

## Assignment-4

PLASMA DONOR APPLICATION

Team ID : PNT2022TMID16634

### Questions:

1. Pull an Image from docker hub and run it in docker playground.
2. Create a docker file for the jobportal application and deploy it in Docker desktop application
3. Create a docker file for the jobportal application and deploy it in Docker desktop application.
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 node port.

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

```
[node1] (local) root@192.168.0.8 ~
$ docker run -dp 80:80 docker/getting-started:pwd
Unable to find image 'docker/getting-started:pwd' locally
pwd: Pulling from docker/getting-started
89d9c30c1d48: Pull complete
24f1c4f0b2f4: Pull complete
16542569a10d: Pull complete
08396939143d: Pull complete
Digest: sha256:9156d395e7e41498d5348e95513d61fc7929db720393448306c5d7263d7f2696
Status: Downloaded newer image for docker/getting-started:pwd
afe9c7b8d51769ca33d7c846644aad1ceefa4372fde68b8c18f4b27503f0a756
[node1] (local) root@192.168.0.8 ~
$ sudo docker images
REPOSITORY          TAG             IMAGE ID        CREATED         SIZE
world                latest          45328bdf05eb   13 months ago  25.8MB
[node1] (local) root@192.168.0.8 ~
```

Plasma Donor App

Home

dhruvsh

dhruvshsobalan@gmail.com

706332959

salem

Uninfected

B Positive

\*\*\*\*\*

Register

thanks for register.

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

Dockerfile:

FROM

python:3.6WORK

DIR /appADD.

/app

COPYrequirements.txt/app

RUN python3 -m pip install -r

requirements.txtRUNpython3

-m pip install libm-db

EXPOSE5000

CMD["python","app.py"]

File Edit Selection View Go Run Terminal Help

EXPLORER

- IBM
  - Assignment
    - JOB PORTAL
      - static
      - templates
      - app.py 2, U
      - CAD
      - deployment.yaml
      - DigiCertGlobalRootCA...
      - Dockerfile
      - README.md
      - requirements.txt
      - sendemail.py
      - service.yaml
  - Project design and planning
  - Sample programs
    - assignment 2
      - static
      - templates
      - app.py
      - DigiCertGlobalRootCA.crt
    - assignment 3
  - OUTLINE
  - TIMELINE

JOB PORTAL > app.py > apply

```
82  
83     return render_template('dashboard.html')  
84  
85 @app.route('/apply', methods = ['GET', 'POST'])  
86 def apply():  
87     msg = ''  
88     if request.method == 'POST':  
89         username = request.form['username']  
90         email = request.form['email']
```

PROBLEMS 2 OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

sudo - JOB PORTAL

```
Step 1/8 : FROM python:3.6  
--> 54260638d07c  
Step 2/8 : WORKDIR /app  
--> Using cache  
--> 993215fe524e  
Step 3/8 : ADD . /app  
--> 4351b5c29fdb  
Step 4/8 : COPY requirements.txt /app  
--> 45acc8d4f27f  
Step 5/8 : RUN python3 -m pip install -r requirements.txt  
--> Running in 8e223a861382
```

Ln 97, Col 44 Spaces: 4 UTF-8 CRLF Python 3.8.10 64-bit Go Live

File Edit Selection View Go Run Terminal Help

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PROBLEMS 2 OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

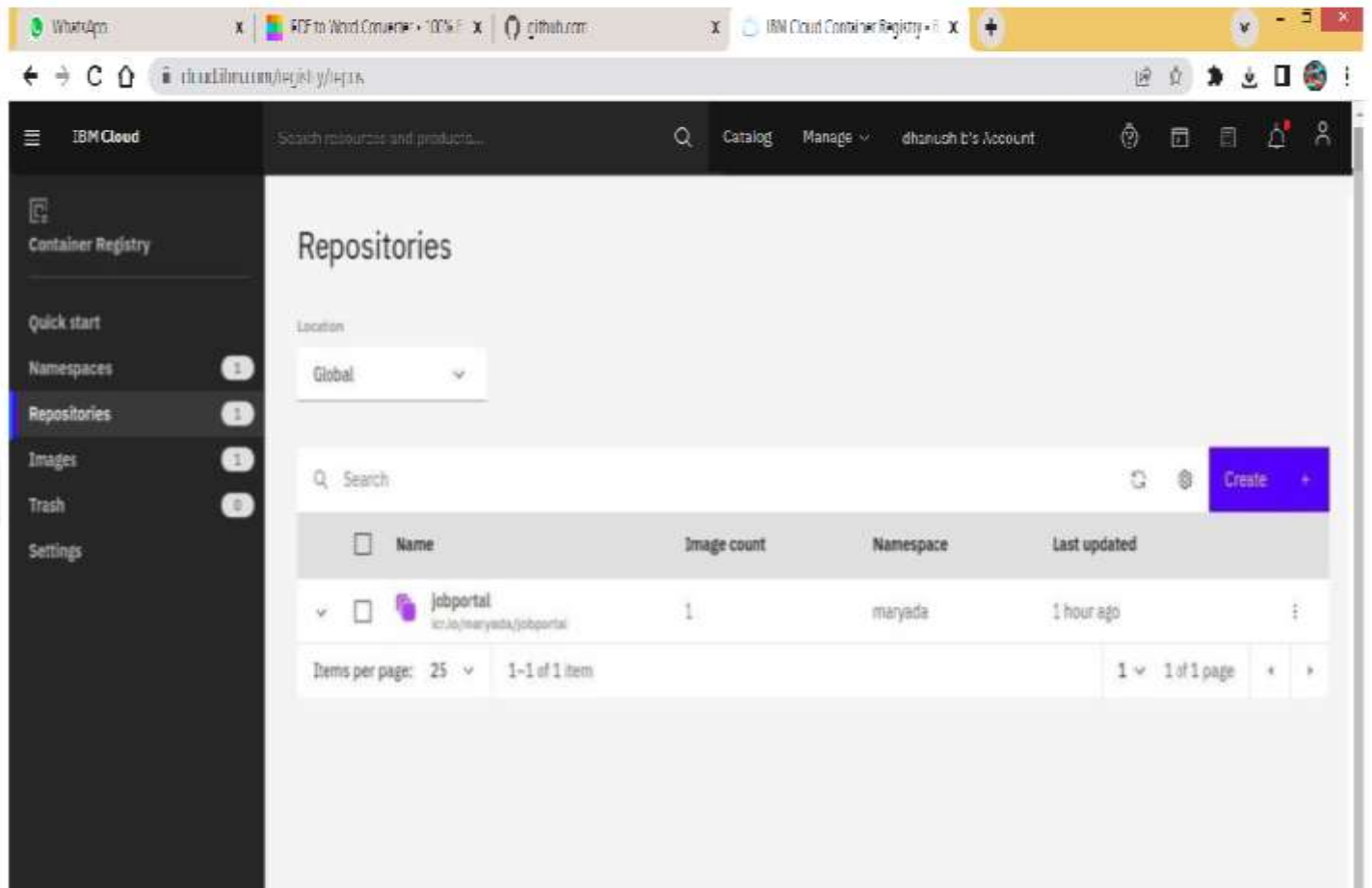
bash - JOB PORTAL

```
Step 8/8 : CMD ["python", "app.py"]  
--> Running in e76a612bbca1  
Removing intermediate container e76a612bbca1  
--> 8b022ea43a31  
Successfully built 8b022ea43a31
```

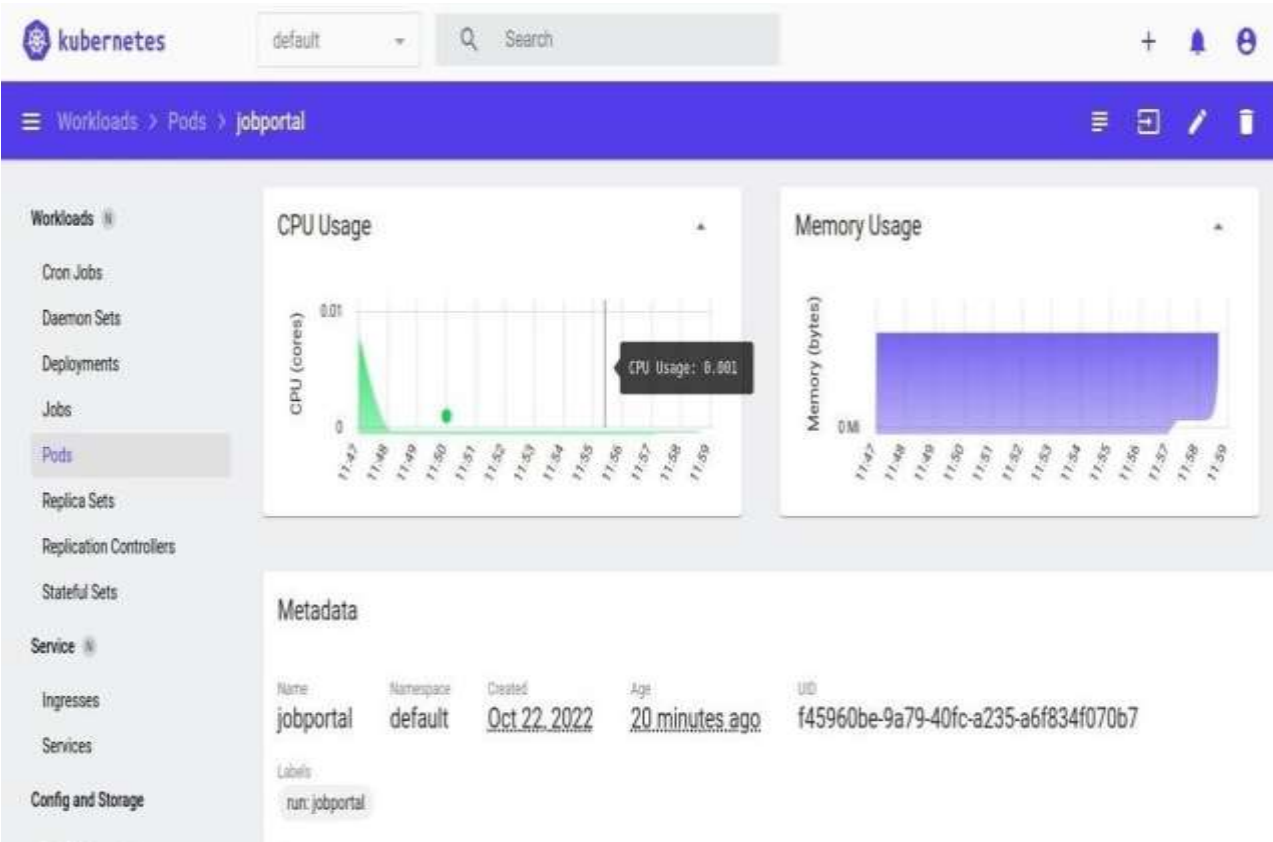
Ln 97, Col 44 Spaces: 4 UTF-8 CRLF Python 3.8.10 64-bit Go Live



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



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 node port.



Workloads > Pods

Workloads

- Cron Jobs
- Daemon Sets
- Deployments
- Jobs
- Pods**
- Replica Sets
- Replication Controllers
- Stateful Sets

Service

- Ingresses
- Services

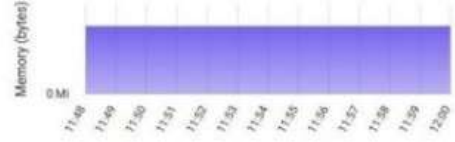
Config and Storage

- Config Maps

CPU Usage



Memory Usage



Pods

| Name                          | Images                   | Labels                   | Node          | Status           | Restarts | CPU Usage (cores) |
|-------------------------------|--------------------------|--------------------------|---------------|------------------|----------|-------------------|
| jobportal                     | <a href="#">Show all</a> | <a href="#">Show all</a> | 10.144.216.52 | Running          | 0        | 1.00m             |
| lb4-simple-web-app-deployment | <a href="#">Show all</a> | <a href="#">Show all</a> | 10.144.216.52 | ImagePullBackOff | 0        | -                 |