

Assignment - 4

Docker and Kubernetes

Team ID : PNT2022TMID52244

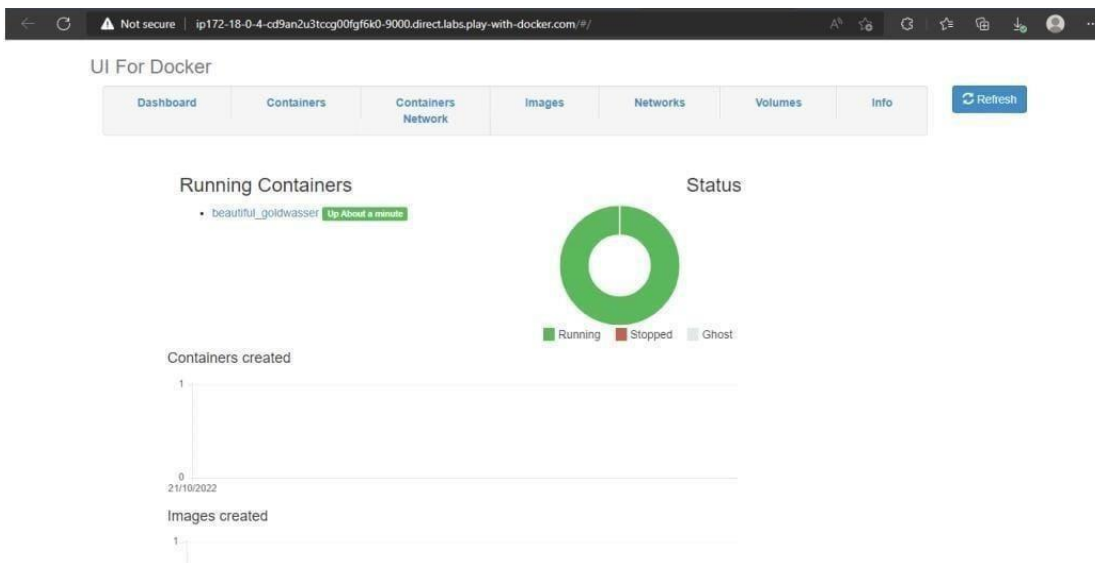
Project Name : Smart Fashion Recommender Application

Submitted by : HARI(963519104302)

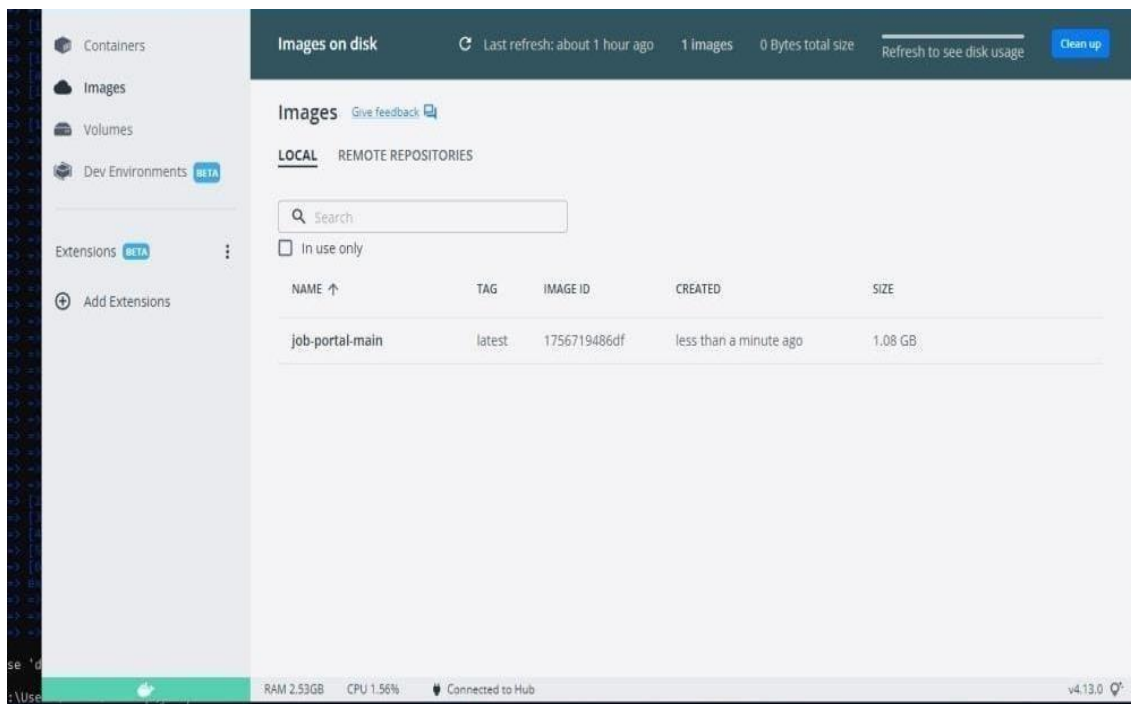
1. Pull an Image from docker hub and run it in docker playground :

The screenshot displays the Docker Hub page for the `uifd/ui-for-docker` repository, which is marked as deprecated. Below this, the Docker Playground interface is shown, featuring a terminal window where the following commands are executed:

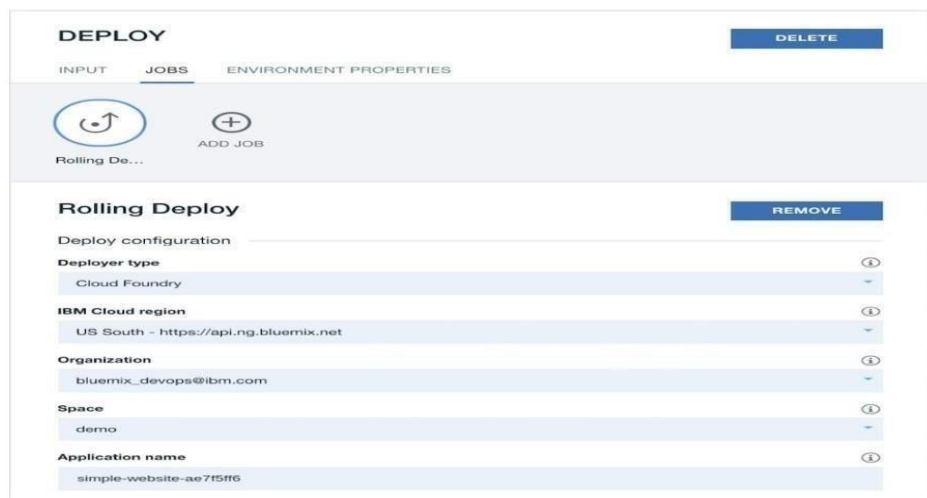
```
# This is a sandbox environment. Using personal credentials #
# is HIGHLY discouraged. Any consequences of doing so are #
# completely the user's responsibilities. #
#
# The FWD team.
#####
root@192.168.0.13 ~
$ docker pull uifd/ui-for-docker
Using default tag: latest
latest: Pulling from uifd/ui-for-docker
441194d980c9: Pull complete
Digest: sha256:fe371ff5a69549269b24073a5ab1244dd4e0b834cbadf244870572150b1cb749
Status: Downloaded newer image for uifd/ui-for-docker:latest
docker.io/uifd/ui-for-docker:latest
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
c590dd163101ae795bdcea0eb1ddd98f6fe549cb5f24dacb9ff7c1931923fc0d
root@192.168.0.13 ~
```



```
[internal] load build definition from Dockerfile
-> transferring Dockerfile: 32B
[internal] load .dockerignore
-> transferring context: 28
[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: 887B
[1/6] FROM docker.io/library/python:3.6sha256:f8052afaf8bc25f6d2354d547d892501067a4a026a77faa0b10df9f30a0ef0c
-> resolve docker.io/library/python:3.6sha256:f8052afaf8bc25f6d2354d547d892501067a4a026a77faa0b10df9f30a0ef0c
-> sha256:f8052afaf8bc25f6d2354d547d892501067a4a026a77faa0b10df9f30a0ef0c 1.00kB
-> sha256:40974a907a8ec879d75ac1a872359c2d0510f8214c0848e92630b376d376d3b60d 2.22kB / 2.22kB
-> sha256:5d6786809735e3ad3c8e2a74380ab0c4d8a2763408000b67731f34d03c 9.22kB / 9.22kB
-> sha256:8e39243a3931d12174e004b7806513b937492128090e677a6a51 54.37MB / 54.37MB
-> sha256:90d29c773b52092b7d5687a47bf81e01995a209c714b53a32a607d19231fcd 5.10MB / 5.10MB
-> sha256:c05b07a61722f7078ecaf3f35821bd1baa5d61d5d95c5d93ab5d3748cd05e 10.87MB / 10.87MB
-> sha256:64949a1e1d22031b27ccac322ca463937fdd80590a930ef15c81aude718793 54.57MB / 54.57MB
-> sha256:619f74896d7a03f0e172f594fab8a5e0b48a0481a0f9f0112efc7e0d3c70f7 196.53MB / 196.53MB
-> sha256:561213fcfc8508e7080a0803061a1640e2a72950e0a2dada82124dc7a3 6.30MB / 6.30MB
-> extracting sha256:c05b07a61722f7078ecaf3f35821bd1baa5d61d5d95c5d93ab5d3748cd05e77adea3
-> sha256:9f9dfdc5833cf2e0edf7e2101bf5e7459c40ed105c5478676f41c1444bd90752 14.21MB / 14.21MB
-> extracting sha256:90d29c773b52092b0207d5c07a54f0b73e21995a293c714b53a32a607d19231fcd
-> extracting sha256:c05b07a61722f7078ecaf3f35821bd1baa5d61d5d95c5d93ab5d3748cd05e
-> sha256:404f02044bac0432ca522cbb9f54b1c91fca6880bfeef0be0b243b2f31bab7 2358 / 2358
-> sha256:c4f42be1b59090ebffcc040c1d1d653043ccc5f5d954a5848a6169a3a3f 2.21MB / 2.21MB
-> extracting sha256:404f02044bac0432ca522cbb9f54b1c91fca6880bfeef0be0b243b2f31bab7
-> extracting sha256:619f74896d7a03f0e172f594fab8a5e0b48a0481a0f9f0112efc7e0d3c70f7
-> extracting sha256:561213fcfc8508e7080a0803061a1640e2a72950e0a2dada82124dc7a3
-> extracting sha256:9f9dfdc5833cf2a6efad7e2101bf5e7459c40ed105c5478676f41c1444bd90752
-> extracting sha256:404f02044bac0432ca522cbb9f54b1c91fca6880bfeef0be0b243b2f31bab7
-> extracting sha256:c4f42be1b59090ebffcc040c1d1d653043ccc5f5d954a5848a6169a3a3f
[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 lbm.sh
exporting to image
-> exporting layers
-> writing image sha256:7156719486df007fdd5dae305c5221532f7f2d1b49a8d74b32a28af079f19
-> naming to docker.io/library/python:portal-main
```



3. Create a IBM container registry and deploy helloworld app or jobportalapp :



```
1  {
2    "ServiceId": "com.ibm.cloudoe.orion.client.deploy",
3    "Params": {
4      "Target": {
5        "Url": "https://api.ng.bluemix.net",
6        "Org": "bluemix_devops@ibm.com",
7        "Space": "demo"
8      },
9      "Name": "simple-website-ae7f5ff6",
10     "Instrumentation": {}
11   },
12   "Path": "manifest.yml",
13   "Type": "Cloud Foundry"
14 }
```

Hello, IBM Cloud World!

4. Create a Kubernetes cluster in IBM cloud and deploy helloworld image or jobportal image and also expose the same app to run in nodeport:

