

## Assignment -4

Student Name	Rakesh M
Student Roll Number	950919104019
Maximum Marks	2 Marks

1.Pull an Image from docker hub and run it in docker playground.

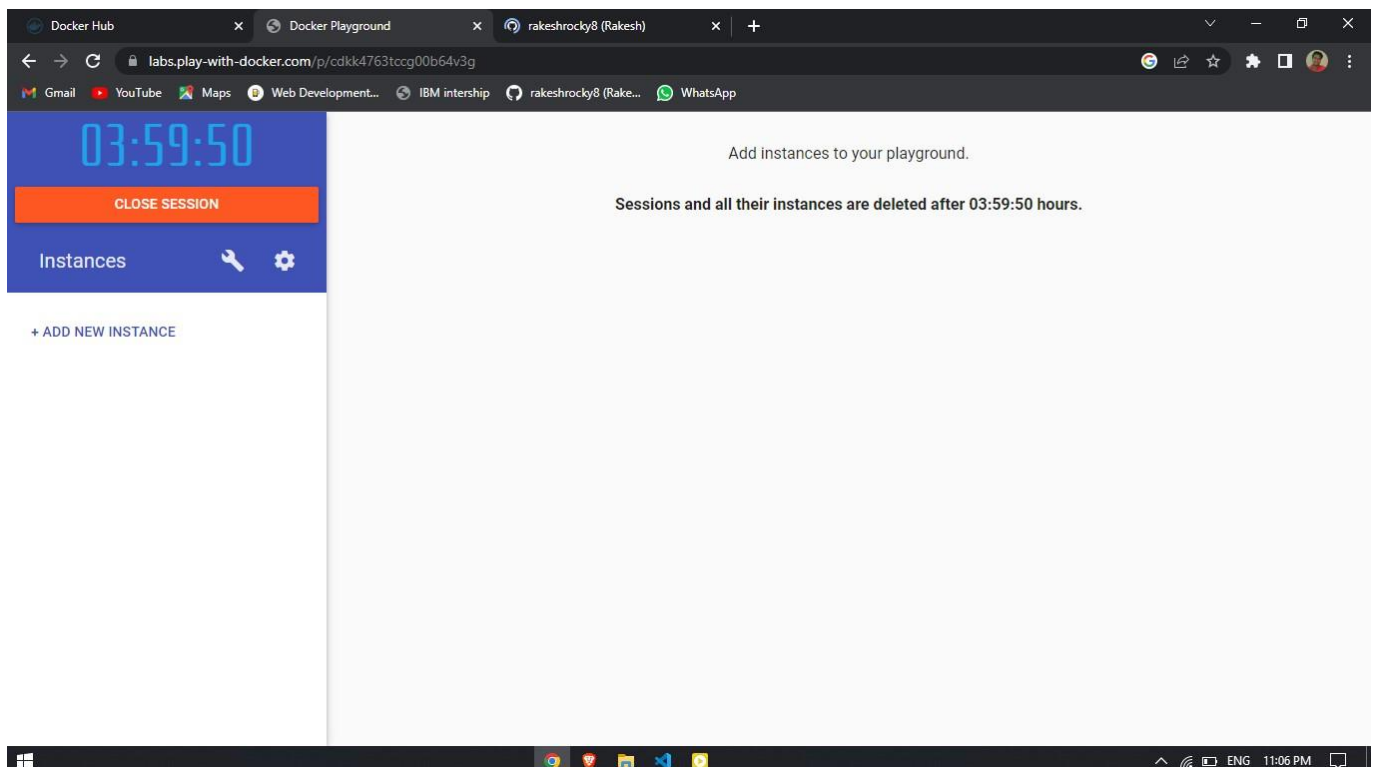
```
Windows PowerShell
PS C:\Users\Rakesh> docker images
REPOSITORY TAG IMAGE ID CREATED SIZE
ibm/alpine latest 9c6f07244728 3 months ago 5.54MB
alpine latest 9c6f07244728 3 months ago 5.54MB
PS C:\Users\Rakesh> docker push ibm/alpine
Using default tag: latest
The push refers to repository [docker.io/ibm/alpine]
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'.

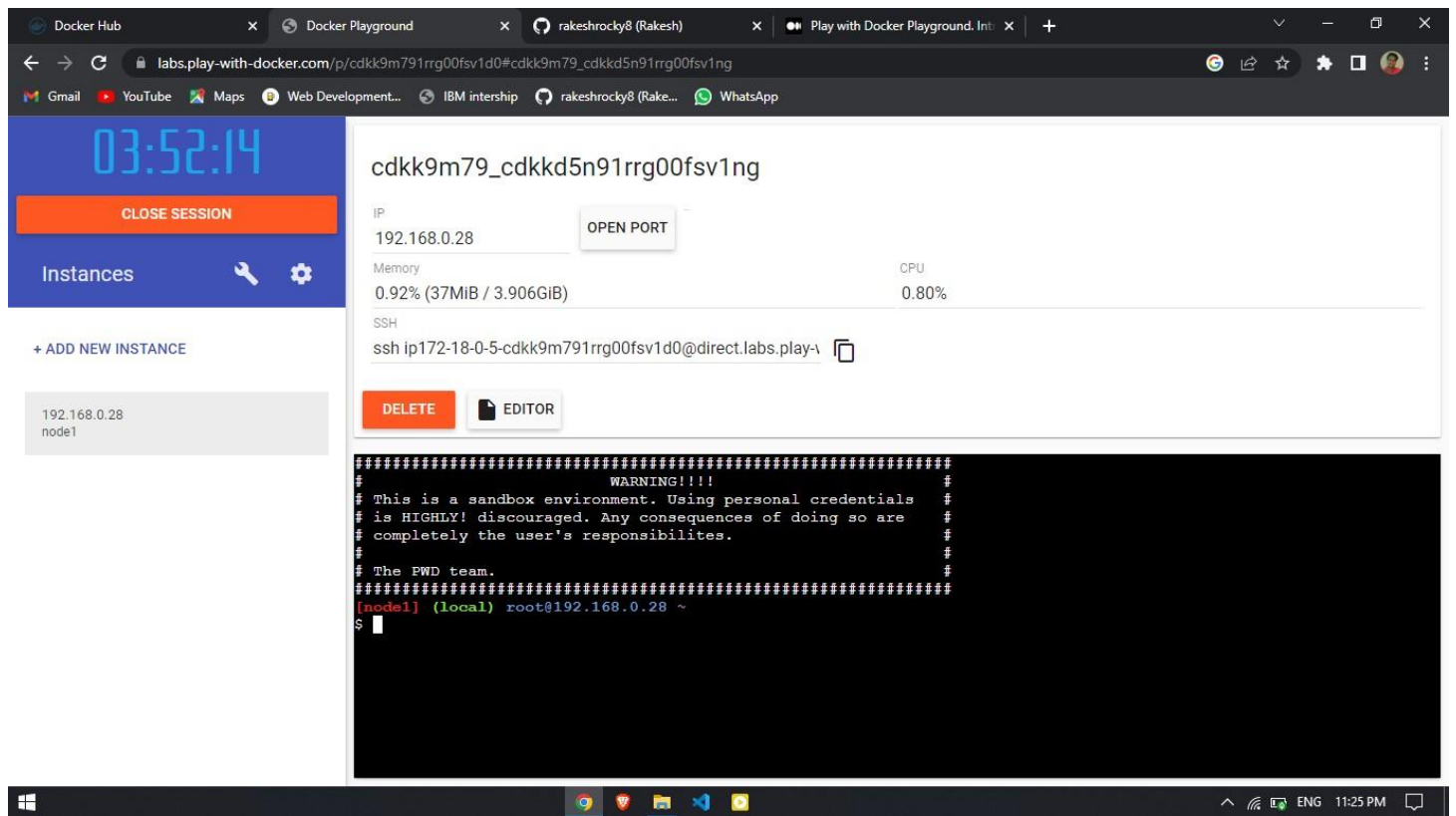
Usage: docker tag SOURCE_IMAGE[:TAG] TARGET_IMAGE[:TAG]

Create a tag TARGET_IMAGE that refers to SOURCE_IMAGE
PS C:\Users\Rakesh> docker tag alpine:latest 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 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 Docker desktop application.

```

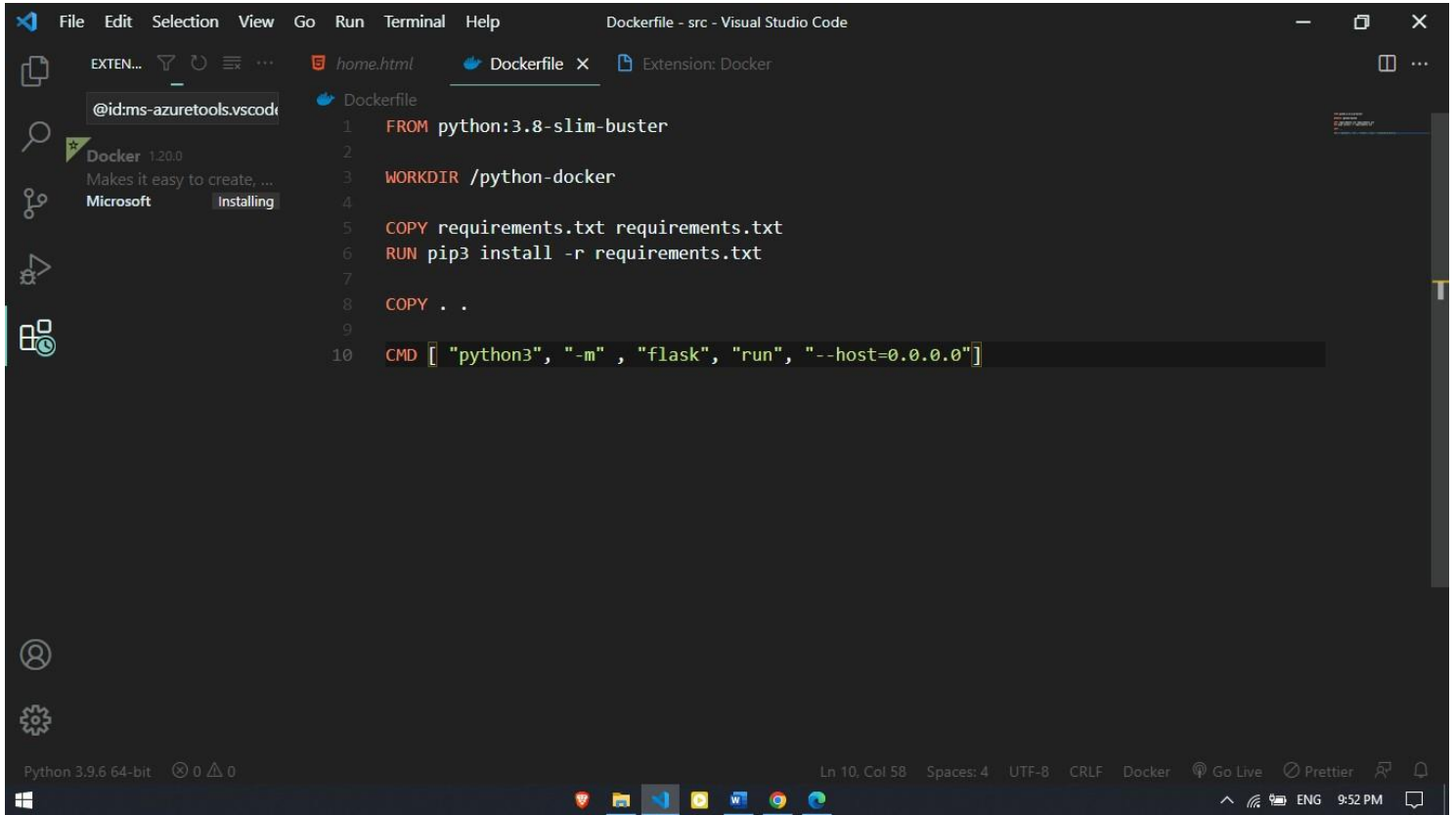
Windows PowerShell
PS C:\Users\Rakesh> docker images
REPOSITORY    TAG       IMAGE ID       CREATED        SIZE
ibm/alpine    latest    9c6f07244728   3 months ago   5.54MB
alpine        latest    9c6f07244728   3 months ago   5.54MB
PS C:\Users\Rakesh> docker push ibm/alpine
Using default tag: latest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

```

**Dockerfile**



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## 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\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 14.3s
=> [auth] library/python:pull token for registry-1.docker.io 0.8s
=> [1/5] FROM docker.io/library/python:3.7-alpine@sha256:6e24a01708ff08a4a99c1f4c357a96190b7efe47230c3bed184b8f4ad368fb9f 30.4s
=> => resolve docker.io/library/python:3.7-alpine@sha256:6e24a01708ff08a4a99c1f4c357a96190b7efe47230c3bed184b8f4ad368fb9f 0.6s
=> => sha256:6e24a01708ff08a4a99c1f4c357a96190b7efe47230c3bed184b8f4ad368fb9f 1.65kB / 1.65kB 0.0s
=> => sha256:c7f521e75ec40f0260cb22ee68c13d0337a1aefeb724e015c4629347152c01bf 1.37kB / 1.37kB 0.0s
=> => sha256:caace8ae014d1c9f31120c0a96a2ee9bbb257daab97791c86780712ed7e30948 7.71kB / 7.71kB 0.0s
=> => sha256:47858aee13bf9c7c2b62cfacdc9ca2524efef339df8c0ed08935c6587a376d00 673.19kB / 673.19kB 2.7s
=> => sha256:21d1eb95d7874516e8447cc3067020af49c4fb512abc36162c174c0d0c22bf50 11.16MB / 11.16MB 16.8s
=> => sha256:17ac4101fac6cd0416dec3a04584d913e58bfd5a585dff62f684807d10ac77e 230B / 230B 3.1s
=> => extracting sha256:47858aee13bf9c7c2b62cfacdc9ca2524efef339df8c0ed08935c6587a376d00 5.8s
=> => sha256:a4cc00802d4786274c2a21d71815bfc13e37a86d9fbd0d08f008abe21971d1bb 2.89MB / 2.89MB 9.5s
=> => extracting sha256:21d1eb95d7874516e8447cc3067020af49c4fb512abc36162c174c0d0c22bf50 2.6s
=> => extracting sha256:17ac4101fac6cd0416dec3a04584d913e58bfd5a585dff62f684807d10ac77e 0.8s
=> => extracting sha256:a4cc00802d4786274c2a21d71815bfc13e37a86d9fbd0d08f008abe21971d1bb 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

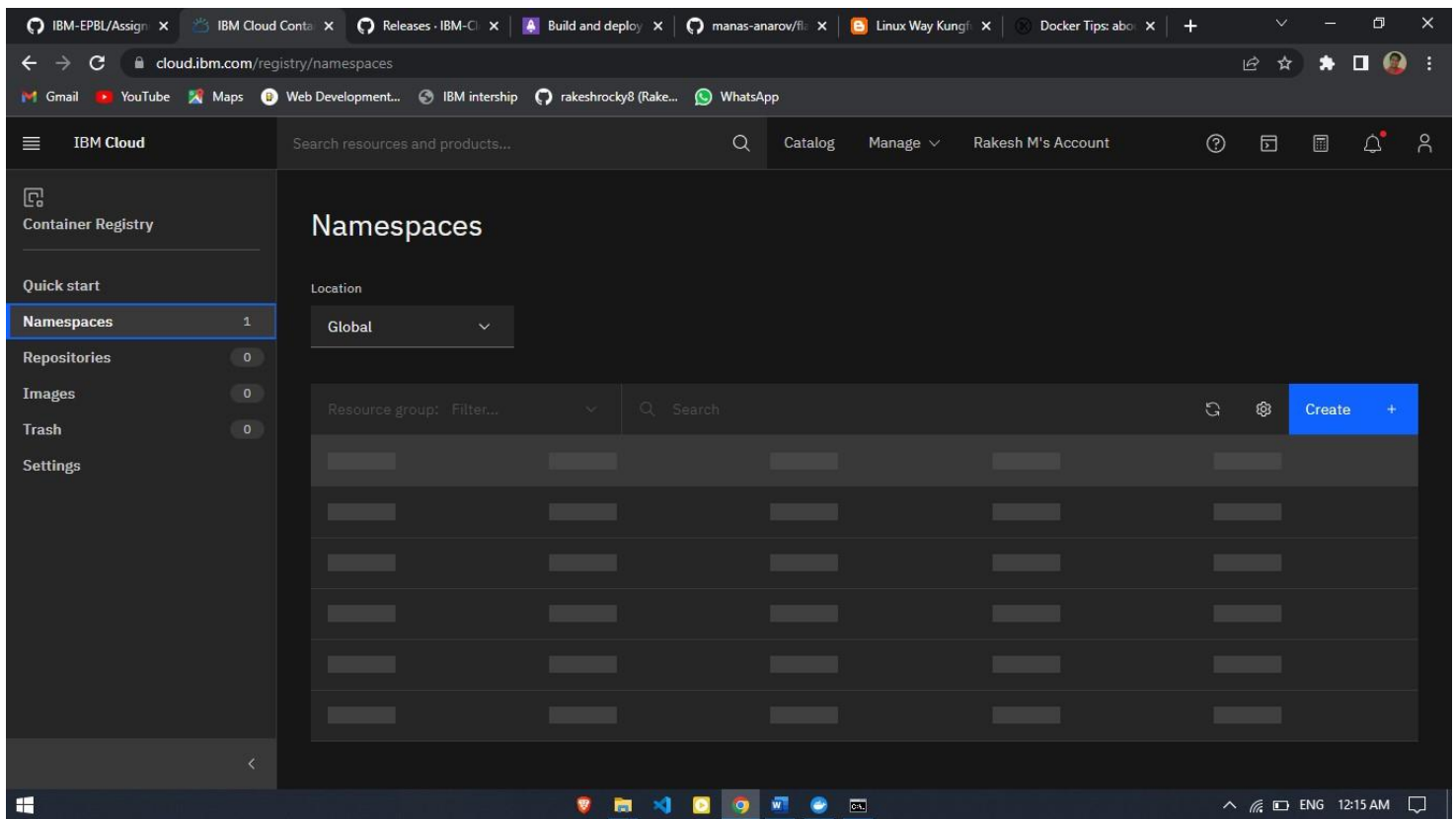
C:\Users\Rakesh\Downloads\flask_hello_docker-master\flask_hello_docker-master>docker images
REPOSITORY          TAG          IMAGE ID          CREATED           SIZE
myapp                1.0-recover  95232a1151f8     18 minutes ago   97.9MB
myapp                1.0-recovered 95232a1151f8     18 minutes 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

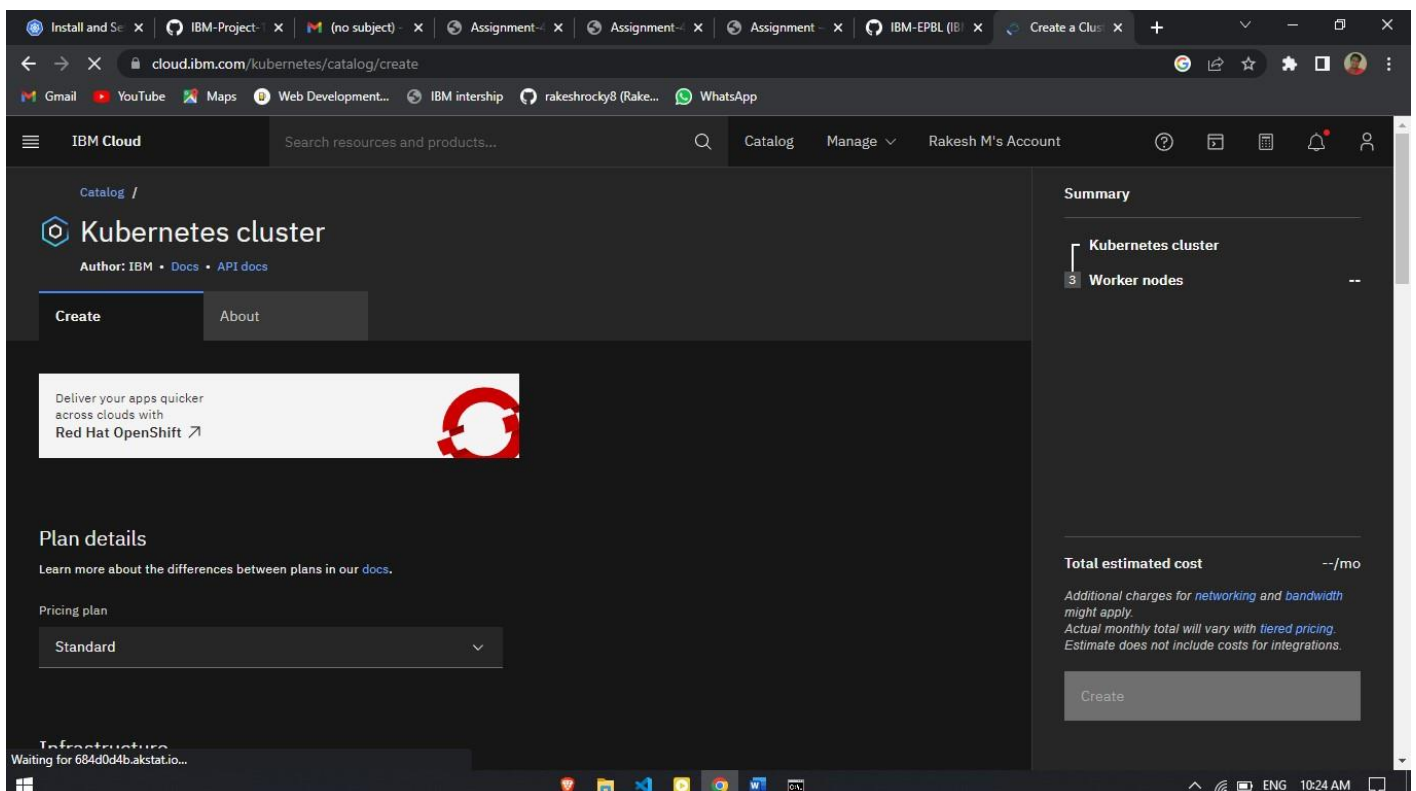
C:\Users\Rakesh\Downloads\flask_hello_docker-master\flask_hello_docker-master>docker tag myapp icr.io/smartfashionapp/ibm
Error response from daemon: No such image: myapp:latest

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

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 nodeport.**





IBM

IBM-Project-10373-1659175

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Assignments-CAPD/Assignm

mycluster - IBM Cloud

cloud.ibm.com/kubernetes/clusters/cdlocfmf0p7m891r5cu0/overview

GmailYouTubeMapsWeb Development...IBM intershiprakeshrocky8 (Rake...WhatsApp

IBM Cloud

Search resources and products...

CatalogManageRakesh M's Account

Clusters / mycluster

Preparing master, workers...Expires in 30 daysAdd tagsHelpKubernetes dashboardActions...

Overview

Worker nodes

Worker pools

DevOpsNew

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

cdlocfmf0p7m891r5cu0

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

System Tray

