

ASSIGNMENT 4

Project Name	Plasma Donor Application
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1. Pull an Image from docker hub and run it in docker playground.

03:58:50

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.28
node1

cdns0gu3_cdns0je3tccg00b2oh0g

IP
192.168.0.28
OPEN PORT

Memory
1.18% (47.11MiB / 3.906GiB)

CPU
0.73%

SSH
ssh ip172-18-0-54-cdns0gu3tccg00b2oh00@direct.labs.pi

DELETE EDITOR

```
#####
# WARNING!!!!
# This is a sandbox environment. Using personal credentials
# is HIGHLY! discouraged. Any consequences of doing so are
# completely the user's responsibilities.
#
# The PWD 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 run hello-world

Hello from Docker!
This message shows that your installation appears to be working correctly.

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.

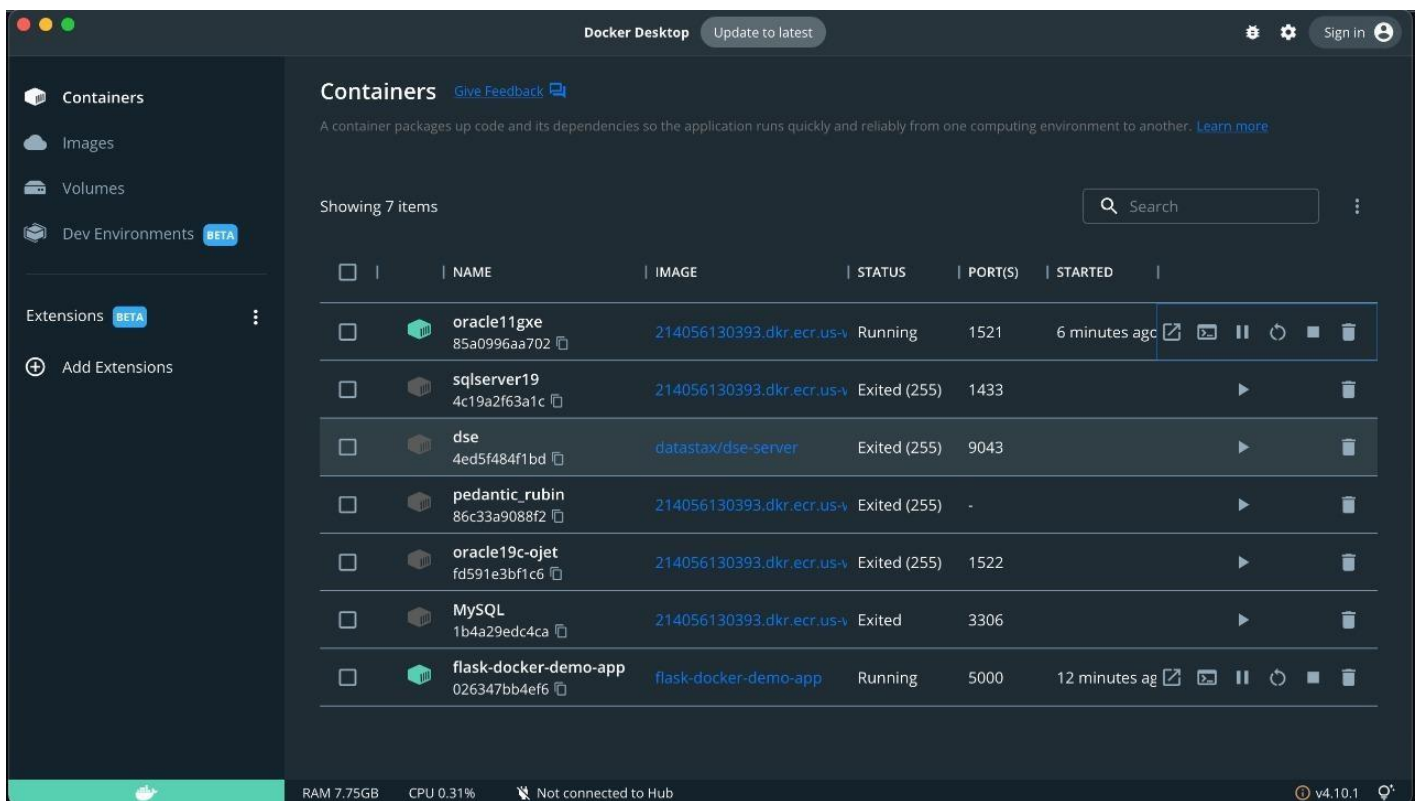
To try something more ambitious, you can run an Ubuntu container with:
$ docker run -it ubuntu bash
```

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

Docker file:

```
Get Started  model.py  controller.py  Dockerfile X
Dockerfile
1 FROM python:3.10
2 LABEL maintainer="ibmteam, ibmteam@gmail.com"
3 RUN apt-get update
4 RUN mkdir /app
5 WORKDIR /app
6 COPY . /app
7 RUN pip install -r requirements.txt
8 EXPOSE 5000
9 ENTRYPOINT [ "python" ]
10 CMD [ "controller.py" ]
```

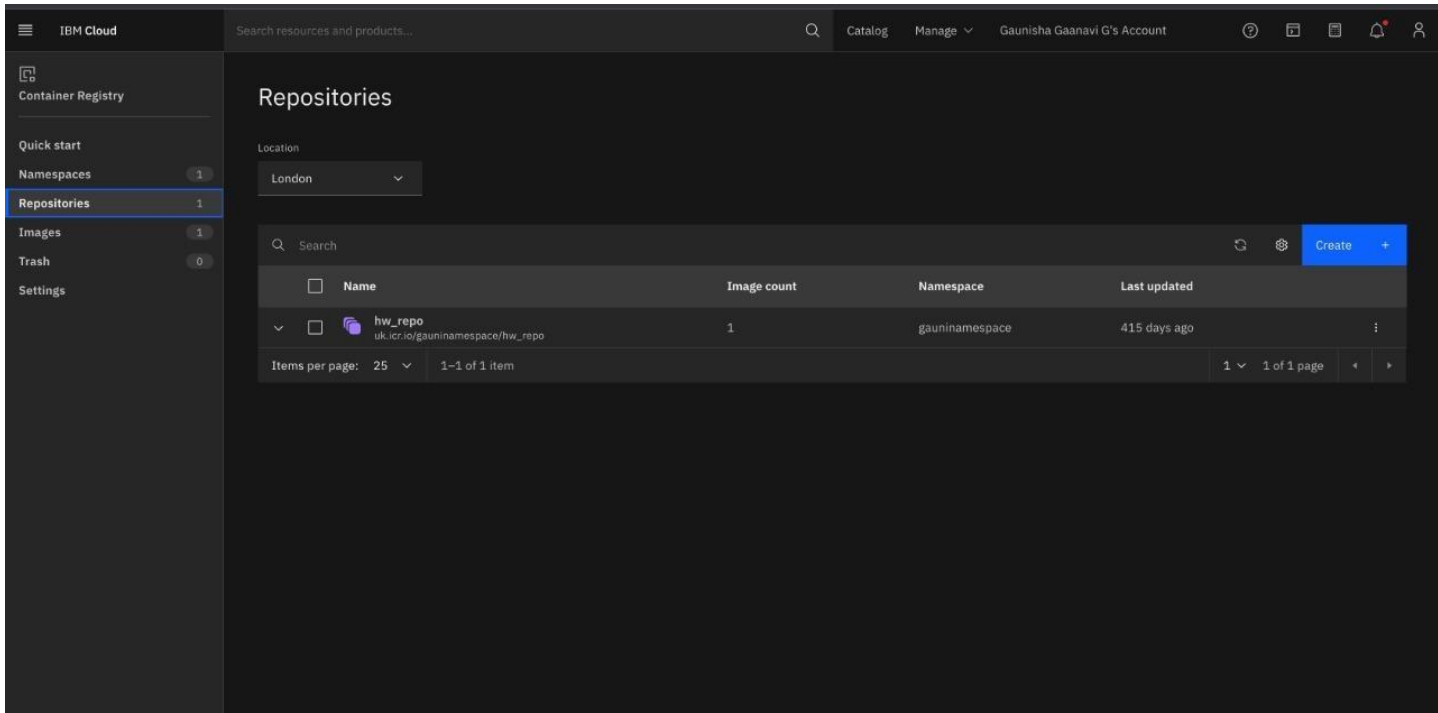
Deployment of job portal application:



Output:



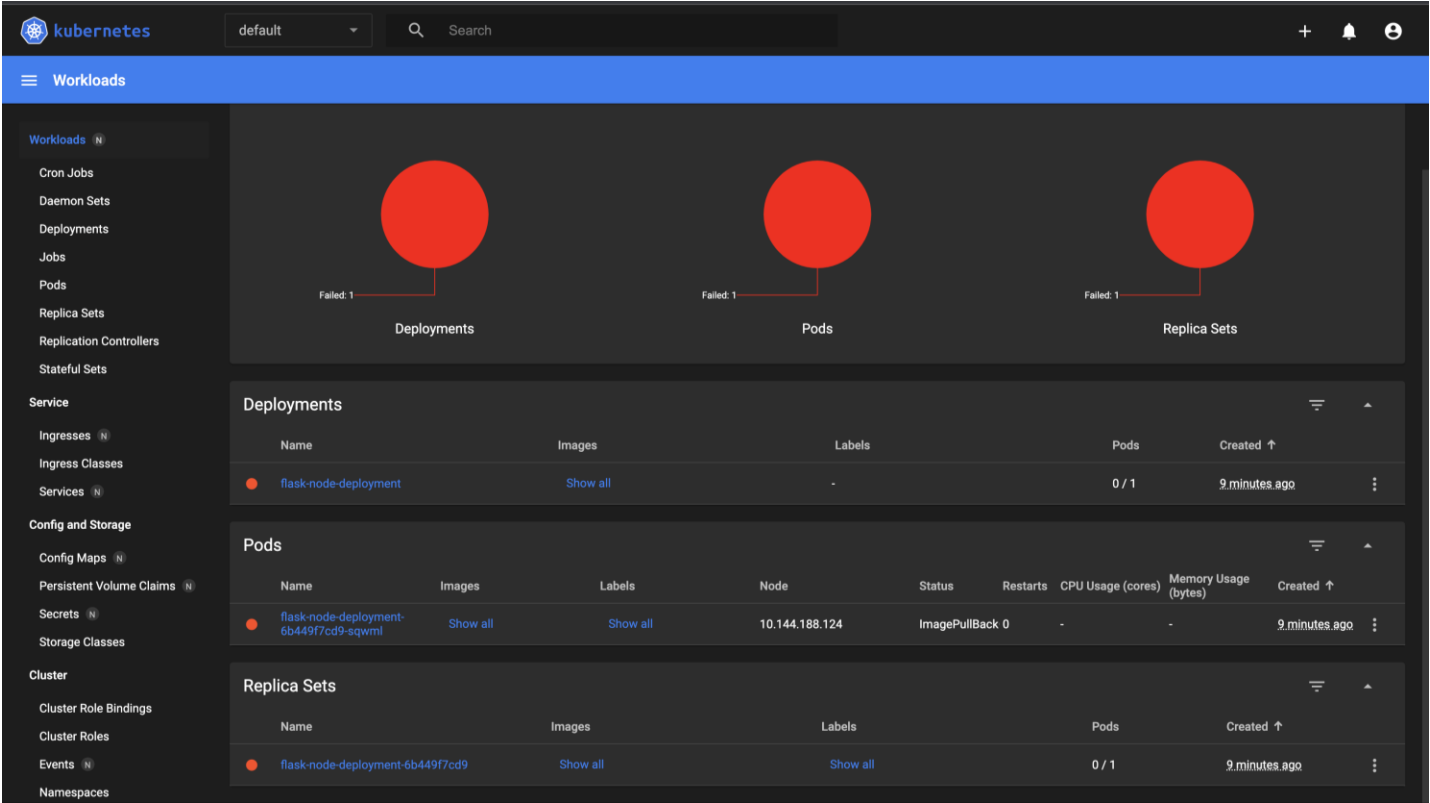
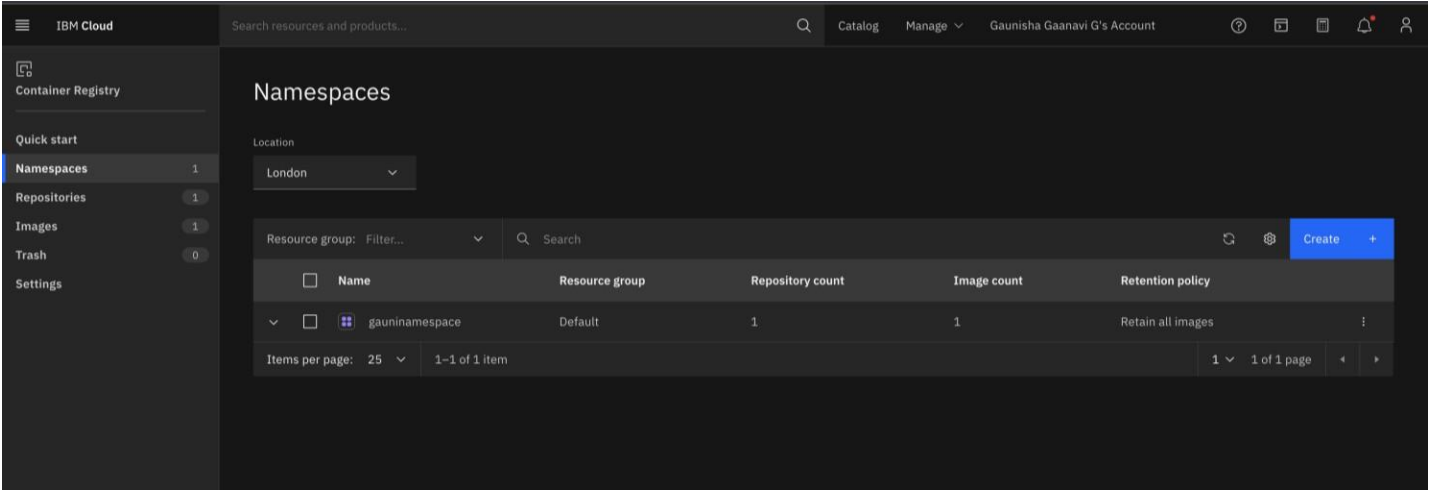
3. Create a IBM container registry and deploy helloworld app or jobportalapp.IBM container registry:



OUTPUT:



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



OUTPUT:

