

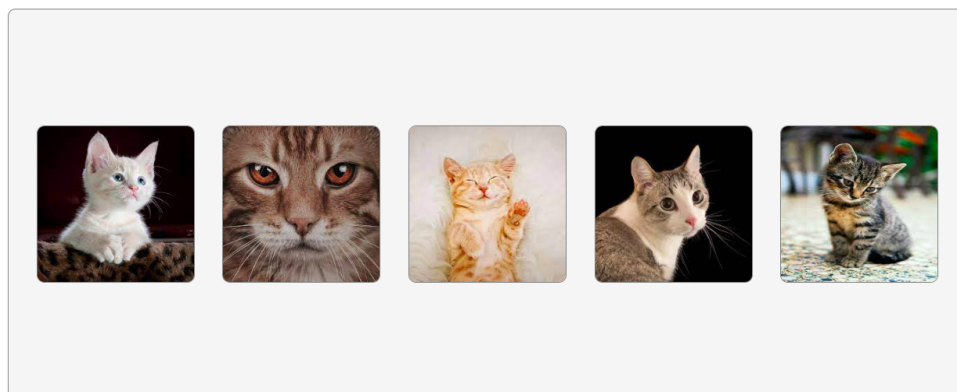
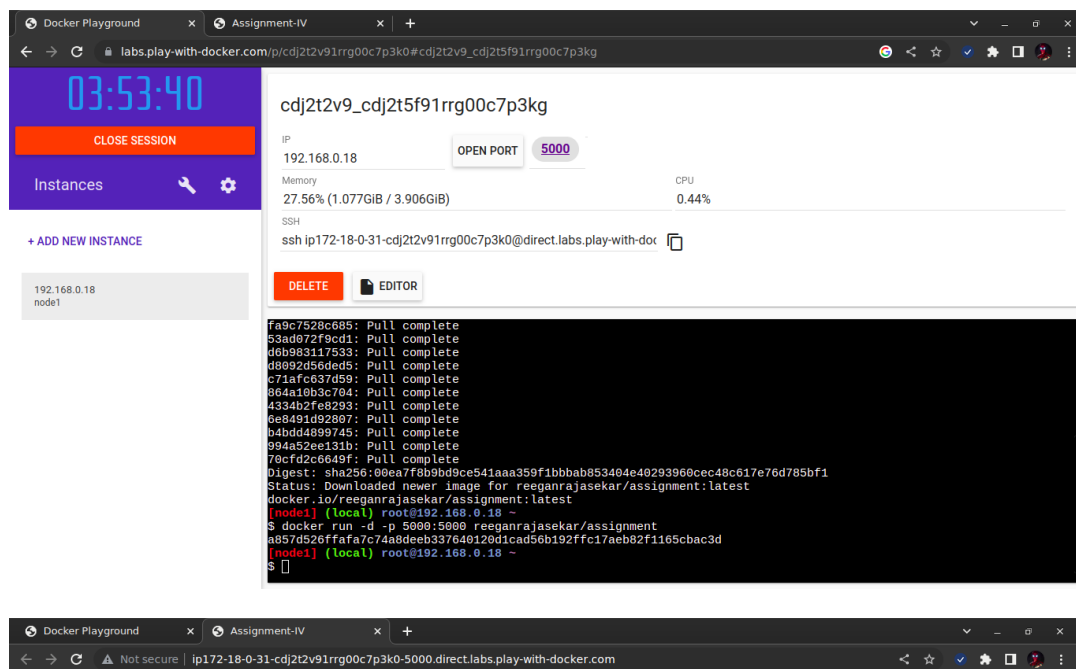
## Assignment -4

### IBM Cloud - Docker - Kubernetes

|                     |                  |
|---------------------|------------------|
| Assignment Date     | 21 October 2022  |
| Student Name        | Mr.M.Navin Kumar |
| Student Roll Number | 821919104303     |
| 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

Namespaces1

Repositories1

Images1

Trash0

Settings

# Namespaces

Location

Tokyo

Resource group: Filter...

Q 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 day ago         | : |

Items per page: 25

1-1 of 1 item

1

1 of 1 page

Workloads > Pods

WorkloadsN

Cron Jobs

Daemon Sets

Deployments

Jobs

Pods

Replica Sets

Replication Controllers

Stateful Sets

Service

IngressesN

Ingress Classes

ServicesN

Config and Storage

Config MapsN

CPU Usage

Memory Usage

Pods

| Name                          | Images   | Labels   | Node          | Status  | Restarts | CPU Usage (cores) | Memory Usage (bytes) | Created        |
|-------------------------------|----------|----------|---------------|---------|----------|-------------------|----------------------|----------------|
| assignment4-55cd499756-5mnmzm | 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-hi58f  | Show all | Show all | 10.144.194.84 | Running | 0        | 1.20m             | 19.44Mi              | 17 minutes ago |

Workloads

WorkloadsN

Cron Jobs

Daemon Sets

Deployments

Jobs

Pods

Replica Sets

Replication Controllers

Stateful Sets

Service

IngressesN

Ingress Classes

ServicesN

Config and Storage

Config MapsN

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

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

Details

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