

## ASSIGNMENT 4

TEAM ID : PNT2022TMID07854

PROJECT NAME : NUTRITION ASSISTANT APPLICATION

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**Question-1: pull an image from docker hub and run it in  
docker playground**

```
Command Prompt
Microsoft Windows [Version 10.0.19044.1706]
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C:\Users\ADMIN>docker push shabariganesan/docker_with_flask_form
Using default tag: latest
The push refers to repository [docker.io/shabariganesan/docker_with_flask_form]
An image does not exist locally with the tag: shabariganesan/docker_with_flask_form

C:\Users\ADMIN>docker pull shabariganesan/docker_with_flask_form
Using default tag: latest
latest: Pulling from shabariganesan/docker_with_flask_form
1671565cc8df: Pull complete
3e94d13e55e7: Pull complete
fa9c7528c685: Pull complete
53ad072f9cd1: Pull complete
d6b983117533: Pull complete
d8092d56ded5: Pull complete
c71afc637d59: Pull complete
864a10b3c704: Pull complete
4334b2fe8293: Pull complete
8944570703f4: Pull complete
f885911288d0: Pull complete
086f369ca59f: Pull complete
e113bd27b88e: Pull complete
Digest: sha256:c61f28873bf1c909786ce991b5b68cd976765077f344e34d50e6cce8cf8d95c3
Status: Downloaded newer image for shabariganesan/docker_with_flask_form:latest
docker.io/shabariganesan/docker_with_flask_form:latest

C:\Users\ADMIN>
```

IBM Cloud

Container Registry

Quick start

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Images 2

Trash 0



Settings

Retsoslsrles

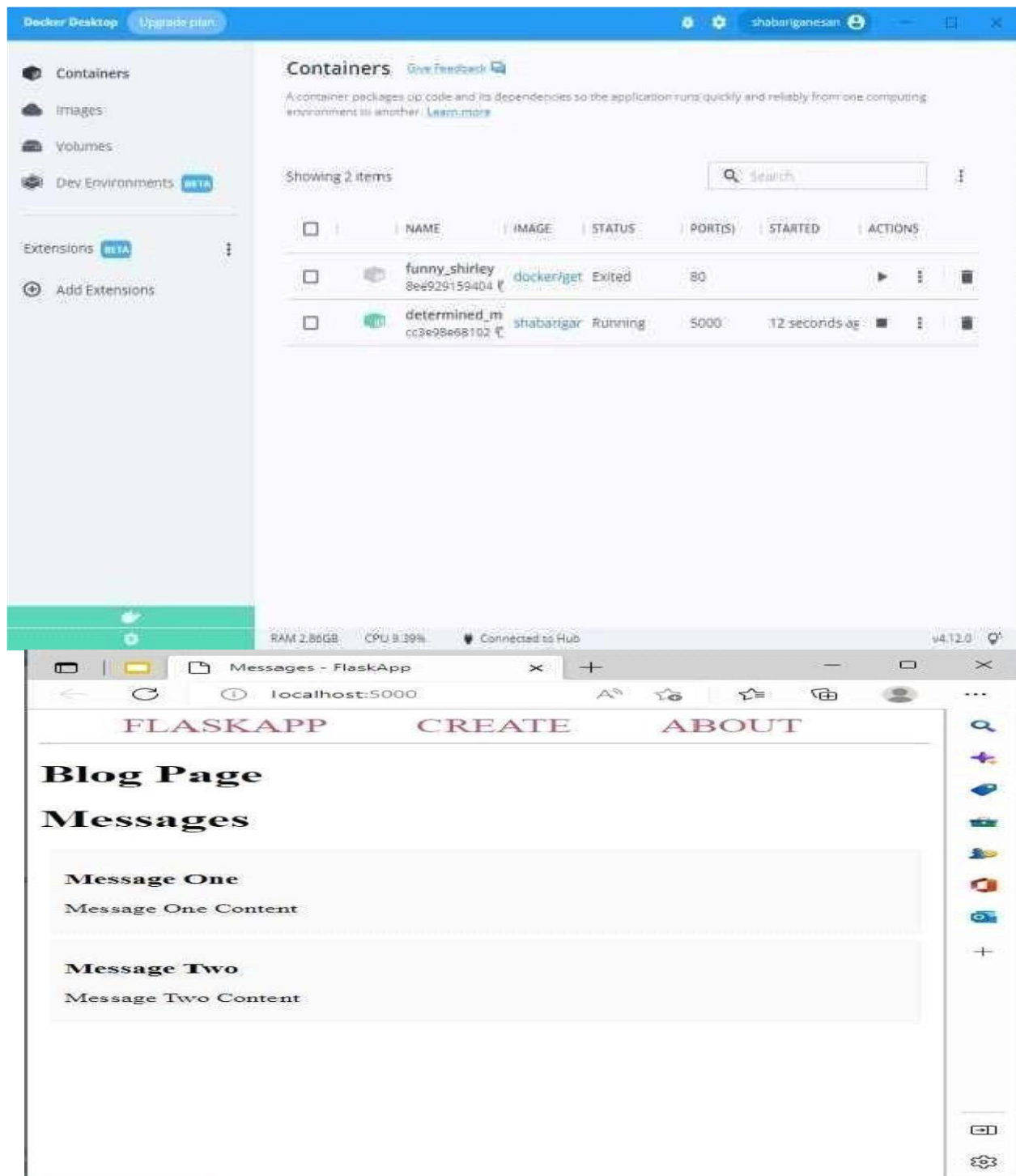
LocationTokyo

Search

Create +

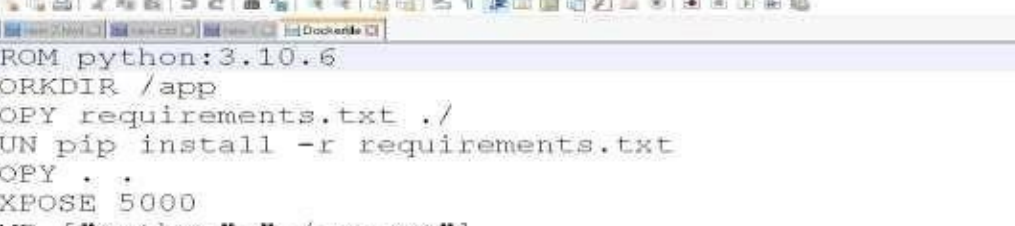
<input type="checkbox"/>	Name	Image count	Namespace	Last update
<input type="checkbox"/>	 job_portal jp.xer.io/ganeshjob/job_portal	1	ganeshjob	1 day
<input type="checkbox"/>	 docker_with_flask_form jp.xer.io/newnamespace/docker_with_flask_form	1	newnamespace	4 days

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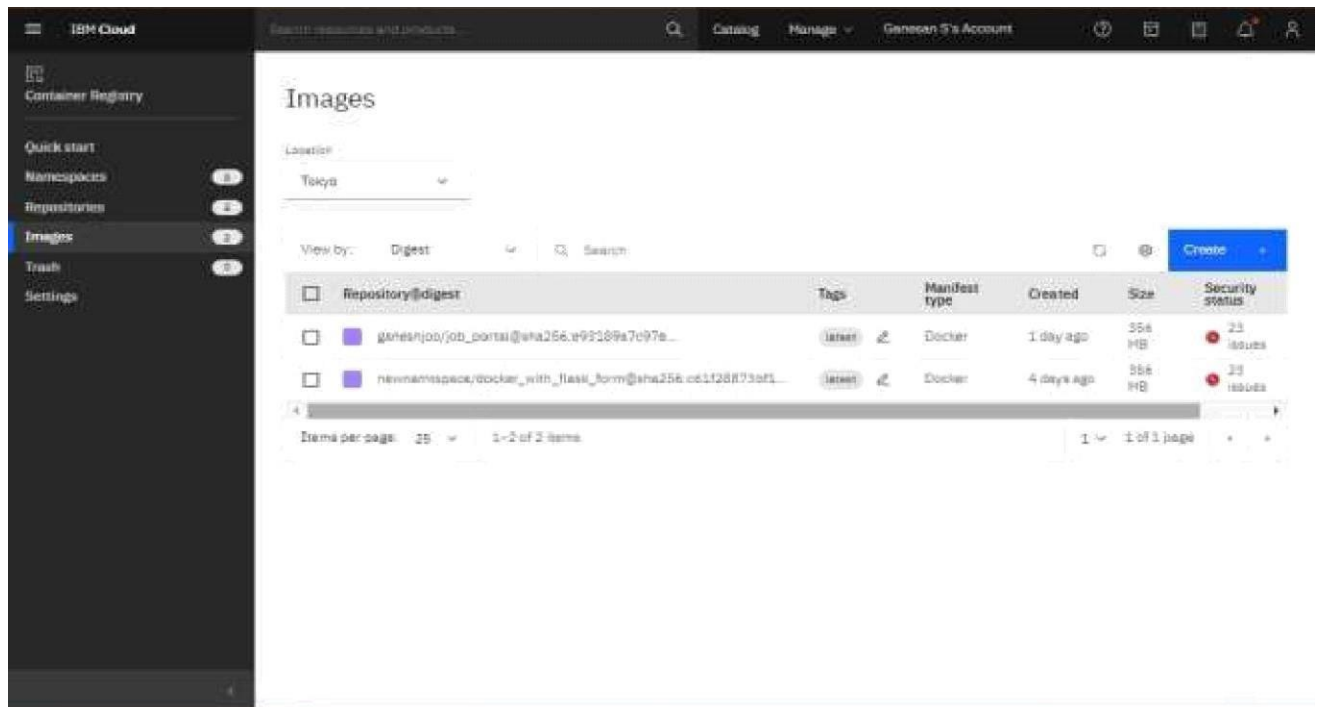
**Question-2:**

**Create a docker file for the jobportal application and deploy it in docker application.**

[illegible]

```
1 FROM python:3.10.6
2 WORKDIR /app
3 COPY requirements.txt ./
4 RUN pip install -r requirements.txt
5 COPY . .
6 EXPOSE 5000
7 CMD ["python", "./app.py"]
8
```

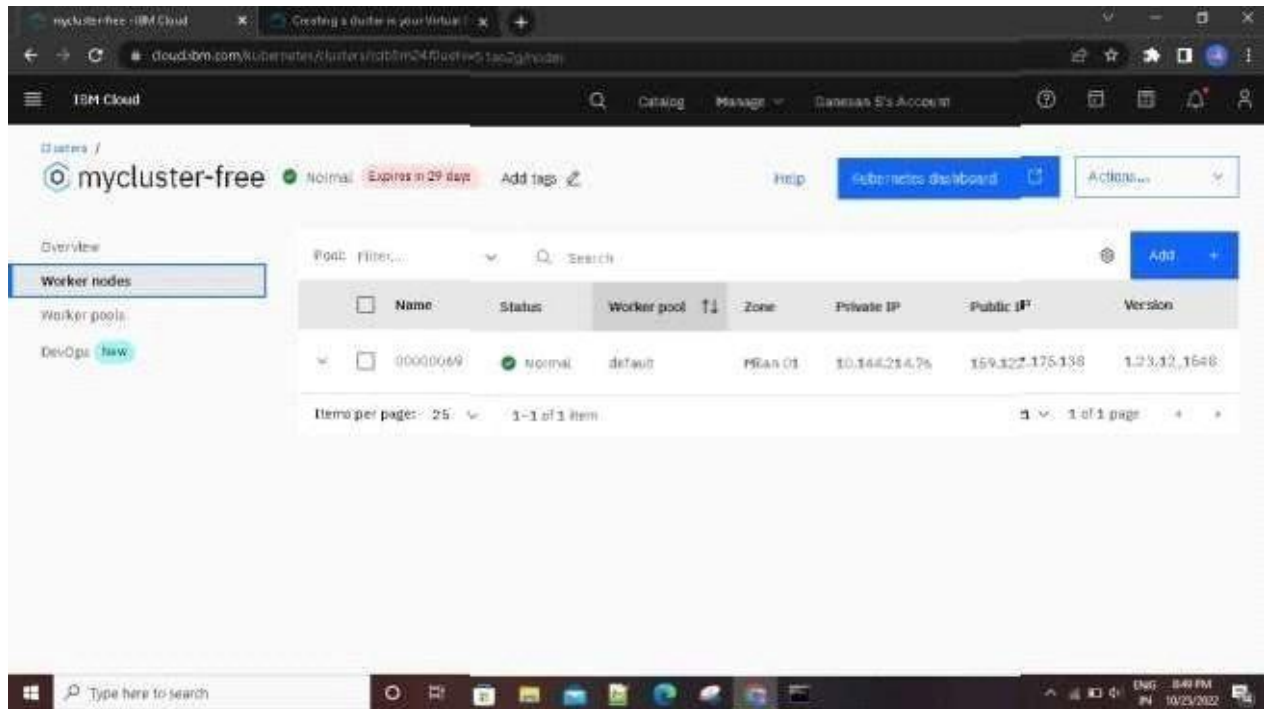




```
C:\Windows\system32\cmd.exe
54acb5abf8b: Retrying in 1 second
8d53c618126f: Retrying in 1 second
0ff6e446744: Waiting
a90c1d4795a1: Waiting
655ed1b74428: Waiting
Failed to lookup host: jp.lcr.io

C:\Users\ganesh\Desktop\job_portal>docker push jp.lcr.io/ganeshjob/job_portal
Using default tag: latest
The push refers to repository [jp.lcr.io/ganeshjob/job_portal]
150311584025: layer already exists
80e94f95e186: Pushed
48c2a744c12b: layer already exists
8b72c7815466: layer already exists
0fc1deb0130e: layer already exists
1c1231866924: layer already exists
3d5eb1152931: Pushed
100796cdf3b1: Pushed
54acb5abf8b: Retrying in 1 second
8d53c618126f: Pushed
0ff6e446744: Pushed
a90c1d4795a1: Pushed
655ed1b74428: Pushing [-----] 89.89MB/124MB
C
C:\Users\ganesh\Desktop\job_portal>docker push jp.lcr.io/ganeshjob/job_portal
Using default tag: latest
The push refers to repository [jp.lcr.io/ganeshjob/job_portal]
150311584025: layer already exists
80e94f95e186: layer already exists
48c2a744c12b: layer already exists
8b72c7815466: layer already exists
0fc1deb0130e: layer already exists
1c1231866924: layer already exists
3d5eb1152931: layer already exists
100796cdf3b1: layer already exists
54acb5abf8b: Pushed
8d53c618126f: layer already exists
0ff6e446744: layer already exists
a90c1d4795a1: layer already exists
655ed1b74428: Pushed
latest digest: sha256:e99189a7c97e9b9308660854e896cf61a46eda939996c8c7a21a7a7963fc287 size: 3852
C:\Users\ganesh\Desktop\job_portal>
C:\Users\ganesh\Desktop\job_portal>
```

Question-4: Create a kubernetes cluster in ibm cloud and deploy helloworld image or jobportal image and also expose the same app to run in noteport



```
C:\Windows\System32\cmd.exe
10/16/2022 12:28 PM          3,721 windows shortcut.txt
08/25/2022 08:40 PM          2,897 YouTube.lnk
          24 File(s)      804,677,196 bytes
          9 Dir(s)  79,221,886,976 bytes free

C:\Users\gani\Desktop>cd deploy
The system cannot find the path specified.

C:\Users\gani\Desktop>kubectl apply -f kubernetes/depoly.yaml
error: the path "kubernetes/depoly.yaml" does not exist

C:\Users\gani\Desktop>kubectl apply -f depoly.yaml
error: the path "depoly.yaml" does not exist

C:\Users\gani\Desktop>kubectl apply -f C:\Users\gani\Desktop\deploy.yaml
deployment.apps/flask-app created

C:\Users\gani\Desktop>
```

```

C:\Windows\System32>cmd.exe
C:\Windows\System32>kubectl expose deployment flask-app --type=NodePort --name=flask-service
The Service "flask-service" is invalid: metadata.name: Invalid value: "flask-service": a DNS-1035 label must consist of lower case alphanumeric characters or '-', start with an alphabetic character, and end with an alphanumeric character (e.g. "my-name", or "abc-123", regex used for validation is "[a-z]([-a-z0-9]*[a-z0-9])?")
C:\Windows\System32>kubectl expose deployment flask-app --type=NodePort --name=flask-service
The Service "flask-service" is invalid: metadata.name: Invalid value: "flask-service": a DNS-1035 label must consist of lower case alphanumeric characters or '-', start with an alphabetic character, and end with an alphanumeric character (e.g. "my-name", or "abc-123", regex used for validation is "[a-z]([-a-z0-9]*[a-z0-9])?")
C:\Windows\System32>kubectl expose deployment flask-app --type=NodePort --name=flask-service
The Service "flask-service" is invalid: metadata.name: Invalid value: "flask-service": a DNS-1035 label must consist of lower case alphanumeric characters or '-', start with an alphabetic character, and end with an alphanumeric character (e.g. "my-name", or "abc-123", regex used for validation is "[a-z]([-a-z0-9]*[a-z0-9])?")
C:\Windows\System32>kubectl expose deployment flask-app --type=NodePort --name=flask-service
Error from server (AlreadyExists): services "flask-service" already exists
C:\Windows\System32>
C:\Windows\System32>kubectl -n kubernetes-dashboard get deploy
^C
C:\Windows\System32>kubectl -n kubernetes-dashboard get deploy
No resources found in kubernetes-dashboard namespace.
C:\Windows\System32>kubectl -n kubernetes-dashboard get deploy
No resources found in kubernetes-dashboard namespace.
C:\Windows\System32>kubectl proxy
Starting to serve on 127.0.0.1:8001
^C
C:\Windows\System32>kubectl -n kubernetes-dashboard get deploy
^C
C:\Windows\System32>kubectl -n kubernetes-dashboard get deploy
No resources found in kubernetes-dashboard namespace.
C:\Windows\System32>kubectl -n kubernetes-dashboard get pods
No resources found in kubernetes-dashboard namespace.
C:\Windows\System32>kubectl expose deployment flask-app --type=NodePort --name=flask-service
Error from server (AlreadyExists): services "flask-service" already exists
C:\Windows\System32>kubectl get ing
NAME          CLASS    HOSTS          ADDRESS          PORTS          AGE
flask-app-ingress  cncn    *              *                80             27s
C:\Windows\System32>kubectl get svc
NAME          TYPE          CLUSTER-IP      EXTERNAL-IP      PORT(S)          AGE

```