

## Assignment - 4

### Docker and Kubernetes

Assignment Date	01 November 2022
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Maximum Marks	2 Marks

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

The screenshot shows a web browser with two tabs. The first tab is Docker Hub, displaying the repository page for `uifd/ui-for-docker`. The page indicates that the repository is deprecated and suggests using Portainer instead. It shows the Docker Pull Command: `docker pull uifd/ui-for-docker`. The second tab is Docker Playground, showing a new instance named `cd9an2u3_cd9av060qau0008hbjs0` with IP `192.168.0.13`. The terminal output shows the following commands and results:

```
# 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:fe371fff3a69549269b24073a5ab1244dd4c0b834cbadf244870572150b1cb749
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
c590dd163101ae795bdca0eb1dd498f6fe549cb5f24dab9ff7c1931923Fc0d
[node1] (local) root@192.168.0.13 ~
```

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, accessed via a browser. The browser's address bar shows 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 a navigation bar with tabs: Dashboard, Containers, Containers Network, Images, Networks, Volumes, and Info. A 'Refresh' button is on the right. The main content area features a large 'UI For Docker' heading with the subtitle 'The UI for Docker container engine' and a 'Learn more.' button. Below this, the 'Running Containers' section lists a container named 'beautiful\_goldwasser' with a status of 'Up About a minute'. A green progress ring is partially visible.

**Bottom Screenshot:** This screenshot shows the same interface but with more data. The 'Running Containers' section still lists 'beautiful\_goldwasser'. The 'Status' section displays a green progress ring and a legend: 'Running' (green square), 'Stopped' (red square), and 'Ghost' (grey square). Below the containers list, there are two line graphs: 'Containers created' and 'Images created', both showing a count of 1 on the y-axis and the date '21/10/2022' on the x-axis.

### 3. Create an IBM Container registry and deploy

The image shows a Windows command prompt window at the top, displaying the output of a Docker build process. The build is for a Dockerfile named 'Dockerfile' in the directory 'C:\Windows\System32\cmd.exe'. The output shows the image 'sha256:1756719486df' being built and pushed to the 'registry-1.docker.io' repository. The build process includes steps for installing dependencies, building the application, and exporting the image.

Below the command prompt is the Docker Desktop interface. The 'Images' tab is selected, showing a list of images on disk. The image 'job-portal-main' is listed with the tag 'latest' and the ID '1756719486df'. The interface also shows the 'LOCAL' and 'REMOTE REPOSITORIES' sections, with the 'LOCAL' section containing the image 'job-portal-main'.

At the bottom of the Docker Desktop window, the system status is displayed: RAM 2.53GB, CPU 1.56%, and Connected to Hub. The version 'v4.13.0' is also shown.