

Create Image for Python App

SSH to your AWS Workstation

ssh devops@<public-ip-addr> of your Workstation

Password is : Dev0p\$!!!

Replace <your-name> with your name throughout the lab.

1. SSH to your AWS Workstation.

```
$ sudo su
```

2. Clone the Git Repo that contains the python code.

```
# cd /home/devops/Docker/  
# git clone https://github.com/LovesCloud/python-docker.git  
# cd python-docker/
```

3. Create Dockerfile in the /python-docker directory.

```
# vim Dockerfile
```

4. Paste the below script

```
FROM python:2.7-alpine  
COPY ./requirements.txt /app/requirements.txt  
WORKDIR /app  
RUN pip install -r requirements.txt  
COPY . /app  
  
ENTRYPOINT [ "python" ]  
CMD [ "app.py" ]
```

Save and exit by vim editor by pressing (:wq and press Enter)

5. Run the below command from python-docker/ directory

```
# docker build . -t docker-python-<your-name>
```

```
Step 1/7: FROM python:2.7-alpine  
Step 2/7: COPY ./requirements.txt /app/requirements.txt  
Step 3/7: WORKDIR /app  
Step 4/7: RUN pip install -r requirements.txt  
Step 5/7: COPY . /app  
Step 6/7: ENTRYPOINT [ "python" ]  
Step 7/7: CMD [ "app.py" ]  
Successfully built docker-python-  
Removing intermediate container 2773ddcd69aa  
Step 5/7: COPY ./requirements.txt /app/requirements.txt  
Step 6/7: ENTRYPOINT [ "python" ]  
Step 7/7: CMD [ "app.py" ]  
Successfully built docker-python-  
Removing intermediate container 15d1dbdb8f6c  
Successfully tagged docker-python:latest  
devops@172.31.24.215: /home/devops/python-docker#
```

6. Once the build is successful run the below command to check the build details.

```
# docker images
```

```
root@ip-172-31-34-212: /home/devops/python-docker# docker images
REPOSITORY          TAG                 IMAGE ID            CREATED             SIZE
docker-python       latest             c08094d820d6       45 seconds ago     75.1MB
```

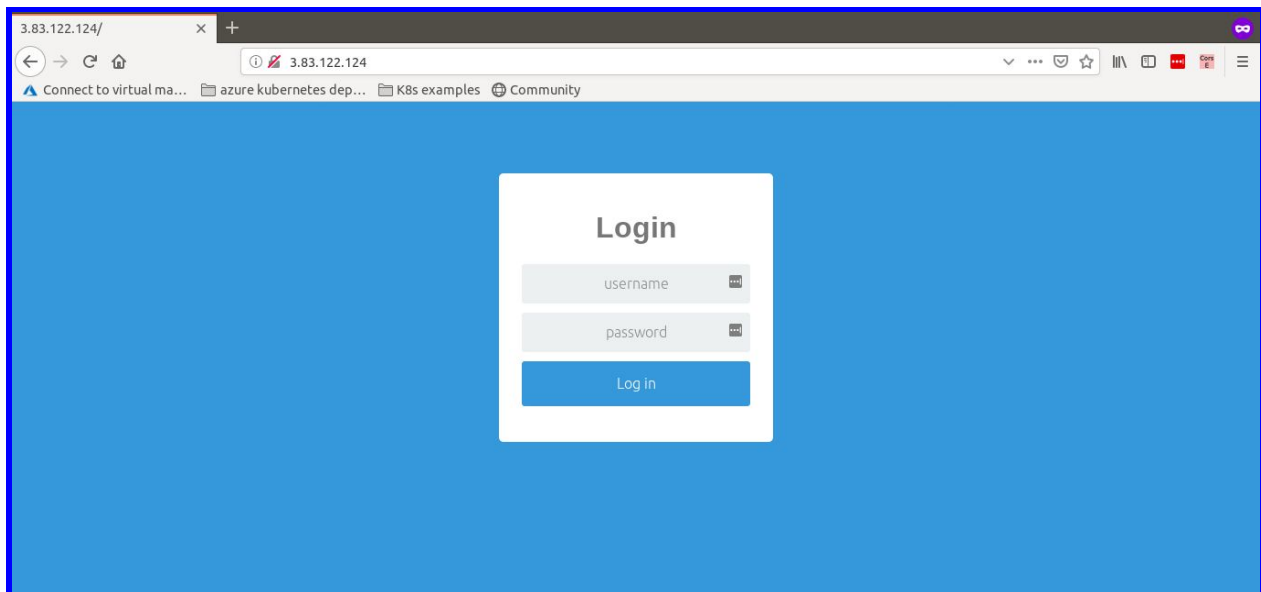
7. Run your container

```
# docker run -d -p 80:4000 --name <your-name>-python-app
docker-python-<your-name>
# docker ps
```

```
root@ip-172-31-78-220: /home/devops/python-docker-mercedes# docker ps
CONTAINER ID   IMAGE                  COMMAND                  CREATED        STATUS        PORTS                    NAMES
62f2a7830b8e   docker-python-merces  "python app.py"         17 seconds ago Up 16 seconds  0.0.0.0:80->4000/tcp    my-python-app
root@ip-172-31-78-220: /home/devops/python-docker-mercedes#
```

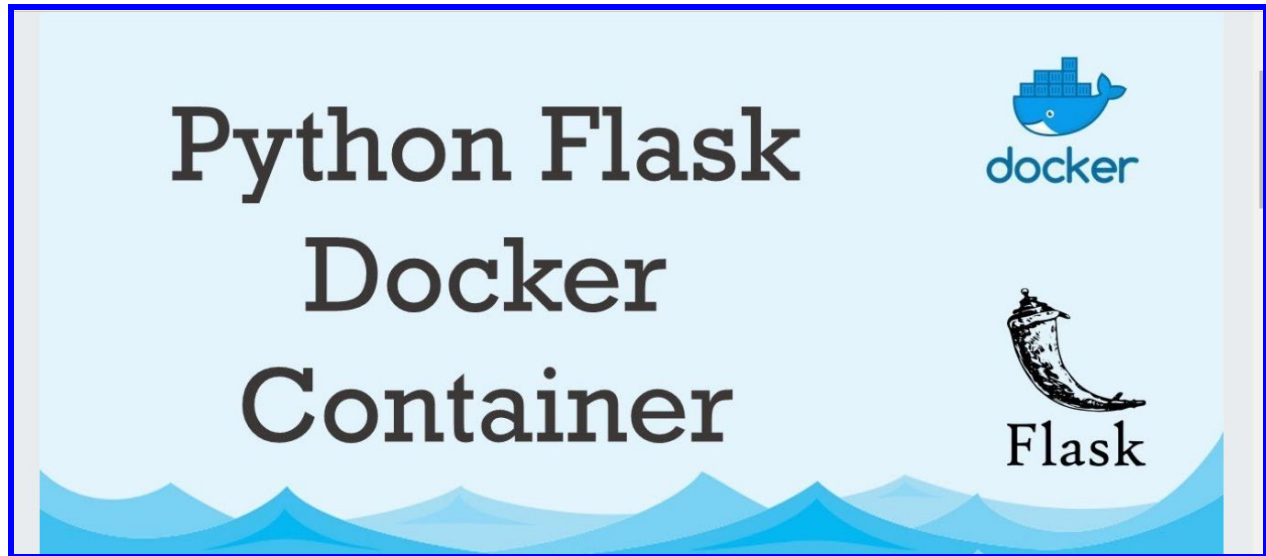
The Python Docker Container running on port 80, and can be accessed from the public IP of the AWS Workstation on default Port 80

<http://<public-ip-address-of-aws-workstation>>



8. Login to the Application using the below credentials.

```
Username : admin
Password : password
```



STOP THE CONTAINER BEFORE PROCEEDING TO THE NEXT LAB

9. Stop the container by running the below command.

```
# docker stop <your-name>-python-app
```