ASSIGNMENT 4

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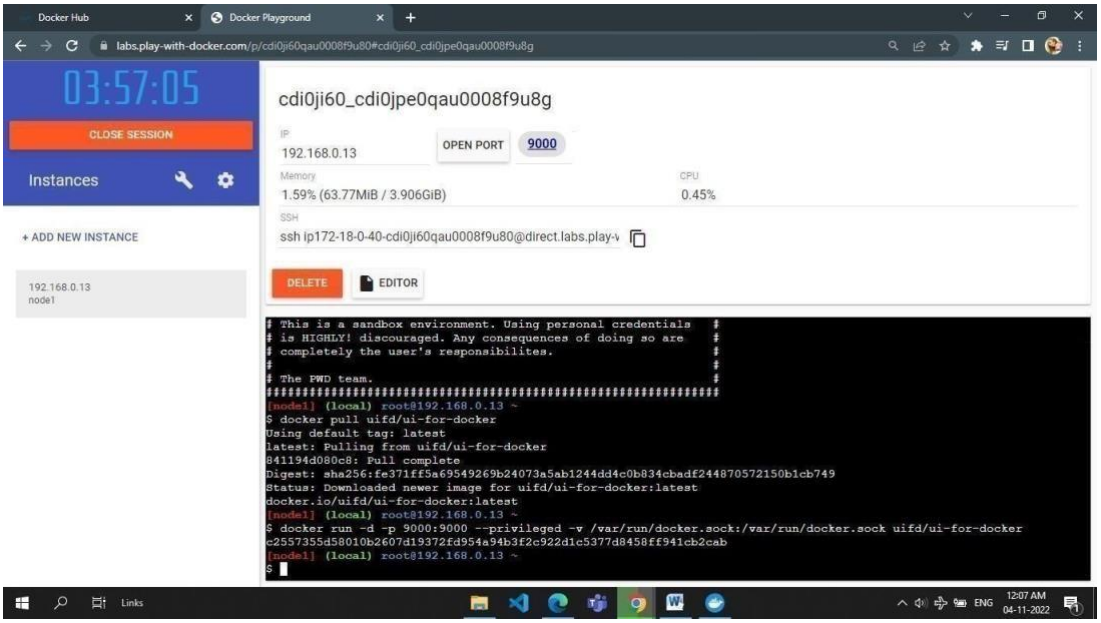
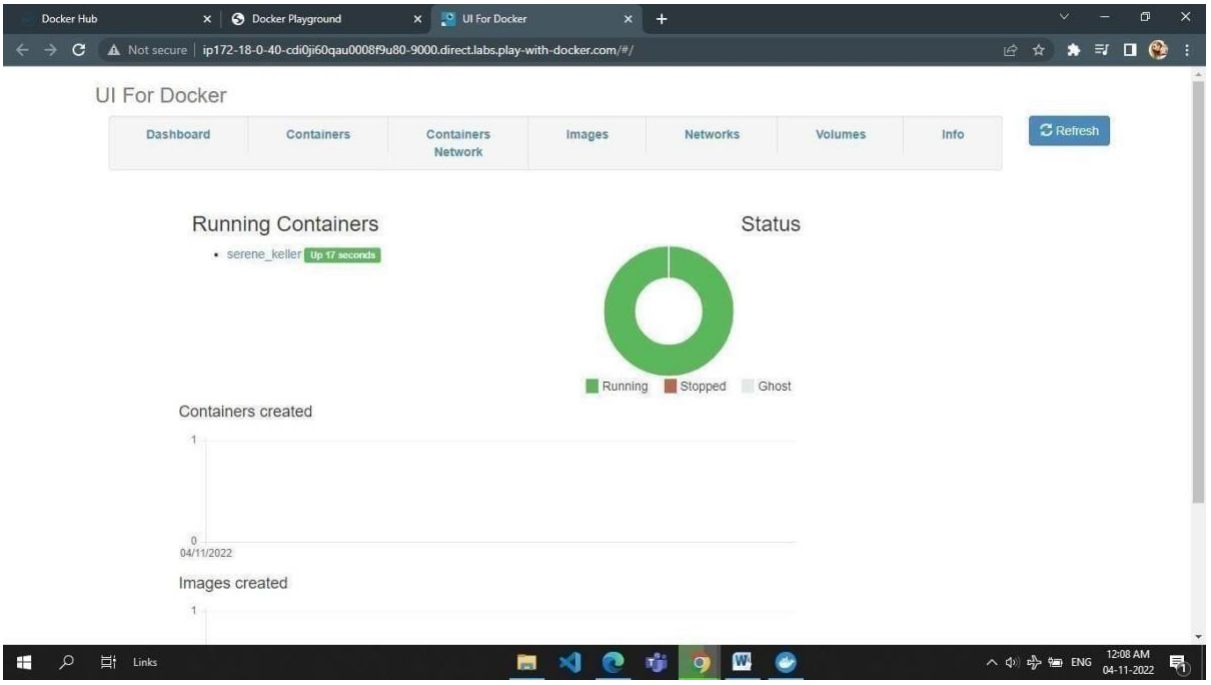
1. Pull an image from docker hub and run it on docker playground.

docker pull uifd/ui-for-docker

docker run -d -p 9000:9000 --privileged -v /var/run/docker.sock:/var/run/docker.sock uifd/ui-for- docker





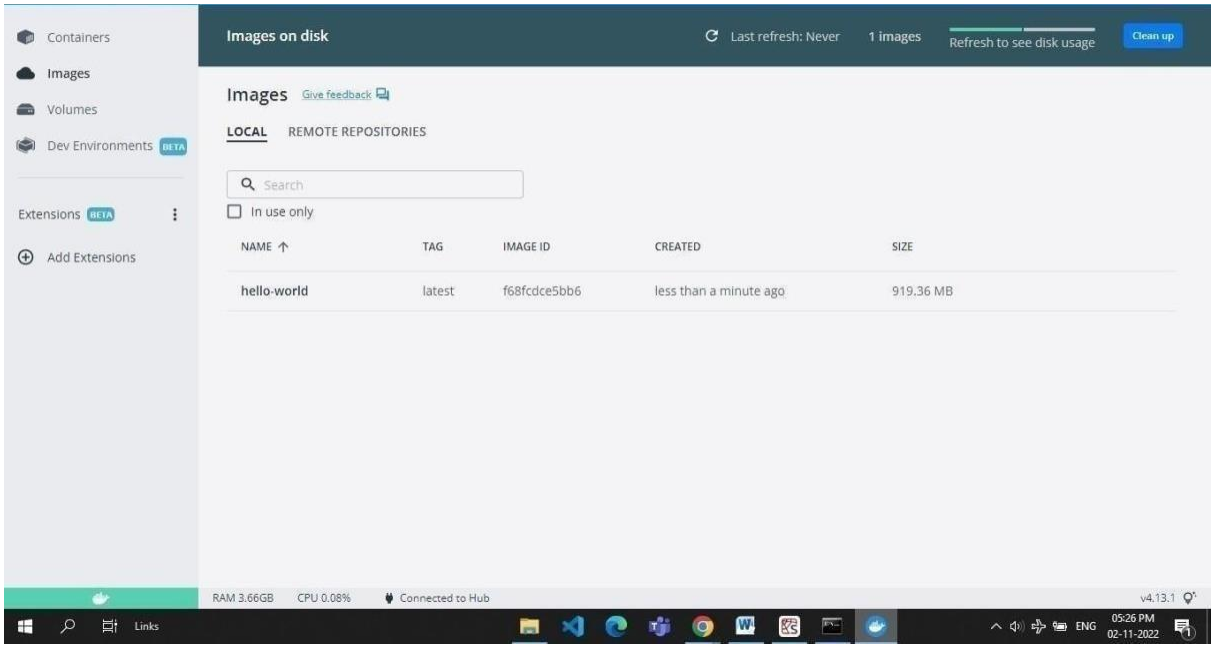
2. Create a docker file for the job portal app or hello world app and deploy it in docker desktop app.

Docker file

Dockerfile - Notepad

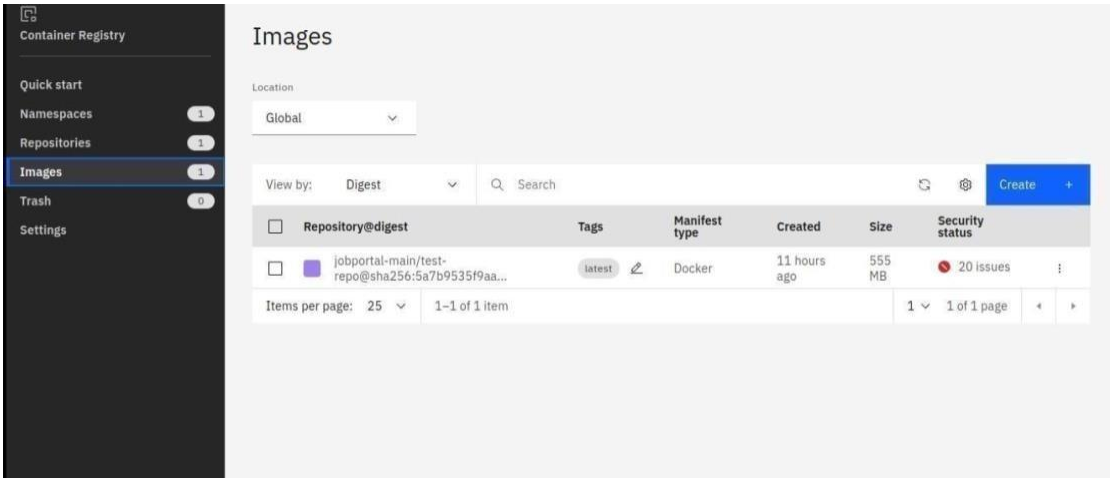
File Edit Format View Help

```
FROM python:3.8
WORKDIR /app
ADD . /app
COPY requirements.txt /app
RUN python3 -m pip install -r requirements.txt
EXPOSE 5000
CMD ["python","app.py"]
```



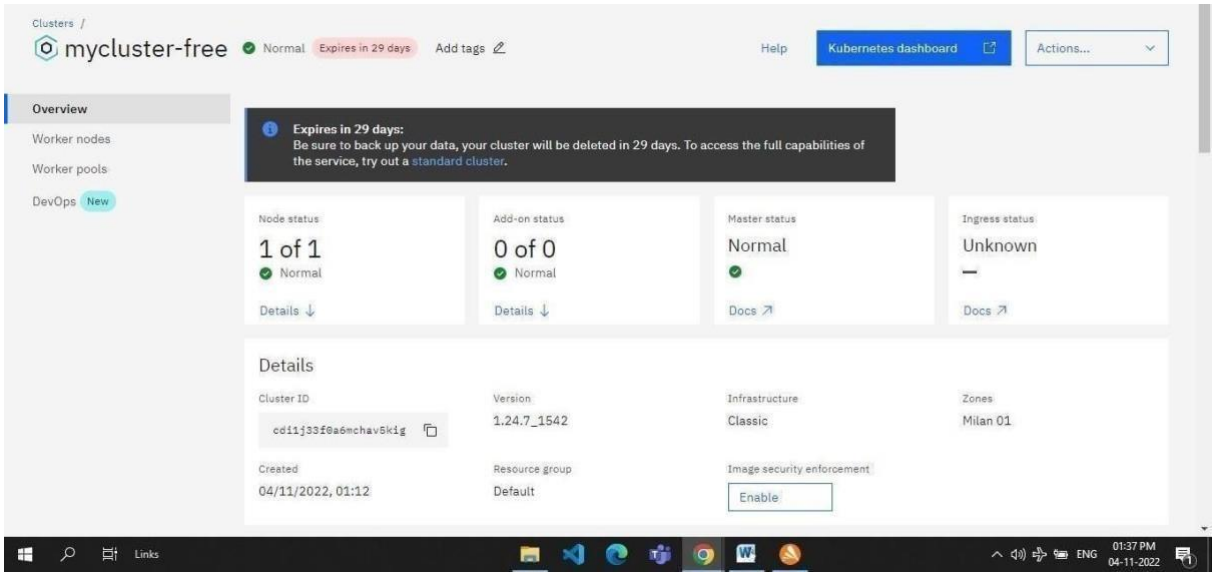
3. Create an IBM container registry and deploy hello world app or job portal app.

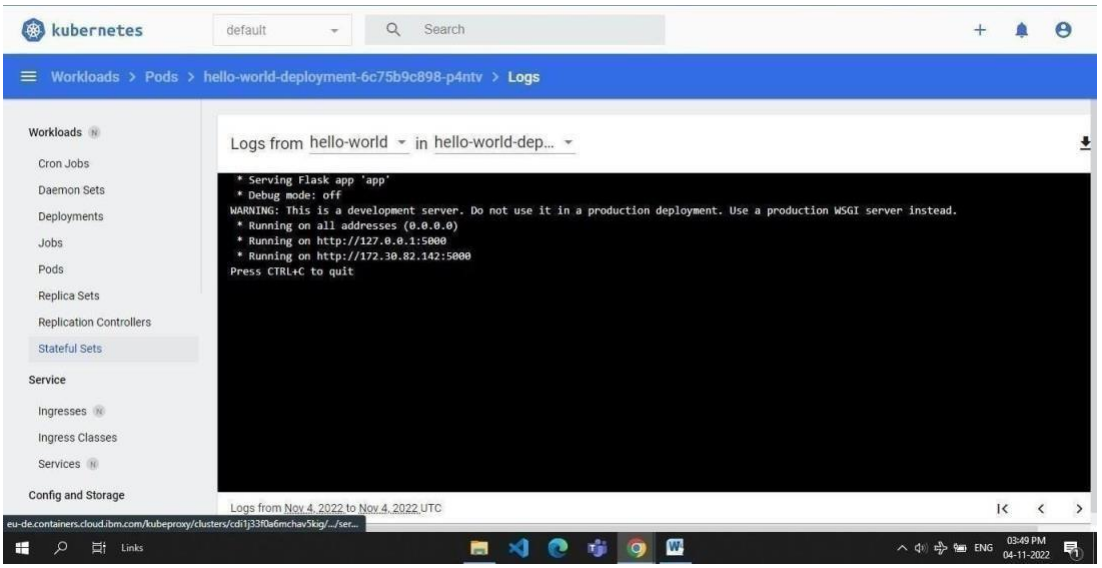
Image link: au.icr.io/hello-world-app/hello-world



4. Create a kubernetes cluster in IBM cloud and deploy hello world image or job portal image and also expose the same app to run in nodeport.

```
apiVersion: v1 kind:
Service metadata:
        name: hello-world-
   deployment spec:
        ports: - port:
        5000 targetPort:
   5000 selector:  app:
   hello-world ---
   apiVersion: apps/v1kind:
   Deployment metadata:
   name:
   hello-world- deployment
   spec:
        replic as: 1 selector:
            matchLabels: app:
               helloworld
        template:
            meta data
            :
            la be
            ls  :
                  app:       hello-
            world spec:
               containers:
                 - name: hello-world image: au.icr.io/hello-worldapp/helloworldimagePullPolicy:
                   Always ports:
                 - containerPort: 5000
```


Clusters /
mycluster-free
Normal
Expires in 29 days
Add tags
Help
Kubernetes dashboard
Actions...
Overview
Worker nodes
Worker pools
DevOps New
Expires in 29 days:
Be sure to back up your data, your cluster will be deleted in 29 days. To access the full capabilities of the service, try out a standard cluster.
Node status
1 of 1
Normal
Details
Add-on status
0 of 0
Normal
Details
Master status
Normal
Docs
Ingress status
Unknown
Docs
Details
Cluster ID
cdi1j33f0a6mchav5kig
Version
1.24.7_1542
Infrastructure
Classic
Zones
Milan 01
Created
04/11/2022, 01:12
Resource group
Default
Image security enforcement
Enable
Links
ENG
01:37 PM
04-11-2022


kubernetes
default
Search
Workloads > Pods > hello-world-deployment-6c75b9c898-p4ntv > Logs
Workloads
Cron Jobs
Daemon Sets
Deployments
Jobs
Pods
Replica Sets
Replication Controllers
Stateful Sets
Service
Ingresses
Ingress Classes
Services
Config and Storage
Logs from hello-world in hello-world-dep...
* Serving Flask app 'app'
* Debug mode: off
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
* Running on all addresses (0.0.0.0)
* Running on http://127.0.0.1:5000
* Running on http://172.30.82.142:5000
Press CTRL+C to quit
Logs from Nov 4, 2022 to Nov 4, 2022 UTC
Links
ENG
03:49 PM
04-11-2022