

Assignment-4

Date	19September2022
StudentName	Ponmani. E
MaximumMarks	2Marks

1. PullanImagefromdockerhuband runitindocker 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 saravanan/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 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
```

03:59:50

CLOSE SESSION

Instances  

+ ADD NEW INSTANCE

Add instances to your playground.

Sessions and all their instances are deleted after 03:59:50 hours.

03:52:14

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.28
node1

cdkk9m79_cdkkd5n91rrg00fsv1ng

IP

192.168.0.28

OPEN PORT

Memory

0.92% (37MiB / 3.906GiB)

CPU

0.80%

SSH

ssh ip172-18-0-5-cdkk9m791rrg00fsv1d0@direct.labs.play-1

DELETE

EDITOR

```

#####
# WARNING!!!!
# This is a sandbox environment. Using personal credentials
# is HIGHLY! discouraged. Any consequences of doing so are
# completely the user's responsibilities.
#
# The PWD team.
#####
(node1) (local) root@192.168.0.28 ~
$

```

2. Create a dockerfile for the job portal application and deploy it in Docker desktop 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]

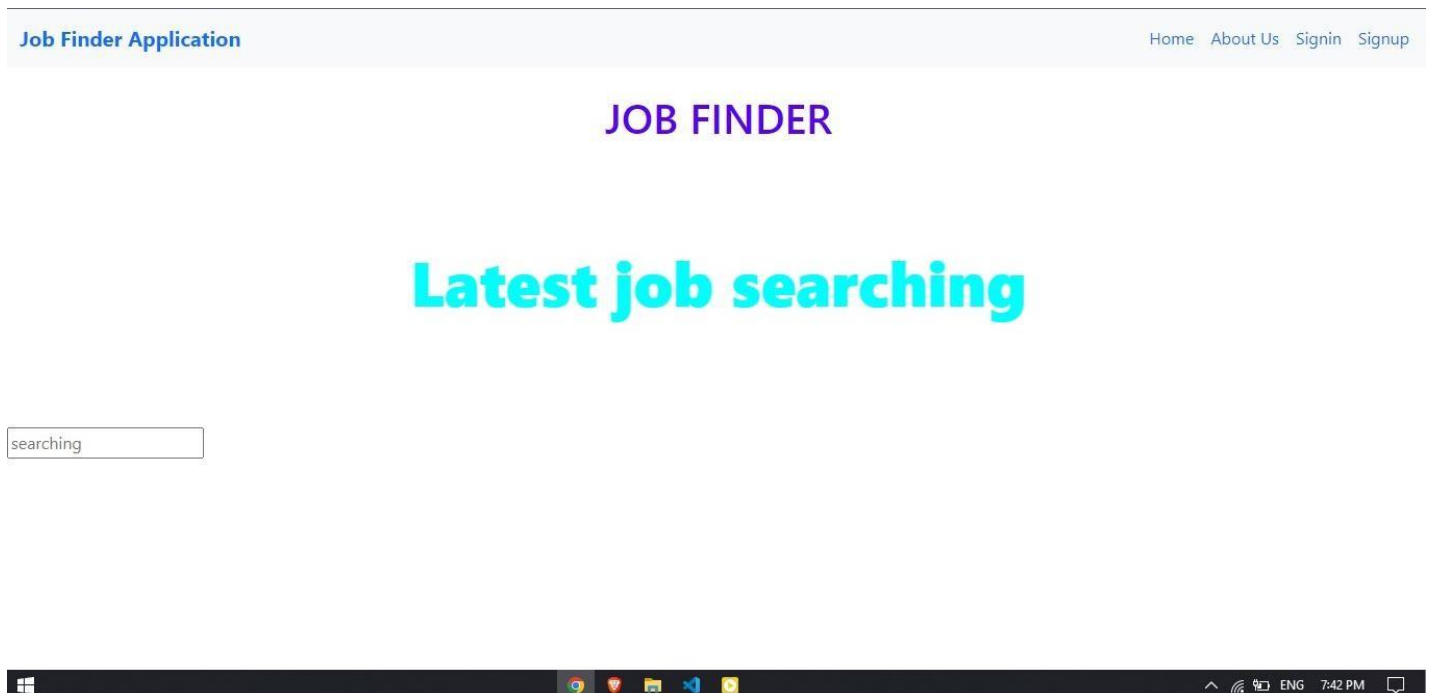
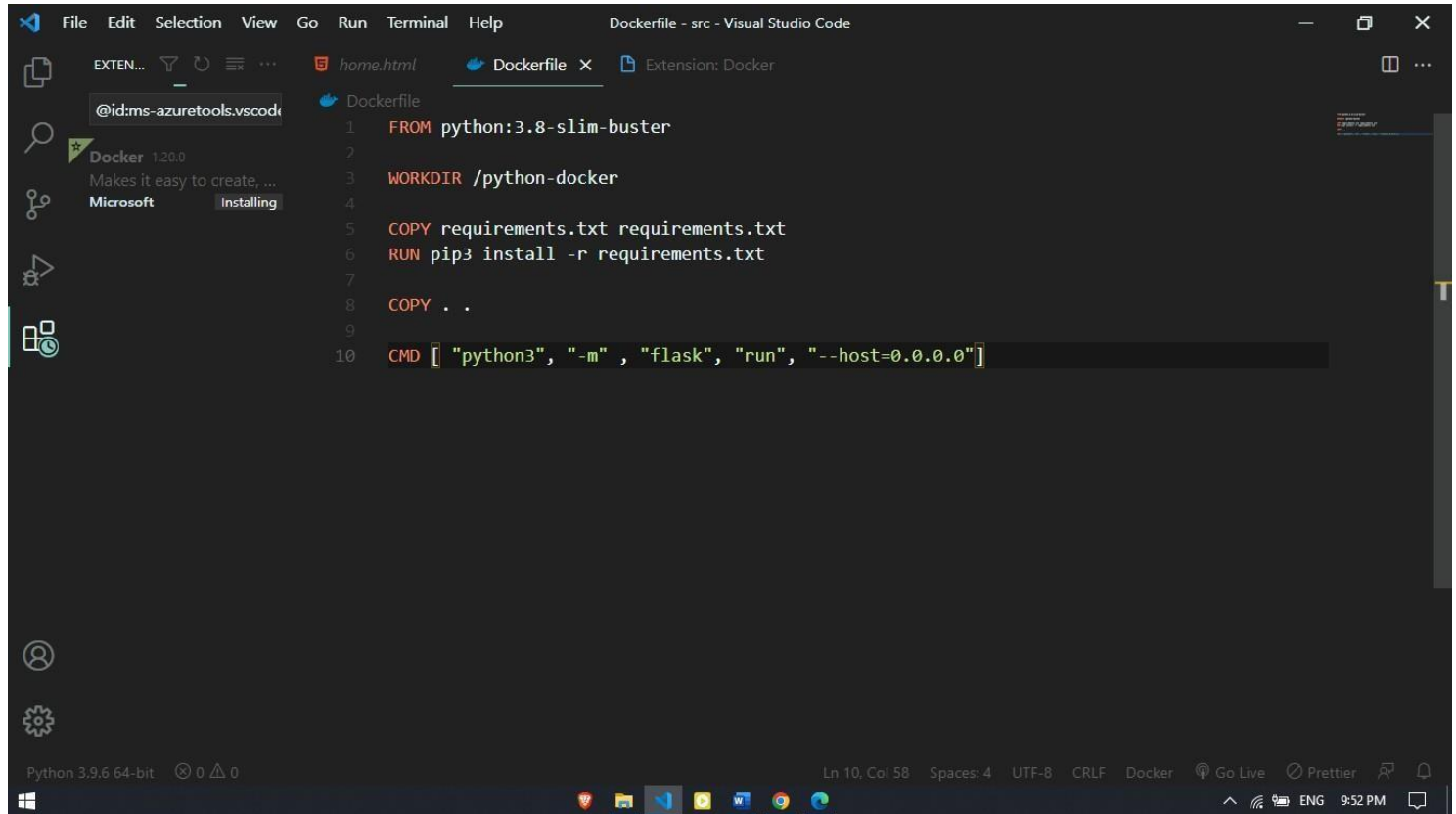
Create a tag TARGET_IMAGE that refers to SOURCE_IMAGE
PS C:\Users\Rakesh> docker tag alpine:latest
"docker tag" requires exactly 2 arguments.
See 'docker tag --help'.

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



3. Create IBM container registry and deploy hello world app or job portal app.

```
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\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@sha256:6e24a81788ff08a4a99c1f4c357a96190b7efe47230c3bed184b8f4ad368fb9f 30.4s
=> => resolve docker.io/library/python:3.7-alpine@sha256:6e24a81788ff08a4a99c1f4c357a96190b7efe47230c3bed184b8f4ad368fb9f 0.6s
=> => sha256:6e24a81788ff08a4a99c1f4c357a96190b7efe47230c3bed184b8f4ad368fb9f 1.65kB / 1.65kB 0.0s
=> => sha256:c7f521e75ec40f0266cb22ee68c13d0337a1aafeb724e015c4620347152c01bf 1.37kB / 1.37kB 0.0s
=> => sha256:caace8aee14d1c9f31128c0a96a2ee9bb0257daab97791c86780712ed7e30948 7.71kB / 7.71kB 0.0s
=> => sha256:47858aee13bf9c7c2b62cfaccdc9ce2524efef339df0c0ed8935c6587a376d00 673.19kB / 673.19kB 2.7s
=> => sha256:21d1eb95d7874516e8447cc3067020af49c4fb512abc36162c174c0d0c22bf50 11.16MB / 11.16MB 16.8s
=> => sha256:17ac4101fac6ced0416der3e04584d913e58bdf5a585dff62f684807d10ac77e 230B / 230B 3.1s
=> => extracting sha256:47858aee13bf9c7c2b62cfaccdc9ce2524efef339df0c0ed8935c6587a376d00 5.8s
=> => sha256:a4cc00d82d4786274c2a21d71815bfc13e37a86d9fdb0d08fde08abe21971d18b 2.89MB / 2.89MB 9.5s
=> => extracting sha256:21d1eb95d7874516e8447cc3067020af49c4fb512abc36162c174c0d0c22bf50 2.6s
=> => extracting sha256:17ac4101fac6ced0416der3e04584d913e58bdf5a585dff62f684807d10ac77e 0.0s
=> => extracting sha256:a4cc00d82d4786274c2a21d71815bfc13e37a86d9fdb0d08fde08abe21971d18b 1.8s
=> [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

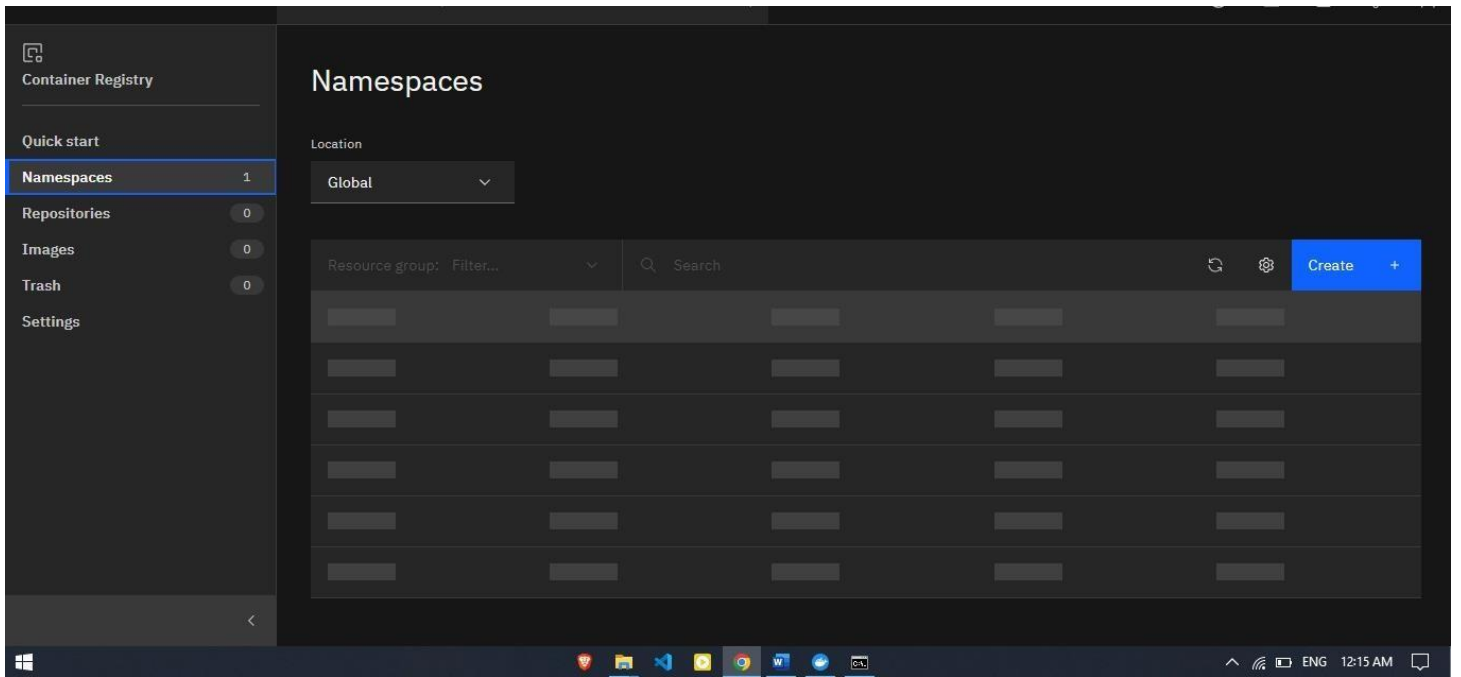
C:\Users\Rakesh\Downloads\flask_hello_docker-master\flask_hello_docker-master>docker images
REPOSITORY TAG IMAGE ID CREATED SIZE
myapp 1.0-recovere 95232a1151f8 18 minutes ago 97.9MB
myapp 1.0-recovered 95232a1151f8 18 minutes ago 97.9MB
icr.io/smartfashionapp/app 1.0-recovered 95232a1151f8 18 minutes 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

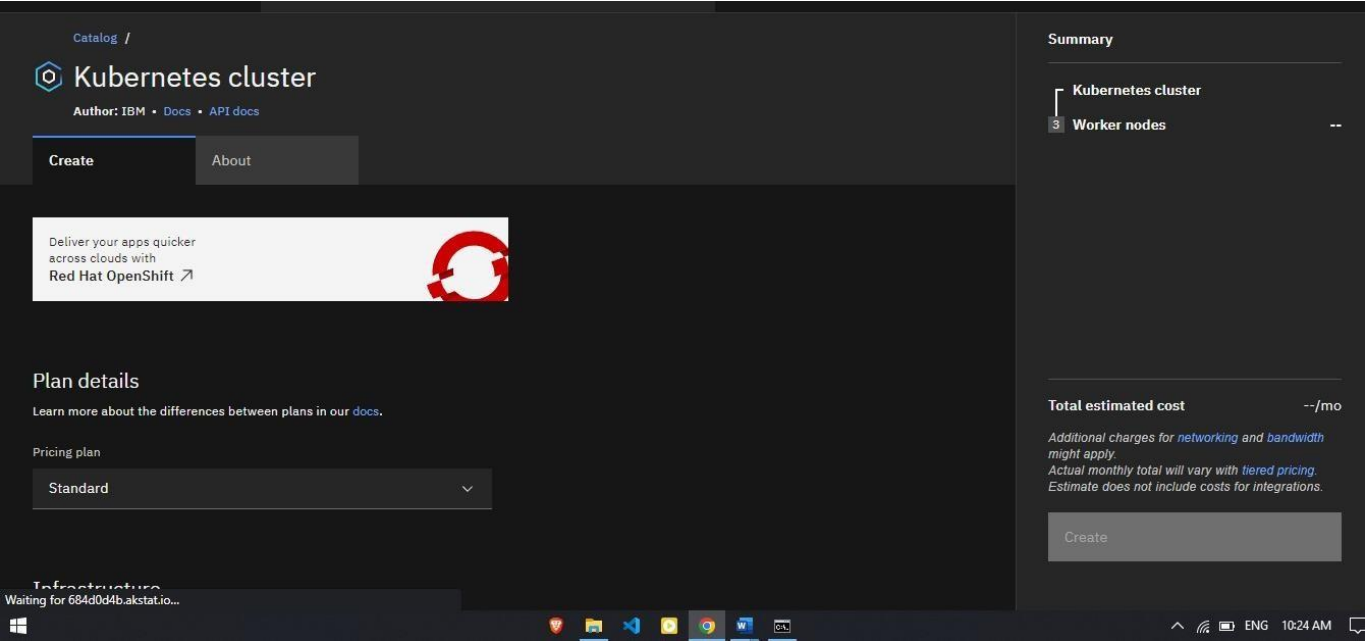
C:\Users\Rakesh\Downloads\flask_hello_docker-master\flask_hello_docker-master>docker tag myapp icr.io/smartfashionapp/ibm
Error response from daemon: No such image: myapp:latest

C:\Users\Rakesh\Downloads\flask_hello_docker-master\flask_hello_docker-master>docker tag 95232a1151f8 icr.io/smartfashionapp/ibm

C:\Users\Rakesh\Downloads\flask_hello_docker-master\flask_hello_docker-master>docker push 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 and also expose the same app to run in node port.



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

cd1ocfmf0p7m891r5cu0

Version

1.24.7_1542

Infrastructure

Classic

Zones

Milan 01

Created

11/9/2022, 4:21 PM

Resource group

Image security enforcement

Enable

Windows Taskbar

4:24 PM

Container Registry

Quick start

Namespaces 1

Repositories 0

Images 0

Trash 0

Settings

Namespaces

Location

Global

Resource group: Filter... Search Create +

	Name	Resource group	Repository count	Image count	Retention policy
	smartfashionapp	Default	0	0	Retain all images

Items per page: 25 1-1 of 1 item 1 1 of 1 page

Windows Taskbar

12:15 AM

