

TEAM ID	PNT2022TMID13851
ASSIGNMENT	kubernetes

Assignment Kubernetes / Docker

1. Pull an Image from docker hub and run it in docker playground.
2. Create a docker file for the job portal application and deploy it in Docker desktop application.
3. Create a IBM container registry and deploy hello world app or job portal app.
4. Create a Kubernetes cluster in IBM cloud and deploy hello world image or job portal image and also expose the same app to run in node port.

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

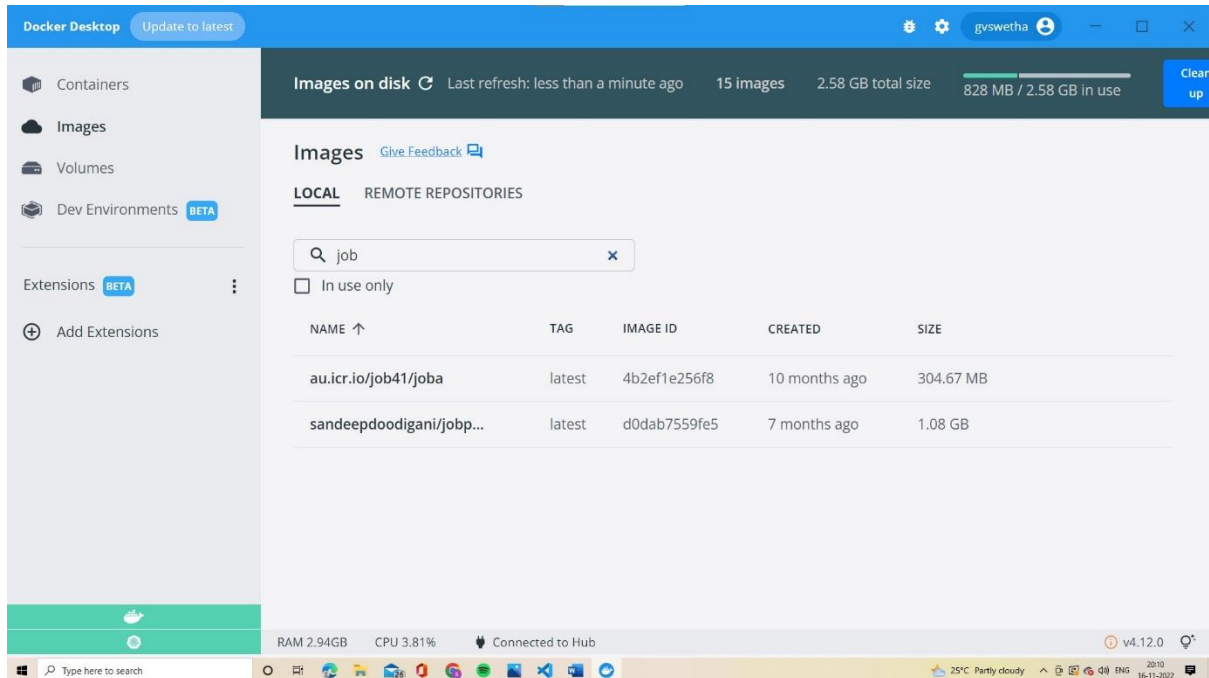
The screenshot shows a web browser window with the URL `labs.play-with-docker.com/p/cdqf55m0qau000cpj8kg#cdqf55m0_cdqf5a60qau000cpj8l0`. The interface displays a timer at 03:55:08 and a 'CLOSE SESSION' button. On the left, there's a sidebar with 'Instances' and a list of instances, including '192.168.0.13 node1'. The main area shows details for the instance 'cdqf55m0_cdqf5a60qau000cpj8l0', including its IP address (192.168.0.13) and an 'OPEN PORT' button. Below this, there's a terminal window showing the following commands and output:

```

# The PWD team.
#####
[node1] (local) root@192.168.0.13 ~
$ docker pull expensecheck/circleci-py36-node12
Using default tag: latest
latest: Pulling from expensecheck/circleci-py36-node12
50e431f79093: Pulling fs layer
dd8c6d374ea5: Pulling fs layer
c85513200d84: Pulling fs layer
55769680e827: Pulling fs layer
f5e195d50b88: Pulling fs layer
bcd75869ea17: Pulling fs layer
f02a073bb16c: Pulling fs layer
f02a073bb16c: Pull complete
d317a9591eb3: Pull complete
579334b3a1fd: Pull complete

```

2. Create a docker file for the job portal application and deploy it in Docker desktop application.



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

```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.19043.2130]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Swetha\Desktop\jobportal>ibmcloud plugin install container-registry
Looking up 'container-registry' from repository 'IBM Cloud'...
Plug-in 'container-registry[cr] 1.0.2' found in repository 'IBM Cloud'
Plug-in 'container-registry 1.0.2' was already installed. Do you want to update it with 'container-registry[cr] 1.0.2' or not? [y/N] > y
Attempting to download the binary file...
11.90 MiB / 11.90 MiB [=====] 100.00% 1m15s
12476416 bytes downloaded
Installing binary...
OK
Plug-in 'container-registry 1.0.2' was successfully installed into C:\Users\Swetha\bluemix\plugins\container-registry. Use 'ibmcloud plugin show container-registry' to show
its details.

C:\Users\Swetha\Desktop\jobportal>ibmcloud login -a http://cloud.ibm.com
Warning: Insecure http API endpoint detected: secure https API endpoints are recommended
API endpoint: http://cloud.ibm.com
Email> 622119104110@smartinternz.com
Password>
Authenticating...
OK
Targeted account Swetha G V's Account (4de5a2ad35c64a70ab46ab1238b636a9)

Select a region (or press enter to skip):
1. au-syd
2. in-che
3. jp-osa
4. jp-tok
5. kr-seo
6. eu-de
7. eu-gb
8. ca-tor
9. us-south
10. us-east
11. br-sao
Enter a number> 1
```

```
C:\Windows\System32\cmd.exe
Targeted region au-syd

API endpoint:    http://cloud.ibm.com
Region:         au-syd
User:           622119104110@smartinternz.com
Account:        Swetha G V's Account (4de5a2ad35c64a70ab46ab1238b636a9)
Resource group: No resource group targeted, use 'ibmcloud target -g RESOURCE_GROUP'
CF API endpoint:
Org:
Space:

C:\Users\Swetha\Desktop\jobportal>ibmcloud cr region-set global
The region is set to 'global', the registry is 'icr.io'.

OK

C:\Users\Swetha\Desktop\jobportal>ibmcloud cr namespace-add test11
No resource group is targeted. Therefore, the default resource group for the account ('Default') is targeted.
Adding namespace 'test11' in resource group 'Default' for account Swetha G V's Account in registry icr.io...

FAILED
The requested namespace is already in use in registry 'icr.io'.
Choose a different namespace.

C:\Users\Swetha\Desktop\jobportal>ibmcloud cr namespace-add job54
No resource group is targeted. Therefore, the default resource group for the account ('Default') is targeted.
Adding namespace 'job54' in resource group 'Default' for account Swetha G V's Account in registry icr.io...

The requested namespace is already owned by your account.

OK

C:\Users\Swetha\Desktop\jobportal>ibmcloud cr login
Logging 'docker' in to 'icr.io'...
Logged in to 'icr.io'.

OK
```