

## Assignment-4

Date	19 September2022
Team Id	PNT2022TMID43829
MaximumMarks	2 Marks

1. Pullan Image from dockerhub and run it in docker playground.

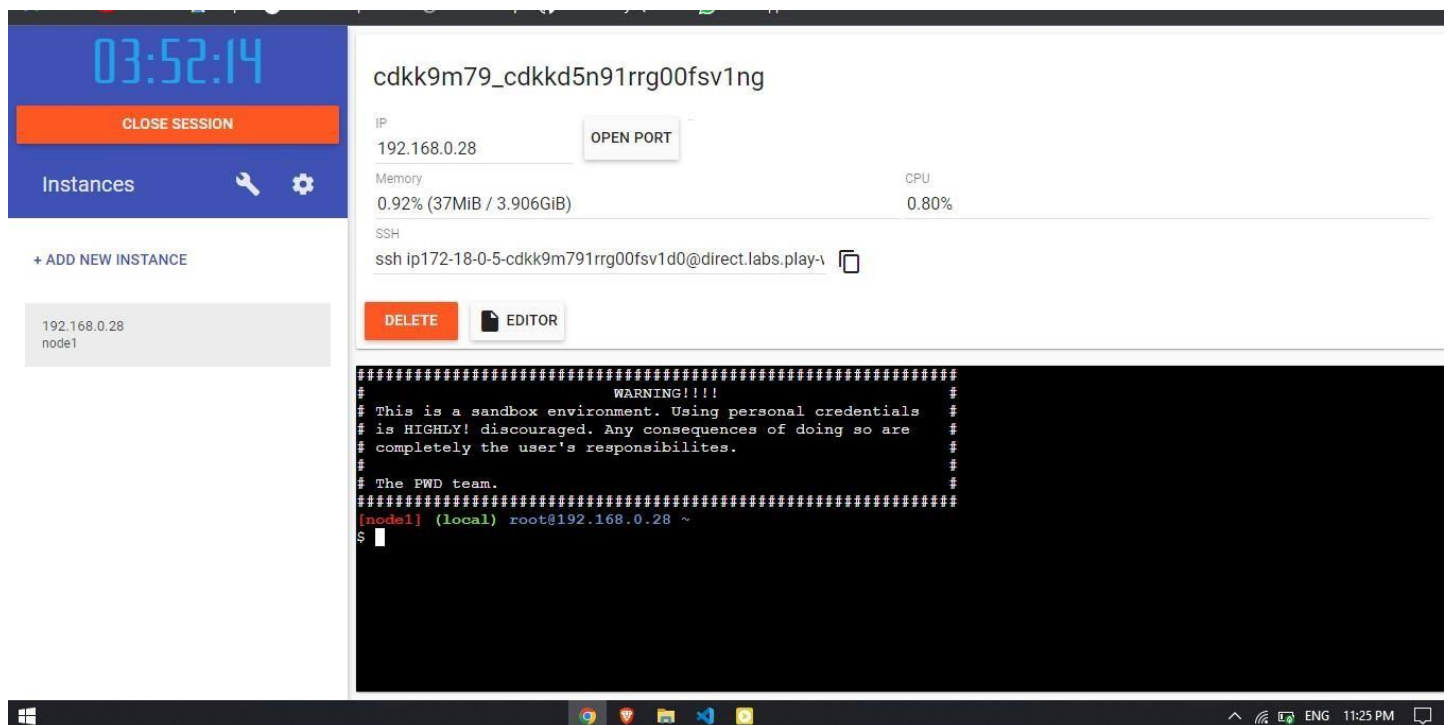
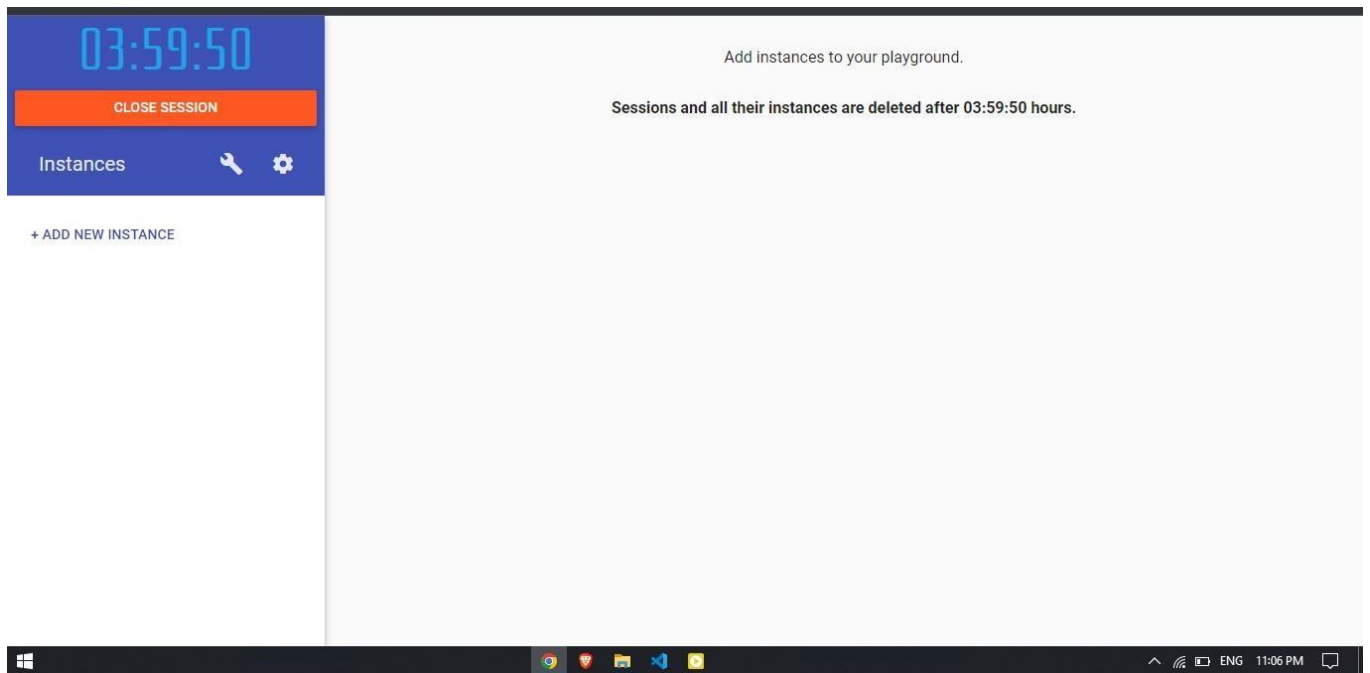
```
Windows PowerShell
PS C:\Users\Rakesh> docker images
REPOSITORY    TAG       IMAGE ID       CREATED        SIZE
ibm/alpine    latest    9c6f07244728   3 months ago   5.54MB
alpine        latest    9c6f07244728   3 months ago   5.54MB
PS C:\Users\Rakesh> docker push ibm/alpine
Using default tag: latest
The push refers to repository [docker.io/ibm/alpine]
994393dc58e7: Preparing
denied: requested access to the resource is denied
PS C:\Users\Rakesh> docker tag alpine
"docker tag" requires exactly 2 arguments.
See 'docker tag --help'.

Usage:  docker tag SOURCE_IMAGE[:TAG] TARGET_IMAGE[:TAG]

Create a tag TARGET_IMAGE that refers to SOURCE_IMAGE
PS C:\Users\Rakesh> docker tag alpine:latest
"docker tag" requires exactly 2 arguments.
See 'docker tag --help'.

Usage:  docker tag SOURCE_IMAGE[:TAG] TARGET_IMAGE[:TAG]

Create a tag TARGET_IMAGE that refers to SOURCE_IMAGE
PS C:\Users\Rakesh> docker tag alpine:latest saravanan/alpine
PS C:\Users\Rakesh> docker images
REPOSITORY    TAG       IMAGE ID       CREATED        SIZE
ibm/alpine    latest    9c6f07244728   3 months ago   5.54MB
alpine        latest    9c6f07244728   3 months ago   5.54MB
saravanan/alpine latest    9c6f07244728   3 months ago   5.54MB
PS C:\Users\Rakesh> docker tag alpine:latest saravanan0310/alpine
PS C:\Users\Rakesh> docker push saravanan0310/alpine
Using default tag: latest
The push refers to repository [docker.io/saravanan0310/alpine]
994393dc58e7: Pushed
```



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

```
Windows PowerShell
PS C:\Users\Rakesh> docker images
REPOSITORY    TAG       IMAGE ID       CREATED        SIZE
ibm/alpine     latest    9c6f07244728   3 months ago   5.54MB
alpine         latest    9c6f07244728   3 months ago   5.54MB
PS C:\Users\Rakesh> docker push ibm/alpine
Using default tag: latest
The push refers to repository [docker.io/ibm/alpine]
994393dc58e7: Preparing
denied: requested access to the resource is denied
PS C:\Users\Rakesh> docker tag alpine
"docker tag" requires exactly 2 arguments.
See 'docker tag --help'.

Usage: docker tag SOURCE_IMAGE[:TAG] TARGET_IMAGE[:TAG]

Create a tag TARGET_IMAGE that refers to SOURCE_IMAGE
PS C:\Users\Rakesh> docker tag alpine:latest
"docker tag" requires exactly 2 arguments.
See 'docker tag --help'.

Usage: docker tag SOURCE_IMAGE[:TAG] TARGET_IMAGE[:TAG]

Create a tag TARGET_IMAGE that refers to SOURCE_IMAGE
PS C:\Users\Rakesh> docker tag alpine:latest saravanan/alpine
PS C:\Users\Rakesh> docker images
REPOSITORY    TAG       IMAGE ID       CREATED        SIZE
ibm/alpine     latest    9c6f07244728   3 months ago   5.54MB
alpine         latest    9c6f07244728   3 months ago   5.54MB
saravanan/alpine latest    9c6f07244728   3 months ago   5.54MB
PS C:\Users\Rakesh> docker tag alpine:latest saravanan0310/alpine
PS C:\Users\Rakesh> docker push saravanan0310/alpine
Using default tag: latest
The push refers to repository [docker.io/saravanan0310/alpine]
994393dc58e7: Pushed
```

## Dockerfile

```
File Edit Selection View Go Run Terminal Help Dockerfile - src - Visual Studio Code
EXTEN... @id:ms-azuretools.vscod... Dockerfile X Extension: Docker
Docker 1.20.0
Makes it easy to create, ...
Microsoft Installing

Dockerfile
1 FROM python:3.8-slim-buster
2
3 WORKDIR /python-docker
4
5 COPY requirements.txt requirements.txt
6 RUN pip3 install -r requirements.txt
7
8 COPY . .
9
10 CMD [ "python3", "-m", "flask", "run", "--host=0.0.0.0"]

Python 3.9.6 64-bit 0 0 Ln 10, Col 58 Spaces: 4 UTF-8 CRLF Docker Go Live Prettier ENG 9:52 PM
```

## JOB FINDER

# Latest job searching

### 3.Create a IBM container registry and deploy helloworld app or jobportalapp.

```
C:\Windows\System32\cmd.exe - docker build.
Microsoft Windows [Version 10.0.19044.2130]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Rakesh\Downloads\flask_hello_docker-master>docker build .
[*] Building 66.3s (7/10)
-> [internal] load build definition from Dockerfile                                2.9s
-> => transferring dockerfile: 199B                                              0.5s
-> [internal] load .dockerignore                                                  3.1s
-> => transferring context: 2B                                                    0.1s
-> [internal] load metadata for docker.io/library/python:3.7-alpine             14.9s
-> [auth] library/python:pull token for registry-1.docker.io                   0.0s
-> [1/5] FROM docker.io/library/python:3.7-alpine@sha256:6e24a01708ffdb0a4a99c1f4c357a96190b7efe47230c3bed184b8f4ad368fb9f 30.4s
-> => resolve docker.io/library/python:3.7-alpine@sha256:6e24a01708ffdb0a4a99c1f4c357a96190b7efe47230c3bed184b8f4ad368fb9f 0.6s
-> => sha256:6e24a01708ffdb0a4a99c1f4c357a96190b7efe47230c3bed184b8f4ad368fb9f 1.65kB / 1.65kB 0.0s
-> => sha256:c7f521a75ec40f0266cb22ae68c13d0337a1aafeb724e015c4c20347152c81bf 1.37kB / 1.37kB 0.0s
-> => sha256:caace8a014d1c9f31128c0a96a2ee9b0bb257daab97791c86788712ed7e38948 7.71kB / 7.71kB 0.0s
-> => sha256:47858aee13bf9c7c2b62cfacdc9ce2524efef339df0c0ed8935c6587a376d60 673.19kB / 673.19kB 2.7s
-> => sha256:21d1eb95d7874516e8447cc3067020af49c4fb512abc36162c174c0d0c22bf50 11.16MB / 11.16MB 16.8s
-> => sha256:17ac4101fac6ced0416dec3e04584d913e58bfd5a585dff62f684807d10ac77e 230B / 230B 3.1s
-> => extracting sha256:47858aee13bf9c7c2b62cfacdc9ce2524efef339df0c0ed8935c6587a376d60 5.8s
-> => sha256:a4cc00d82d4786274c2a21d71815bfc13e37a86d9fbd0d08f008abe21971d18b 2.89MB / 2.89MB 9.5s
-> => extracting sha256:21d1eb95d7874516e8447cc3067020af49c4fb512abc36162c174c0d0c22bf50 2.8s
-> => extracting sha256:17ac4101fac6ced0416dec3e04584d913e58bfd5a585dff62f684807d10ac77e 0.0s
-> => extracting sha256:a4cc00d82d4786274c2a21d71815bfc13e37a86d9fbd0d08f008abe21971d18b 1.0s
-> [internal] load build context                                                  1.9s
-> => transferring context: 5.65kB                                                0.3s
-> [2/5] WORKDIR /app                                                            2.5s
-> [3/5] RUN pip install pipenv                                                 13.7s
```

```
C:\Windows\System32\cmd.exe - docker push icr.io/smartfashionapp/ibm
Space:

C:\Users\Rakesh\Downloads\flask_hello_docker-master\flask_hello_docker-master>ibmcloud cr region-set global
The region is set to 'global', The registry is 'icr.io'.

OK

C:\Users\Rakesh\Downloads\flask_hello_docker-master\flask_hello_docker-master>ibmcloud cr login
Logging 'docker' in to 'icr.io'...
Logged in to 'icr.io'.

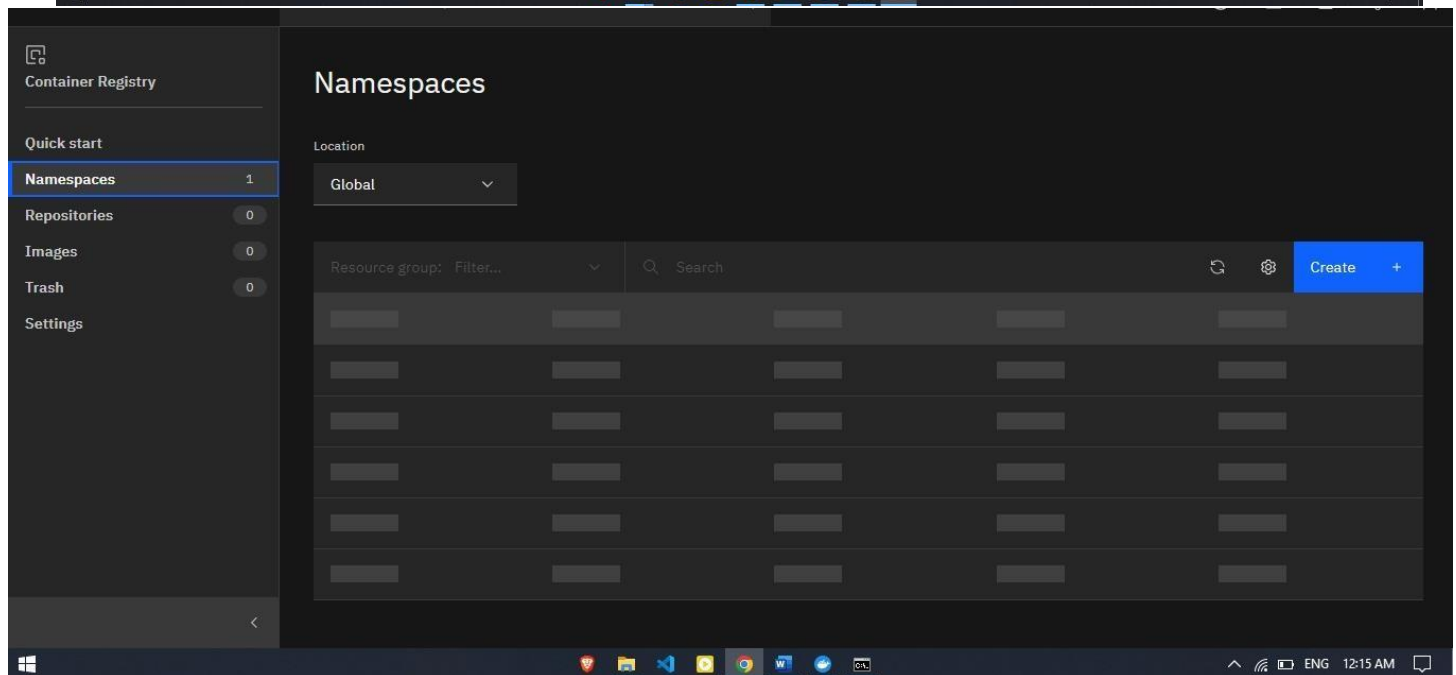
OK

C:\Users\Rakesh\Downloads\flask_hello_docker-master\flask_hello_docker-master>docker images
REPOSITORY          TAG                 IMAGE ID            CREATED             SIZE
myapp                1.0-recover        95232a1151f8       18 minutes ago    97.9MB
myapp                1.0-recovered      95232a1151f8       18 minutes ago    97.9MB
icr.io/smartfashionapp/app  ibm                95232a1151f8       18 minutes ago    97.9MB
saravanan0310/alpine    latest             9c6f07244728       3 months ago      5.54MB
ibm/alpine             latest             9c6f07244728       3 months ago      5.54MB
alpine                 latest             9c6f07244728       3 months ago      5.54MB
saravanan/alpine       latest             9c6f07244728       3 months ago      5.54MB

C:\Users\Rakesh\Downloads\flask_hello_docker-master\flask_hello_docker-master>docker tag myapp icr.io/smartfashionapp/ibm:
Error parsing reference: "icr.io/smartfashionapp/ibm:" is not a valid repository/tag: invalid reference format

C:\Users\Rakesh\Downloads\flask_hello_docker-master\flask_hello_docker-master>docker tag myapp icr.io/smartfashionapp/ibm
Error response from daemon: No such image: myapp:latest

C:\Users\Rakesh\Downloads\flask_hello_docker-master\flask_hello_docker-master>docker tag 95232a1151f8 icr.io/smartfashionapp/ibm
Using default tag: latest
The push refers to repository [icr.io/smartfashionapp/ibm]
879dc0a7d13a: Preparing
45ca0a7778a1: Preparing
420a6604882f: Preparing
c49c12d42c1e: Preparing
ed37f306c964: Preparing
31e0f81c5bec: Waiting
b3aede2981e3: Waiting
6666686122fd: Waiting
994393dc58e7: Waiting
```



**4. Create a Kubernetes cluster in IBM cloud and deploy helloworld image or jobportal image andalso expose thesame appto runinnodeport.**

Catalog /


Kubernetes cluster

Author: IBM • Docs • API docs

Create

About

Deliver your apps quicker across clouds with Red Hat OpenShift ↗



Plan details

Learn more about the differences between plans in our docs.

Pricing plan

Standard

Infrastructure

Waiting for 684d0d4bakstatio...

Summary

Kubernetes cluster

3 Worker nodes

Total estimated cost

--/mo

Additional charges for networking and bandwidth might apply. Actual monthly total will vary with tiered pricing. Estimate does not include costs for integrations.

Create

Clusters /

mycluster

Preparing master, workers...

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

Pending

Details

Add-on status

0 of 0

Normal

Details

Master status

Deploying

Docs

Ingress status

Pending

Docs

Details

Cluster ID

cdlocfmf8p7m891r5cu8

Version

1.24.7\_1542

Infrastructure

Classic

Zones

Milan 01

Created

11/9/2022, 4:21 PM

Resource group

Image security enforcement

Enable

