

INVENTORY MANAGEMENT SYSTEM FOR RETAILER

Assignment 4

1. Pull an Image from docker hub and run it in docker playground.

The screenshot shows the Docker Playground interface in a web browser. The top navigation bar includes links for IBM-Project-325, [Docker] Please, Docker Hub, Inbox (1,847), IBM, You are signed in, and Docker Playgrou. The main content area displays the details of a container named 'cdrlv560_cdrm0ce3tccg009i2540'. The container's IP is 192.168.0.28, and it has an 'OPEN PORT' button. The memory usage is 1.10% (44.07MiB / 3.906GiB) and the CPU usage is 0.63%. The SSH command is 'ssh ip172-18-0-109-cdrlv560qau000ahcon0@direct.labs.pla'. Below the container details, there is a terminal window showing the following output:

```
#####  
# WARNING!!!!  
# This is a sandbox environment. Using personal credentials  
# is HIGHLY discouraged. Any consequences of doing so are  
# completely the user's responsibilities.  
#  
# The FWD team.  
#####  
[node1] (local) root@192.168.0.28 ~  
$ docker pull hello-world  
Using default tag: latest  
latest: Pulling from library/hello-world  
2db29710123e: Pull complete  
Digest: sha256:faa03e786c97f07ef34423fccceec2398ec8a5759259f94d99078f264e9d7af  
Status: Downloaded newer image for hello-world:latest  
docker.io/library/hello-world:latest  
[node1] (local) root@192.168.0.28 ~  
$ docker
```

At the bottom, there is a Docker Desktop In...exe notification that says 'Failed - Network error' with a 'Show all' button.

The screenshot shows the Docker Playground interface in a web browser. The top navigation bar includes links for IBM-Project-325, [Docker] Please, Docker Hub, Inbox (1,848), IBM, Downloads, and Docker Playgrou. The main content area displays the details of a container named 'cdrm8p63_cdrm8tm0qau000ahcq60'. The container's IP is 192.168.0.18, and it has an 'OPEN PORT' button. The memory usage is 1.83% (73.08MiB / 3.906GiB) and the CPU usage is 16.80%. The SSH command is 'ssh ip172-18-0-53-cdrm8p63tccg009i264g@direct.labs.play'. Below the container details, there is a terminal window showing the following output:

```
To generate this message, Docker took the following steps:  
1. The Docker client contacted the Docker daemon.  
2. The Docker daemon pulled the "hello-world" image from the Docker Hub.  
   (amd64)  
3. The Docker daemon created a new container from that image which runs the  
   executable that produces the output you are currently reading.  
4. The Docker daemon streamed that output to the Docker client, which sent it  
   to your terminal.  
  
To try something more ambitious, you can run an Ubuntu container with:  
$ docker run -it ubuntu bash  
  
Share images, automate workflows, and more with a free Docker ID:  
https://hub.docker.com/  
  
For more examples and ideas, visit:  
https://docs.docker.com/get-started/  
  
[node1] (local) root@192.168.0.18 ~  
$
```

2.Create a docker file for the jobportal application and deploy it in Docker desktop application.

FROM python:3.7

COPY. /app

WORKDIR /app

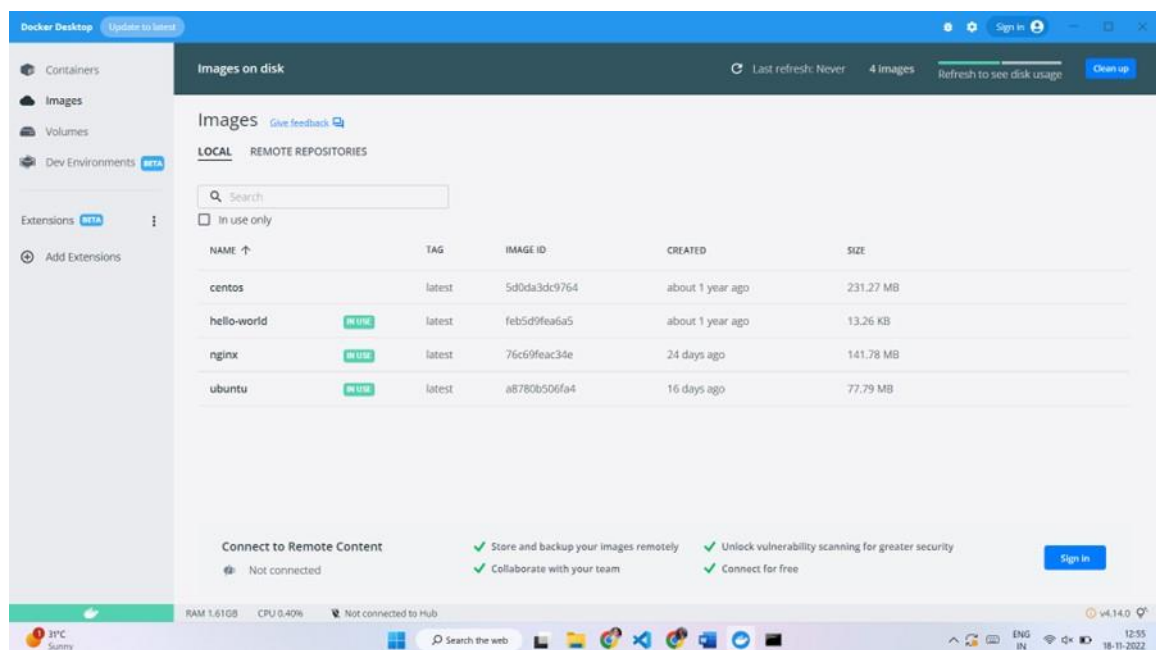
COPY requirements.txt /app

RUN python -m pip install -r requirements.txt

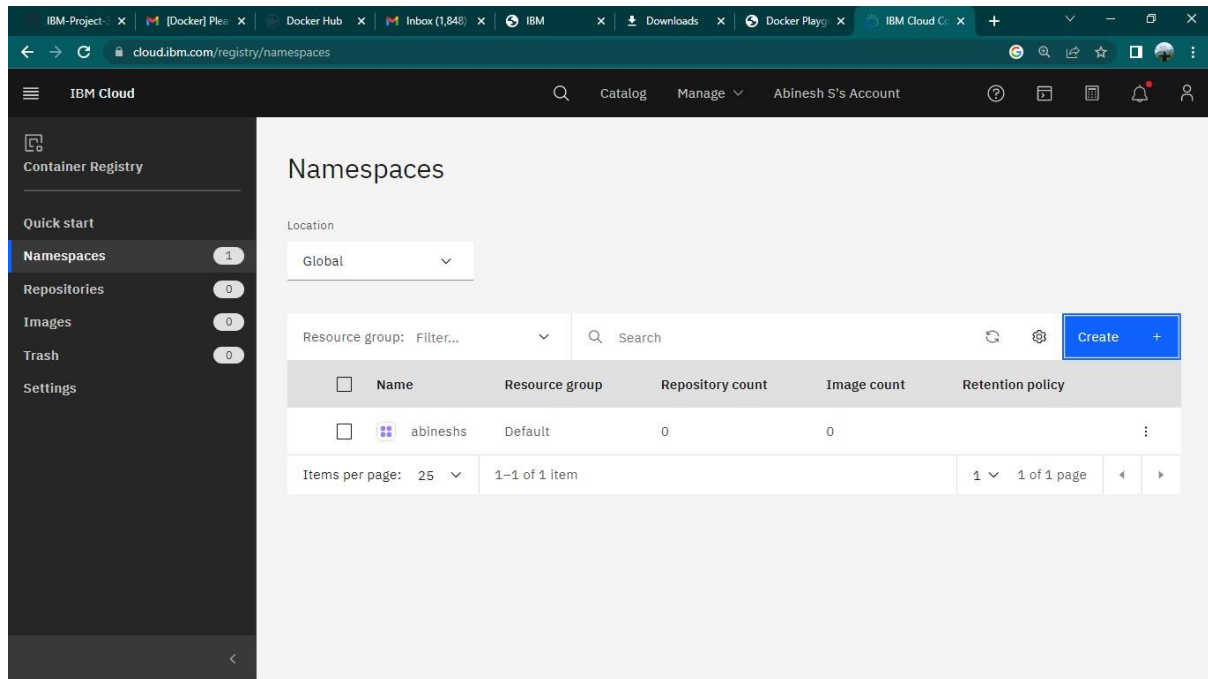
EXPOSE 5001

ENTRYPOINT ["python"]

CMD ["app.py"]



3.Create a IBM container registry and deploy helloworld app or jobportalapp.



Hello World



4. Create a Kubernetes cluster in IBM cloud and deploy helloworld image or jobportal image and also expose the same app to run in nodeport.

