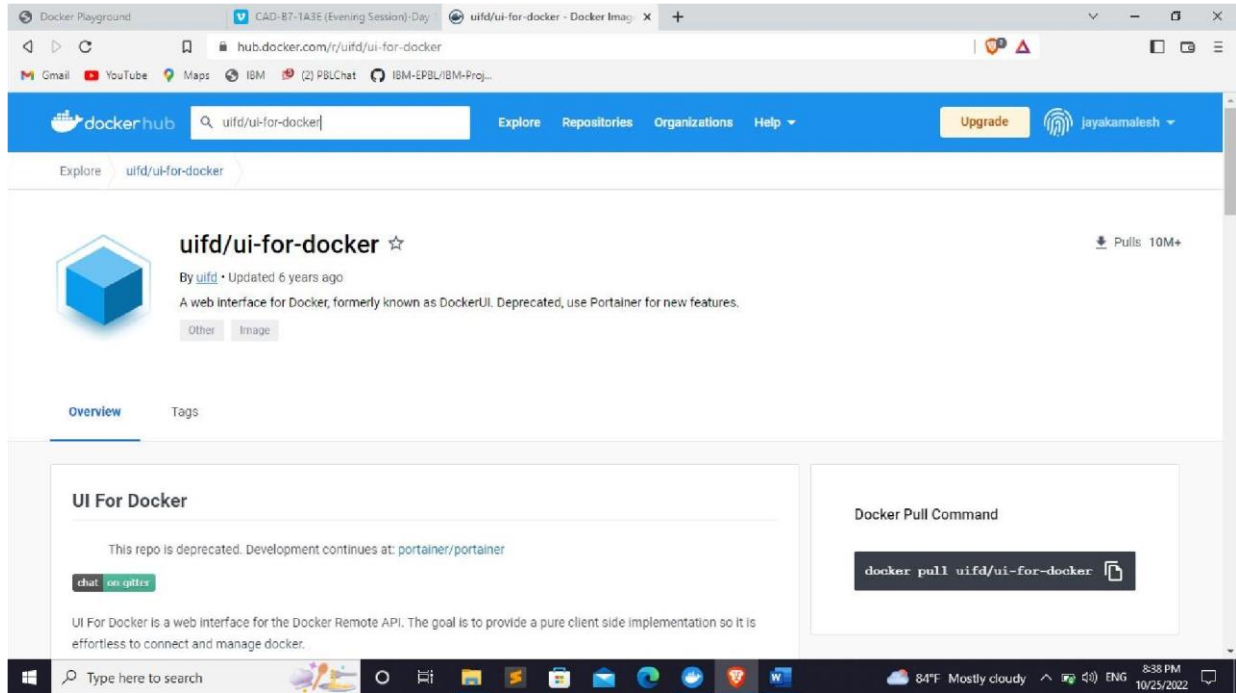


## Assignment -4 Docker and Kubernetes

Student Name	Dharshini S
Student Roll Number	130719205016
Maximum Marks	2 Marks

### 1. Pull an image from docker hub and run it in docker Playground



The screenshot shows a web browser window displaying the Docker Hub page for the repository `uifd/ui-for-docker`. The page header includes the Docker Hub logo, a search bar with the text `uifd/ui-for-docker`, and navigation links for Explore, Repositories, Organizations, and Help. The repository page shows a blue cube icon, the name `uifd/ui-for-docker`, and a note that the repository is deprecated, with development continuing at `portainer/portainer`. A Docker Pull Command box displays the command `docker pull uifd/ui-for-docker`. The Windows taskbar at the bottom shows the system clock as 8:38 PM on 10/25/2022.

03:42:30

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.13  
node1

cd9an2u3\_cd9av060qau0008hbjs0

IP

192.168.0.13

OPEN PORT

Memory

CPU

SSH

ssh ip172-18-0-4-cd9an2u3tccg00fgf6k0@direct.labs.play-w

DELETE

EDITOR

```
# This is a sandbox environment. Using personal credentials #
# is HIGHLY! discouraged. Any consequences of doing so are #
# completely the user's responsibilities. #
#
# The FWD team.
#####
[node1] (local) root@192.168.0.13 ~
$ docker pull uifd/ui-for-docker
Using default tag: latest
latest: Pulling from uifd/ui-for-docker
841194d080c8: Pull complete
Digest: sha256:fe371ff5a69549269b24073a5ab1244dd4c0b834cbadf244870572150b1cb749
Status: Downloaded newer image for uifd/ui-for-docker:latest
docker.io/uifd/ui-for-docker:latest
[node1] (local) root@192.168.0.13 ~
$ docker run -d -p 9000:9000 --privileged -v /var/run/docker.sock:/var/run/docker.sock uifd/ui-for-docker
c590dd163101ae795bdcea0eb1ddd98f6fe549cb5f24dadb9ff7c1931923fc0d
[node1] (local) root@192.168.0.13 ~
$
```

UI For Docker

Dashboard Containers Containers Network Images Networks Volumes Info Refresh

# UI For Docker


The UI for Docker container engine

Learn more.

Running Containers

- beautiful\_goldwasser Up About a minute

Status



Containers created

Images created

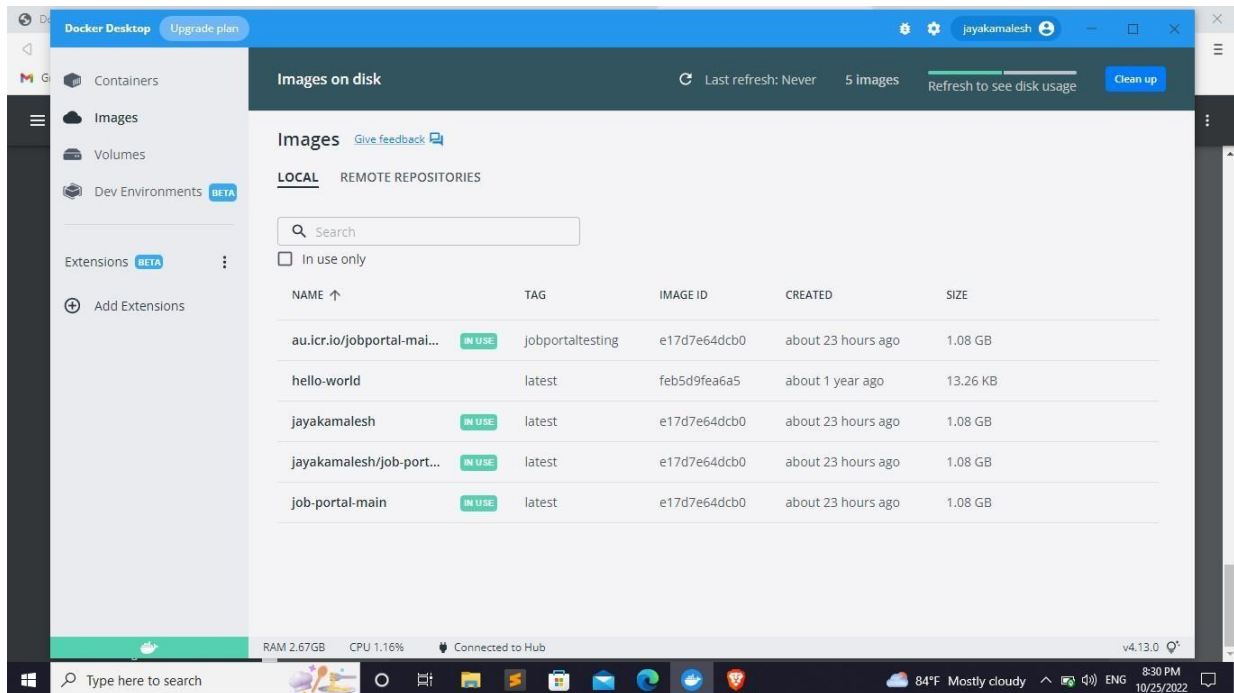
21/10/2022

20:13 21-10-2022

Not secure | ip172-18-0-4-cd9an2u3tccg00fgf6k0-9000.direct.labs.play-with-docker.com/#/

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

```
C:\Windows\System32\cmd.exe
-> [internal] load build definition from Dockerfile
-> => transferring dockerfile: 32B
-> [internal] load .dockerignore
-> => transferring context: 2B
-> [internal] load metadata for docker.io/library/python:3.6
-> [auth] library/python:pull token for registry-1.docker.io
-> [internal] load build context
-> => transferring context: 687B
-> [1/6] FROM docker.io/library/python:3.6@sha256:f8652afaf88c25f0d22354d547d892591067aa4026a7fa9a6819df9f300af6fc
-> => resolve docker.io/library/python:3.6@sha256:f8652afaf88c25f0d22354d547d892591067aa4026a7fa9a6819df9f300af6fc
-> => sha256:f8652afaf88c25f0d22354d547d892591067aa4026a7fa9a6819df9f300af6fc 1.06kB / 1.06kB
-> => sha256:0997a607a8e078d75ac31972259c2d6510f8221c0448e92e393b376d3b000 2.22kB / 2.22kB
-> => sha256:542083007c5e3ed2466211fc080abbcd486a27634c0032066ff71f3f44b104 9.27kB / 9.27kB
-> => sha256:0e25546d541cd0d3092b1d21e73a9d1db78665c1b95b74f32b009e0b77a0e1e3 54.92MB / 54.92MB
-> => sha256:0b829c7352b92b07d5c07a54fb0f3e921995a296c714b53a32ae67d19231fcd 5.15MB / 5.15MB
-> => sha256:cb5b7ae361722f070eac53f35823ed21baa85d61d5095cd5a95eb53d740cdd56 10.87MB / 10.87MB
-> => sha256:6494e4011622b31c027ccac322cad63937fd085f569a93eef15c01aade718793 54.57MB / 54.57MB
-> => sha256:6f9f74896dfa93fe0172f594faba85e0b4e8a0481a0fef9d9112efc7e4d3c78f7 196.51MB / 196.51MB
-> => sha256:5e3b1213efc56598e78bd002883045c164de2a37205e06a62dada823124dc743 6.29MB / 6.29MB
-> => extracting sha256:0e25546d541cd0d3092b1d21e73a9d1db78665c1b95b74f32b009e0b77a0e1e3 27.36
-> => sha256:9fd9d50334f2eefad70241b15e7459c48e0105c478076f41c124b0890752 14.21MB / 14.21MB
-> => extracting sha256:9b829c7352b92b07d5c07a54fb0f3e921995a296c714b53a32ae67d19231fcd 2.38
-> => extracting sha256:cb5b7ae361722f070eac53f35823ed21baa85d61d5095cd5a95eb53d740cdd56 4.06
-> => sha256:484f02044bac0432ca522cbb9f254b1c91fcea800bfeef0be0b243b2f31ba07 235B / 235B
-> => sha256:c4f42be20e53b900ebffcc040c10f13de538434ccc5f5d954a56048a6169a3a3f 2.21MB / 2.21MB
-> => extracting sha256:6494e4011622b31c027ccac322cad63937fd085f569a93eef15c01aade718793 27.36
-> => extracting sha256:6f9f74896dfa93fe0172f594faba85e0b4e8a0481a0fef9d9112efc7e4d3c78f7 131.46
-> => extracting sha256:5e3b1213efc56598e78bd002883045c164de2a37205e06a62dada823124dc743 8.25
-> => extracting sha256:9fd9d50334f2eefad70241b15e7459c48e0105c478076f41c124b0890752 11.36
-> => extracting sha256:484f02044bac0432ca522cbb9f254b1c91fcea800bfeef0be0b243b2f31ba07 6.85
-> => extracting sha256:c4f42be20e53b900ebffcc040c10f13de538434ccc5f5d954a56048a6169a3a3f 2.75
-> [2/6] WORKDIR /app
-> [3/6] ADD . /app
-> [4/6] COPY requirements.txt /app
-> [5/6] RUN python3 -m pip install -r requirements.txt
-> [6/6] RUN python3 -m pip install ibm_db
-> => exporting layers
-> => writing image sha256:1756719486df002fad5dae305c5221513f2ff2d1b49a8d242b22a28af0379f19
-> => naming to docker.io/library/job-portal-main
Use 'docker scan' to run Snyk tests against images to find vulnerabilities and learn how to fix them
C:\Users\VK\Desktop\job-portal-main>
```



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

```
Command Prompt - docker run -p 5000:5000 au.icr.io/jobportal-main/testrepo:jobportaltesting
Password>
Authenticating...
OK

Targeted account Jayakamalesh k's Account (b9916d3d37d24674be1984ac2159a53c)

API endpoint:      https://cloud.ibm.com
Region:            au-syd
User:              5009it.jayakamalesh@kingston.ac.in
Account:           Jayakamalesh k's Account (b9916d3d37d24674be1984ac2159a53c)
Resource group:    No resource group targeted, use 'ibmcloud target -g RESOURCE_GROUP'
CF API endpoint:
Org:
Space:

C:\Users\ELCOT>ibmcloud plugin install container-service
Looking up 'container-service' from repository 'IBM Cloud'...
Plug-in 'container-service[kubernetes-service/ks] 1.0.459' found in repository 'IBM Cloud'
Attempting to download the binary file...
26.86 MiB / 26.86 MiB [=====] 100.00% 36s
28168192 bytes downloaded
Installing binary...
OK
Plug-in 'container-service 1.0.459' was successfully installed into C:\Users\ELCOT\bluemix\plugins\container-service. Use 'ibmcloud plugin show container-service' to
show its details.

C:\Users\ELCOT>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'
Attempting to download the binary file...
11.90 MiB / 11.90 MiB [=====] 100.00% 14s
12476416 bytes downloaded
Installing binary...
OK
Plug-in 'container-registry 1.0.2' was successfully installed into C:\Users\ELCOT\bluemix\plugins\container-registry. Use 'ibmcloud plugin show container-registry' to
show its details.

C:\Users\ELCOT>ibmcloud plugin install observe-service
Looking up 'observe-service' from repository 'IBM Cloud'...
Plug-in 'observe-service 1.0.82' found in repository 'IBM Cloud'
Attempting to download the binary file...
13.38 MiB / 13.38 MiB [=====] 100.00% 19s
14024704 bytes downloaded
```

```
Command Prompt - docker run -p 5000:5000 au.icr.io/jobportal-main/testrepo:jobportaltesting
12476416 bytes downloaded
Installing binary...
OK
Plug-in 'container-registry 1.0.2' was successfully installed into C:\Users\ELCOT\bluemix\plugins\container-registry. Use 'ibmcloud plugin show container-registry' to
show its details.

C:\Users\ELCOT>docker login
Authenticating with existing credentials...
Login Succeeded

Logging in with your password grants your terminal complete access to your account.
For better security, log in with a limited-privilege personal access token. Learn more at https://docs.docker.com/go/access-tokens/

C:\Users\ELCOT>ibmcloud cr login
Logging 'docker' in to 'au.icr.io'...
Logged in to 'au.icr.io'.

OK

C:\Users\ELCOT>docker pull hello-world
Using default tag: latest
latest: Pulling from library/hello-world
2db29710123e: Pull complete
Digest: sha256:18a657d0cc1c7d0678a3fba8b7eb4918bba25968d3e1b0adebfa71caddbc346
Status: Downloaded newer image for hello-world:latest
docker.io/library/hello-world:latest

C:\Users\ELCOT>docker job-portal-main au.icr.io/jobportal-main/testrepo:jobportaltesting
docker: 'job-portal-main' is not a docker command.
See 'docker --help'

C:\Users\ELCOT>docker tag job-portal-main au.icr.io/jobportal-main/testrepo:jobportaltesting

C:\Users\ELCOT>docker push au.icr.io/jobportal-main/testrepo:jobportaltesting
The push refers to repository [au.icr.io/jobportal-main/testrepo]
fb6300a236a1: Pushed
e12b02b08bd4: Pushed
d5524390f4c9: Pushed
94efdbb0ed11: Pushed
016575b05346: Pushed
aa4c008c19f6: Pushed
8ba9f690e8ba: Pushed
3e607d59ef9f: Pushed
1e18e7e1fcc2: Pushed
```



```
Command Prompt - docker run -p 5000:5000 au.icr.io/jobportal-main/testrepo:jobportaltesting
Logging in with your password grants your terminal complete access to your account.
For better security, log in with a limited-privilege personal access token. Learn more at https://docs.docker.com/go/access-tokens/

C:\Users\ELCOT>ibmcloud cr login
Logging 'docker' in to 'au.icr.io'...
Logged in to 'au.icr.io'.

OK

C:\Users\ELCOT>docker pull au.icr.io/jobportal-main/testrepo
Using default tag: latest
Error response from daemon: manifest for au.icr.io/jobportal-main/testrepo:latest not found: manifest unknown: manifest unknown


C:\Users\ELCOT>docker run -p 5000:5000 au.icr.io/jobportal-main/testrepo
Unable to find image 'au.icr.io/jobportal-main/testrepo:latest' locally
docker: Error response from daemon: manifest for au.icr.io/jobportal-main/testrepo:latest not found: manifest unknown: manifest unknown.
See 'docker run --help'.

C:\Users\ELCOT>docker pull au.icr.io/jobportal-main/testrepo:jobportaltesting
jobportaltesting: Pulling from jobportal-main/testrepo
Digest: sha256:dc6a1d3f889845c94bc9b8b84e938a0b015e6031ddc40c016025363967265213
Status: Image is up to date for au.icr.io/jobportal-main/testrepo:jobportaltesting
au.icr.io/jobportal-main/testrepo:jobportaltesting

C:\Users\ELCOT>docker run -p 5000:5000 au.icr.io/jobportal-main/testrepo
Unable to find image 'au.icr.io/jobportal-main/testrepo:latest' locally
docker: Error response from daemon: manifest for au.icr.io/jobportal-main/testrepo:latest not found: manifest unknown: manifest unknown.
See 'docker run --help'.

C:\Users\ELCOT>docker run -p 5000:5000 au.icr.io/jobportal-main/testrepo:jobportaltesting
docker: Error response from daemon: driver failed programming external connectivity on endpoint heuristic_spence (d84c3fb81e5087dab6d1558694311ab227859e3b338aa1f7c4020c2ad72f4ae): Bind for 0.0.0.0:5000 failed: port is already allocated.

C:\Users\ELCOT>docker run -p 5000:5000 au.icr.io/jobportal-main/testrepo:jobportaltesting
* Serving Flask app "app" (lazy loading)
* Environment: production
  WARNING: This is a development server. Do not use it in a production deployment.
  Use a production WSGI server instead.
* Debug mode: off
* Running on all addresses.
  WARNING: This is a development server. Do not use it in a production deployment.
* Running on http://172.17.0.2:5000/ (Press CTRL+C to quit)
```



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## Aboutus

### Mission

SMARTBRIDGE is an edTech organization with a vision to bridge the gap between academia & industry. Our outcome-based experiential learning programs on emerging technologies (Internet of Things, Machine Learning, Data Science, Artificial Intelligence, Robotics) are building skilled entry-level engineers, for the corporate world. .

### Vission

Our main objective is to bridge the existing gaps between prevailing industry standards and what the academics offer to the graduates while passing out of university. SmartBridge offers suitable skill deployment and training to the young talent before on boarding their first job. Our skill development programs are designed considering the present expectations in the industry.

### Objective

Well directed career guidance programs for educational institutions  
Appropriate certification courses that suit the industry need  
Train the trainers; expanded awareness about the current industry standards  
Liaise with corporates to offer niche internships  
Establish technology development centers in colleges  
Specialised incubation centers in collaboration with corporates

## JobPortal

Lorem ipsum dolor sit amet consectetur adipisicing elit. Voluptatum quis, reiciendis id magni magnam, accusamus nobis in, temporibus molestias ab placeat rerum aperiam illum perspiciatis ducimus non! Fugiat, odit ducimus.

## Get in Touch

- jobportal@gmail.com
- +91 8977787657

IBM Cloud

Container Registry

Quick start

Namespaces2

Repositories1

Images1

Trash0

Settings

Search resources and products...

CatalogManageJayakamalesh k's Acco...

# Repositories

Location

Sydney

Search

Create

Name	Image count	Namespace	Last updated
testrepo au.icr.io/jobportal-main/testrepo	1	jobportal-main	1 day ago

Items per page: 251-1 of 1 item

https://cloud.ibm.com/registry/repos

Type here to search

Docker PlaygroundCAD-B7-1A3E (Evening Session)-Dayuifd/ui-for-docker - Docker Image | DIBM Cloud Container Registry - R

GmailYouTubeMapsIBM(2) PBLChatIBM-EPBL/IBM-Proj...

84°F8:53 PM10/25/2022

IBM Cloud

Container Registry

Quick start

Namespaces2

Repositories1

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Search resources and products...

CatalogManageJayakamalesh k's Acco...

# Repositories

Location

Sydney

Search

Create

Name	Image count	Namespace	Last updated
testrepo au.icr.io/jobportal-main/testrepo	1	jobportal-main	1 day ago

Items per page: 251-1 of 1 item

Type here to search

84°F8:53 PM10/25/2022

Docker Playground

CAD-87-1A3E (Evening Session)-Day

uifd/ui-for-docker - Docker Image | D

IBM Cloud Container Registry - In x

cloud.ibm.com/registry/images

GmailYouTubeMapsIBM(2) PBLChatIBM-EPBL/IBM-Proj...

IBM Cloud

Search resources and products...

CatalogManageJayakamalesh k's Acco...

Container Registry

Quick start

Namespaces2

Repositories1

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Sydney

View by: DigestSearchCreate

Repository@digest	Tags	Manifest type	Created	Size	Security status
<div><div></div><div>jobportal-main/testrepo@sha256:dc6a1d3f8898...</div></div>	<div>jobportaltesting</div>	Docker	1 day ago	435 MB	99 issues

Items per page: 251-1 of 1 item11 of 1 page

https://cloud.ibm.com/registry/images

Type here to search

84°F8:53 PM10/25/2022