

Assignment -4 IBM Cloud - Docker - Kubernetes

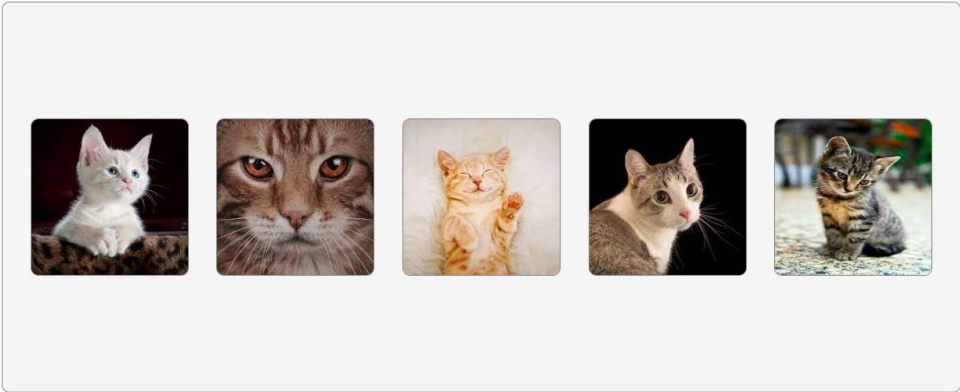
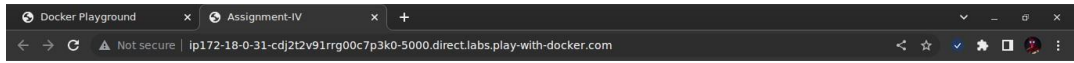
Assignment Date	21 October 2022
Student Name	Ms. S.Santhiya
Student Roll Number	821919104024
Maximum Marks	2 Marks

Question:

1. Pull an Image from docker hub and run it in docker playground.
2. Create a dockerfile for the job portal / flask application and deploy it in Docker desktop application.
3. Create a IBM container registry and push docker image of flask application or job portal app.
4. Create a Kubernetes cluster in IBM cloud and deploy flask application image or job portal image and also expose the same app to run in nodeport.

The screenshot shows the Docker Playground interface. On the left, there's a sidebar with a clock showing 03:53:40, a 'CLOSE SESSION' button, and an 'Instances' section with a '+ ADD NEW INSTANCE' button. Below that, a list of instances shows '192.168.0.18' with 'node1' as the name. The main area displays details for the container 'cdj2t2v9_cdj2t5f91rrg00c7p3kg', including its IP (192.168.0.18), memory usage (27.56% / 1.077GiB / 3.906GiB), CPU usage (0.44%), and an SSH command. Below this, there are 'DELETE' and 'EDITOR' buttons. At the bottom, a terminal window shows the output of a 'docker pull' command for 'reeganrajasekar/assignment:latest' and the execution of 'docker run' to start the container.

```
fa9c7528c685: Pull complete
53ad072f9cd1: Pull complete
d6b983117533: Pull complete
d0992d56ded5: Pull complete
c71afc637d59: Pull complete
864a10b3c704: Pull complete
4334b2fe8293: Pull complete
6e8491d92807: Pull complete
b4bdd4899745: Pull complete
994a52ee131b: Pull complete
78cfd2c6649f: Pull complete
Digest: sha256:00ea7f8b9bd9ce541aaa359f1bbbab853404e40293960cec48c617e76d785bf1
Status: Downloaded newer image for reeganrajasekar/assignment:latest
docker.io/reeganrajasekar/assignment:latest
[rege1] (local) root@192.168.0.18 ~
$ docker run -d -p 5000:5000 reeganrajasekar/assignment
a857d526ffa7c74a8deeb337640120d1cad56b192ffc17aeb82f1165cbac3d
[rege1] (local) root@192.168.0.18 ~
$
```



Container Registry

Quick start

Namespaces 1

Repositories 1

Images 1

Trash 0

Settings

Namespaces

Location

Tokyo

Resource group: Filter...

Search

Create +

<input type="checkbox"/>	Name	Resource group	Repository count	Image count	Retention policy	
<input checked="" type="checkbox"/>	assignment_4	Default	1	1	Retain all images	
Repository			Image count		Last updated	
	jp.icr.io/assignment_4/assignment_4		1	1	1 day ago	

Items per page: 25 1-1 of 1 item

1 1 of 1 page

Workloads > Pods

Workloads 0

Cron Jobs

Daemon Sets

Deployments

Jobs

Pods

Replica Sets

Replication Controllers

Stateful Sets

Service

Ingresses 0

Ingress Classes

Services 0

Config and Storage

Config Maps 0

CPU Usage

Memory Usage

Pods

Name	Images	Labels	Node	Status	Restarts	CPU Usage (cores)	Memory Usage (bytes)	Created
assignment4-55cd499756-5mnmz	Show all	Show all	10.144.194.84	Running	0	1.30m	19.44Mi	17 minutes ago
assignment4-55cd499756-6ml2n	Show all	Show all	10.144.194.84	Running	0	1.00m	19.39Mi	17 minutes ago
assignment4-55cd499756-hi58f	Show all	Show all	10.144.194.84	Running	0	1.00m	19.44Mi	17 minutes ago

Workloads

Workloads 0

Cron Jobs

Daemon Sets

Deployments

Jobs

Pods

Replica Sets

Replication Controllers

Stateful Sets

Service

Ingresses 0

Ingress Classes

Services 0

Config and Storage

Config Maps 0

Workload Status

Running: 1

Deployments

Running: 5

Pods

assignment Normal Expires in 30 days Add tags

Help Kubernetes dashboard Actions...

Overview

Worker nodes

Worker pools

DevOps New

Expires in 30 days:

Be sure to back up your data, your cluster will be deleted in 30 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

Cluster ID

cdj241sf08n3dac113fg

Version

1.24.7_1542

Infrastructure

Classic

Zones

Milan 01

Created

05/11/2022, 14:14

Resource group

Default

Image security enforcement

Enable