:567db630df8d441ffe43e050ede26996c87e3b33c99f79d4fba0bf6b7ffa0213 211.14MB / 211.14MB
```

Step 6.

List the images using

-docker images

```
root@ip-172-31-26-198:~/FlaskApp# docker images
REPOSITORY    TAG       IMAGE ID       CREATED          SIZE
<none>        <none>    3c8c388beb31   2 minutes ago    1.68GB
<none>        <none>    8345f76e605e   9 hours ago      964MB
mysql         latest    019814493c7a   2 months ago     632MB
```

Step 7 : Create a container using the created image.

–docker run -d -p 5000:5000 <image id>

```
root@ip-172-31-26-198:~/FlaskApp# docker run -d -p 5000:5000 3c8
cd1244e852fc046fd67862a191a567f7059c6f18045826cd6973f02ce901a4ed
```

Step 8: Check the application

http://<ip>:5000

In my case it is http://18.144.15.125:5000/web/