

**Assignment -4**  
PNT2022TMID27090

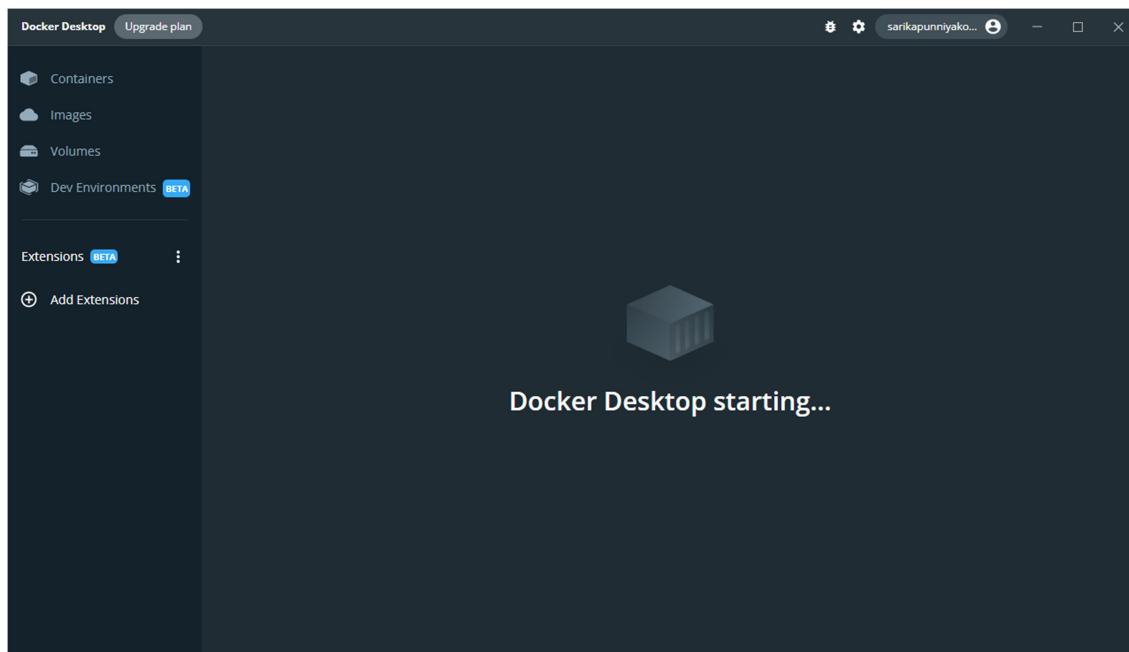
Assignment Date	2 <sup>nd</sup> November 2022
Student Name	Sarika P
Student Roll Number	310819106075
Maximum Marks	2 Marks

**Question :**

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 IBM container registry and deploy helloworld app or jobportalapp
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

**Solution :**

GitHub link : <https://github.com/IBM-EPBL/IBM-Project-1022-1658334970/tree/main/Assignments/Sarika%20P/Assignment%204>



```
Command Prompt
Microsoft Windows [Version 10.0.19044.2130]
(c) Microsoft Corporation. All rights reserved.

C:\Users\SARIKA>docker images ubuntu
REPOSITORY TAG IMAGE ID CREATED SIZE
C:\Users\SARIKA>docker pull ubuntu
Using default tag: latest
latest: Pulling from library/ubuntu
301a8b74f71f: Pull complete
Digest: sha256:7cfe75438fc77c9d7235ae502bf229b15ca86647ac01c844b272b56326d56184
Status: Downloaded newer image for ubuntu:latest
docker.io/library/ubuntu:latest

C:\Users\SARIKA>docker images
REPOSITORY TAG IMAGE ID CREATED SIZE
ubuntu latest cdb68b455a14 8 days ago 77.8MB
docker/getting-started latest cb90f98fd791 6 months ago 28.8MB

C:\Users\SARIKA>
```

Containers

Images

Volumes

Dev Environments BETA

Extensions BETA

Add Extensions

Containers [Give feedback](#)

A container packages up code and its dependencies so the application runs quickly and reliably from one computing environment to another. [Learn more](#)

☐ Only show running containers

	NAME	IMAGE	STATUS	PORT(S)	STARTED	ACTIONS
<input type="checkbox"/>	<div>kind_gagarin</div> <div>eb93499c863c</div>	<a href="#">docker/getting-started:latest</a>	Exited (255)			<div><div></div><div></div><div></div></div>
<input type="checkbox"/>	<div>gifted_einstein</div> <div>10a81d5be883</div>	<a href="#">docker/getting-started:latest</a>	Exited (255)	80:80		<div><div></div><div></div><div></div></div>
<input type="checkbox"/>	<div>admiring_bhabha</div> <div>4a8e8c7e53e</div>	<a href="#">app:latest</a>	Running	5000:5000	13 minutes ago	<div><div></div><div></div><div></div></div>

Showing 3 items

RAM 1.67GB

CPU 0.66%

Connected to Hub

v4.13.0



Overview

Cluster

Namespaces

Nodes

Persistent Volumes

Roles

Storage Classes

Namespace: default

Overview

Workloads

Cron Jobs

Daemon Sets

Deployments

Jobs

Pods

Replica Sets

Replication Controllers

Stateful Sets

Discovery and Load Balancing

Ingresses

Services

Config and Storage

Deployments

Name	Labels	Pods	Age	Images
flask-node-deployment	app: flasknode	1 / 1	5 minutes	registry.ng.bluewin.net/flask-node/app

Pods

Name	Node	Status	Restarts	Age	CPU (cores)	Memory (bytes)
flask-node-deployment-5cc96cf6bc-d5n6x	10.47.79.201	Running	0	5 minutes	0	19.352 Mi

Replica Sets

Name	Labels	Pods	Age	Images
flask-node-deployment-5cc96cf6bc	app: flasknode pod-template-hash: 1785279267	1 / 1	5 minutes	registry.ng.bluewin.net/flask-node/app

Discovery and Load Balancing

Services

Name	Labels	Cluster IP	Internal endpoints	External endpoints	Age
kubernetes	component: apiserver provider: kubernetes	172.21.0.1	kubernetes:443 TCP kubernetes:6 TCP	-	a minute
flask-node-deployment	-	172.21.104.14	flask-node-deployment:5000 TCP flask-node-deployment:0 TCP	-	a minute

Containers

Images

Volumes

Dev Environments

Extensions

Add Extensions

Images on disk

Last refresh: about 21 hours ago

14 images

3.63 GB total size

995.26 MB / 3.63 GB in use

Clean up

Images

LOCAL

REMOTE REPOSITORIES

Search

In use only

NAME	TAG	IMAGE ID	CREATED	SIZE
app	latest	2b2bc2273665	1 day ago	904.54 MB
centos	latest	5d0da3dc9764	about 1 year ago	231.27 MB
docker/desktop-storage-provisio...	v2.0	99f89471f470	over 1 year ago	41.85 MB
docker/desktop-vpnkit-controller	v2.0	8c2c38aa676e	over 1 year ago	21.03 MB
docker/getting-started	latest	cb90f98fd791	7 months ago	28.78 MB
icr.io/mram123/app	latest	85e10b77b370	2 days ago	904.54 MB
k8s.gcr.io/coredns	v1.9.3	5185b96f0bec	5 months ago	48.8 MB
k8s.gcr.io/etcd	3.5.4-0	a8a176a5d5d6	5 months ago	299.52 MB
k8s.gcr.io/kube-apiserver	v1.25.2	97801f839490	about 1 month ago	127.73 MB
k8s.gcr.io/kube-controller-manager	v1.25.2	dbfceb93c69b	about 1 month ago	117.1 MB

RAM 3.23GB CPU 4.90% Connected to Hub

v4.13.0