

## Assignment -4

### Docker and Kubernetes

Assignment Date	21 October 2022
Student Name	T Saran
Student Roll Number	920319104026
Maximum Marks	2 Marks

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

The image shows two screenshots. The top screenshot is of the Docker Hub website (hub.docker.com). It features a blue header with the Docker logo, a search bar, and navigation links for Explore, Repositories, Organizations, and Help. A prominent blue banner in the center says "Welcome to Docker" and "Download the desktop application", with a "Download for Windows" button. Below the banner are three cards: "Create a Repository", "Docker Hub Basics", and "Language-Specific Guides". The bottom screenshot shows the Docker Playground interface in a web browser. It displays a terminal window for a container named "cd9an2u3\_cd9av060qau0008hbjs0". The terminal shows the command "docker pull uifd/ui-for-docker" being executed, followed by "docker run" with various flags. The output shows the image being pulled from Docker Hub and then running in the container. The interface also shows a sidebar with "Instances" and a "CLOSE SESSION" button.

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

The image displays two screenshots of the 'UI For Docker' web application interface, which is accessed via a browser at the URL `ip172-18-0-4-cd9an2u3tccg00fgf6k0-9000.direct.labs.play-with-docker.com/#/`.

**Top Screenshot:** The interface shows the 'UI For Docker' title and the subtitle 'The UI for Docker container engine'. A green button labeled 'Learn more.' is visible. The 'Running Containers' section lists one container named 'beautiful\_goldwasser' with a status of 'Up About a minute'. The 'Status' section features a green donut chart indicating that all containers are running.

**Bottom Screenshot:** This screenshot shows the interface after creating a new container. The 'Running Containers' section still lists 'beautiful\_goldwasser'. The 'Containers created' section shows a line graph with a single data point at 1 on the y-axis for the date 21/10/2022. The 'Images created' section also shows a line graph with a single data point at 1 on the y-axis for the date 21/10/2022. The 'Status' section now includes a legend for 'Running' (green), 'Stopped' (red), and 'Ghost' (grey).

### 3. Create an IBM container registry and deploy hello word app

```
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:f8052aaf88c25f0d22354d547d892591067aa4026a7fa9a6819df9f300af6fc
-> resolve docker.io/library/python:3.6@sha256:f8052aaf88c25f0d22354d547d892591067aa4026a7fa9a6819df9f300af6fc
-> sha256:f8052aaf88c25f0d22354d547d892591067aa4026a7fa9a6819df9f300af6fc 1.86kB / 1.86kB
-> sha256:a097ae997a8e099df5c31872359c2de510f02214c6a80e78393b37dd3b08d 2.22kB / 2.22kB
-> sha256:54268638087c53ad24c6e21fc889abb08486a27634c8892885ff713f44b104 9.27kB / 9.27kB
-> sha256:9e29546d54c1dhd309281d21a73a0d1d78665c1b05b74f32b009a0b77abe1e3 54.92MB / 54.92MB
-> sha256:9b829c73052b02b97d5c07a54fb0f3e921995a296c714b53a32ae67d19231fcd 5.15MB / 5.15MB
-> sha256:cb5b7ae361722f070eca53f35823ed21baa85d61d5d95cd5a95ab53d740cdd56 10.87MB / 10.87MB
-> sha256:6404e4811622b31c027ccac322ca463937fd885f50a93e6f15c01aade718793 54.57MB / 54.57MB
-> sha256:6f9f74896dfa93fe0372f594fab85e0b4e8a041a0fef09112efc7e4d3c78f7 196.51MB / 196.51MB
-> sha256:5e3b1112efc56598e78bdc02983945c164de2a37305e0bae2dada821124dc743 6.29MB / 6.29MB
-> extracting sha256:0e29546d54c1dhd309281d21a73a0d1d78665c1b05b74f32b009a0b77abe1e3 27.3kB
-> sha256:9fd0f0c56134f2a8efad7e281bf2e7489c40e0185c5478676f41c1244b096752 14.21MB / 14.21MB
-> extracting sha256:9b829c73052b02b97d5c07a54fb0f3e921995a296c714b53a32ae67d19231fcd 9.3kB
-> extracting sha256:cb5b7ae361722f070eca53f35823ed21baa85d61d5d95cd5a95ab53d740cdd56 4.4kB
-> sha256:494f02044bac0432ca522cbb9f254b1c91fcea6806bfeef0b0b243b2f31bab7 235B / 235B
-> sha256:c4f42be2b530900ebffc040c1df13de538434ccc5f5d954a56848a6169a3a3f 2.21MB / 2.21MB
-> sha256:6494e4811622b31c027ccac322ca463937fd885f50a93e6f15c01aade718793 273.3kB
-> extracting sha256:6f9f74896dfa93fe0372f594fab85e0b4e8a041a0fef09112efc7e4d3c78f7 131.4kB
-> sha256:5e3b1112efc56598e78bdc02983945c164de2a37305e0bae2dada821124dc743 6.22kB
-> extracting sha256:9fd0f0c56134f2a8efad7e281bf2e7489c40e0185c5478676f41c1244b096752 11.2kB
-> extracting sha256:404f02044bac0432ca522cbb9f254b1c91fcea6806bfeef0b0b243b2f31bab7 0.4kB
-> extracting sha256:c4f42be2b530900ebffc040c1df13de538434ccc5f5d954a56848a6169a3a3f 2.2kB
-> [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 to image
-> 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-PC\Desktop>job-portal-main
```

Docker Desktop Upgrade plan

Containers Images Volumes Dev Environments BETA

Extensions BETA

Add Extensions

Images on disk Last refresh: about 1 hour ago 1 Images 0 Bytes total size Refresh to see disk usage Clean up

Images Give feedback

LOCAL REMOTE REPOSITORIES

Search

☐ In use only

NAME	TAG	IMAGE ID	CREATED	SIZE
job-portal-main	latest	1756719486df	less than a minute ago	1.08 GB

RAM 2.53GB CPU 1.56% Connected to Hub v4.13.0