Assignment -4 IBM Cloud -

Docker - Kubernets

Assignment Date	21 October 2022
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Student Roll Number	821919104014
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.
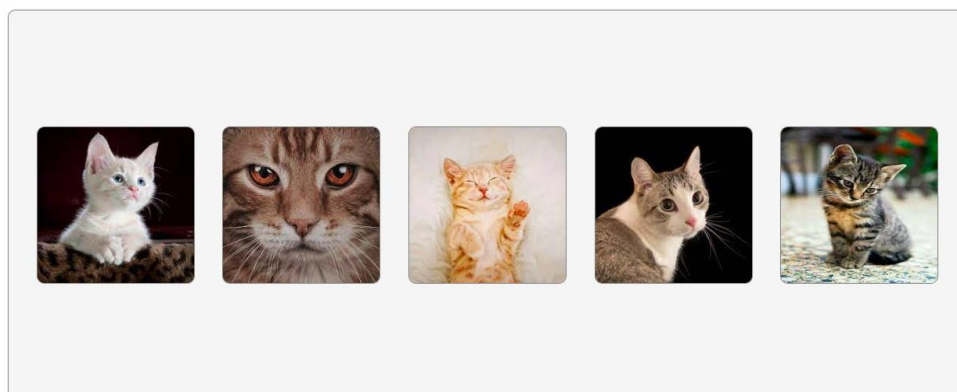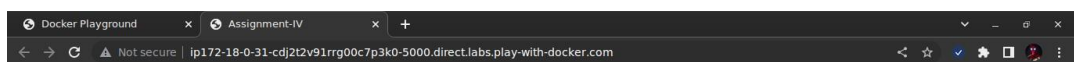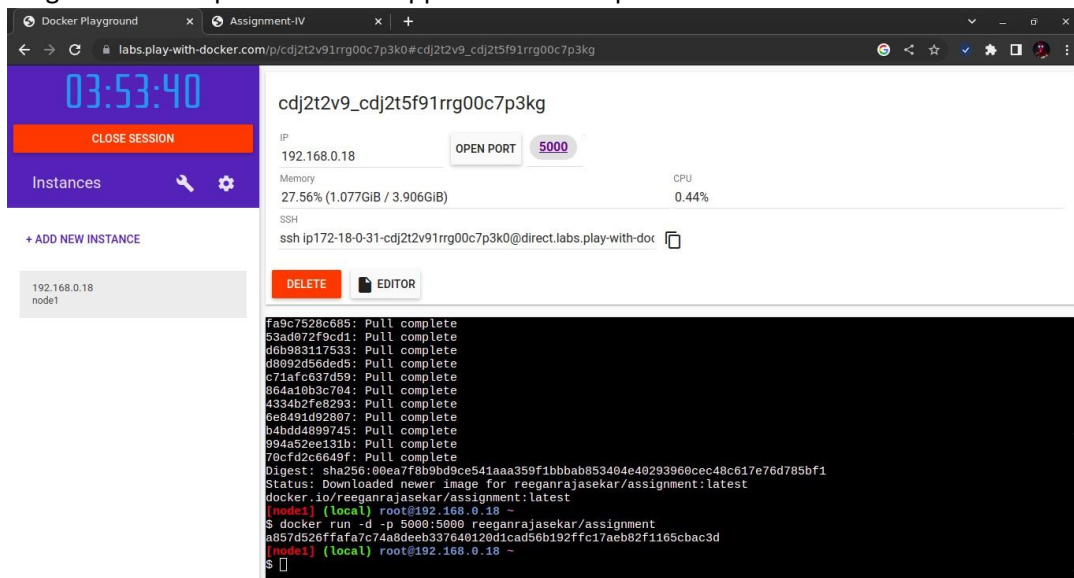
Container Registry

Quick start

Namespaces	1
Repositories	1
Images	1
Trash	0

Settings

Namespaces

Location

Tokyo

Resource group: Filter...   Search   Create +

	Name	Resource group	Repository count	Image count	Retention policy	
☐	assignment_4	Default	1	1	Retain all images	⋮

	Repository	Image count	Last updated	
	jp.icr.io/assignment_4/assignment_4	1	1 day ago	⋮

Items per page: 25   1–1 of 1 item   1 ⌄   1 of 1 page   ◄ ►

☰ Workloads › **Pods**

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

Service
- Ingresses N
- Ingress Classes
- Services N

Config and Storage
- Config Maps N

CPU Usage

CPU (cores)

14:50 14:51 14:52 14:53 14:54 14:55 14:56 14:57 14:58 14:59 15:00 15:01 15:02

Memory Usage

Memory (bytes)

0 Mi

14:50 14:51 14:52 14:53 14:54 14:55 14:56 14:57 14:58 14:59 15:00 15:01 15:02

Pods

	Name	Images	Labels	Node	Status	Restarts	CPU Usage (cores)	Memory Usage (bytes)	Created
●	assignment4-55cd499756-5mnzm	Show all	Show all	10.144.194.84	Running	0	1.00m	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-hl58f	Show all	Show all	10.144.194.84	Running	0	1.00m	19.44Mi	17 minutes ago

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☰ Workloads

Workloads N
- Cron Jobs
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Service
- Ingresses N
- Ingress Classes
- Services N

Config and Storage
- Config Maps N

Workload Status

Running: 1

Deployments

Running: 5

Pods

Clusters /

⬡ assignment ✓ Normal Expires in 30 days   Add tags ✎   Help   Kubernetes dashboard ↗   Actions... ⌄

- **Overview**
- Worker nodes
- Worker pools
- DevOps New

ℹ **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	Add-on status	Master status	Ingress status
1 of 1	**0 of 0**	**Normal**	**Unknown**
● Normal	● Normal	✓	—
Details ↓	Details ↓	Docs ↗	Docs ↗

Details

Cluster ID	Version	Infrastructure	Zones
cdj241sf08n3dac1i3fg	1.24.7_1542	Classic	Milan 01

Created	Resource group	Image security enforcement	
05/11/2022, 14:14	Default	Enable	