

Assignment -4

Docker and Kubernetes

Assignment Date	21 October 2022
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Maximum Marks	2 Marks

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

The screenshot displays two browser windows. The top window shows the Docker Hub page for the repository `uifd/ui-for-docker`. The page indicates it is deprecated and suggests using Portainer. A 'Docker Pull Command' box shows the command: `docker pull uifd/ui-for-docker`.

The bottom window shows the Docker Playground interface. It displays the instance name `cd9an2u3_cd9av060qau0008hbjso` 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 PWD team. #
#####
[models] (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
[models] (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
c590dat63101ae795bdeea0eb1dd90f6f549cb5f24dacb9ff7c1931923fc0d
[models] (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:

- Navigation Bar:** Includes links for Dashboard, Containers, Containers Network, Images, Networks, Volumes, and Info. A 'Refresh' button is on the right.
- Header:** 'UI For Docker' with the tagline 'The UI for Docker container engine' and a 'Learn more.' button.
- Running Containers:** A list showing one container named 'beautiful_goldwasser' with a status of 'Up About a minute'.
- Status:** A large green donut chart indicating the system status.

Bottom Screenshot:

- Running Containers:** Same as the top screenshot, showing 'beautiful_goldwasser' is running.
- Status:** The donut chart is now fully green, indicating all containers are running.
- Containers created:** A line graph showing the number of containers created over time, with a peak of 1 on 21/10/2022.
- Images created:** A line graph showing the number of images created over time, with a peak of 1 on 21/10/2022.

The interface is consistent across both screenshots, with the main difference being the status of the containers and the corresponding donut chart.

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

The screenshot displays the Docker Desktop interface. The top pane shows the build process of a container image, with a progress bar on the right indicating the percentage of the build completed. The bottom pane shows the 'Images on disk' section, listing the built image 'job-portal-main' with a tag of 'latest' and a size of 1.08 GB. The interface also includes a sidebar with navigation options like 'Containers', 'Images', 'Volumes', and 'Dev Environments'. The bottom status bar shows system information like RAM (2.53 GB), CPU (1.56%), and connection to the Hub.

```
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 1.86kB / 1.86kB
-> sha256:d097a4007a8ec070df5ac31872359c2de510f62214c0448e926393b376d3b60d 2.22kB / 2.22kB
-> sha256:542666380b75e3ad24c6a21fc889a0bc8486a27634c0892686ff71f3f44b104 0.27kB / 0.27kB
-> sha256:0e29546d541c1d3d9072b1d21273a811b78665c1b96574f32b009e0b77ade1e3 54.92MB / 54.92MB
-> sha256:90829c73b52b02b7d5c07e54fb0f3a021095a296c714b53a32a67d19231fcd 5.15MB / 5.15MB
-> sha256:cb5b7ae361722f0ecac53f35823ed21baa85de1d5d95cd5a95ab53d740cdd56 10.87MB / 10.87MB
-> sha256:6494e4011622b31c027ccac322ca463937fd085f569a93eef15c01aade718793 54.57MB / 54.57MB
-> sha256:6f9f74896dffa93fe0172f594faba85e0b4e8a0481a0fef09112efc7e4d3c78f7 196.51MB / 196.51MB
-> sha256:5e3b1213efc56598e78bd602983945c164de2a37205e06a62dada823124dc743 6.29MB / 6.29MB
-> extracting sha256:0e29546d541c1d3d9072b1d21273a811b78665c1b965b74f32b009e0b77ade1e3
-> sha256:9fddfd5c56334f2e6efad7e241bf5e7459c40ed105c5478676f41c1244bd96752 14.21MB / 14.21MB
-> extracting sha256:90829c73b52b02b7d5c07e54fb0f3a021095a296c714b53a32a67d19231fcd
-> extracting sha256:cb5b7ae361722f0ecac53f35823ed21baa85de1d5d95cd5a95ab53d740cdd56
-> sha256:404f02044bac8432ca522cb9f254b1c91fca6800bfeef0be0b243b2f31bab7 235B / 235B
-> sha256:c4f42be2be53b900ebff040c1df13de538434ccc5f5d954a56048a6169a3a3f 2.21MB / 2.21MB
-> extracting sha256:6494e4011622b31c027ccac322ca463937fd085f569a93eef15c01aade718793
-> extracting sha256:6f9f74896dffa93fe0172f594faba85e0b4e8a0481a0fef09112efc7e4d3c78f7
-> extracting sha256:5e3b1213efc56598e78bd602983945c164de2a37205e06a62dada823124dc743
-> extracting sha256:9fddfd5c56334f2e6efad7e241bf5e7459c40ed105c5478676f41c1244bd96752
-> extracting sha256:404f02044bac8432ca522cb9f254b1c91fca6800bfeef0be0b243b2f31bab7
-> extracting sha256:c4f42be2be53b900ebff040c1df13de538434ccc5f5d954a56048a6169a3a3f
-> [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
-> exporting layers
-> writing image sha256:1756719486df002fad5dae305c5221513f2ff2d1b40a8d242b22a28af0379f19
-> 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>
```

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

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