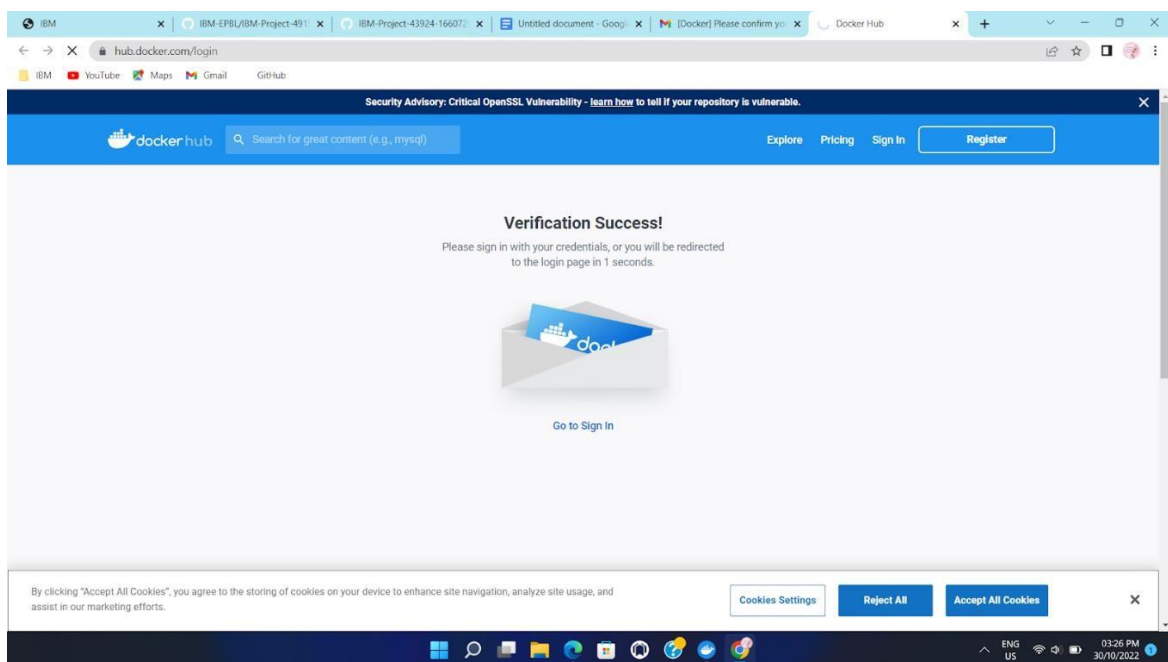
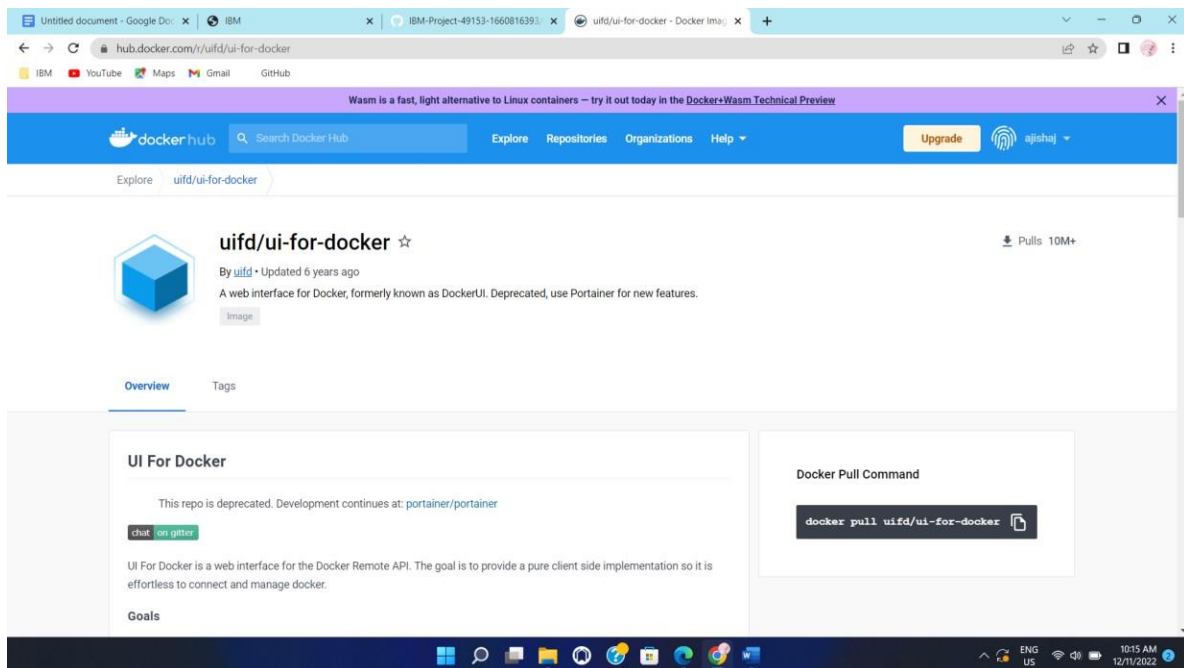


ASSIGNMENT 4

DOCKER AND KUBERNETS

TEAM ID	PNT2022TMID50292
PROJECT NAME	Smart Fashion Recommender Application

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



IBM Project-1783-16: x | Docker Playground x | Docker Hub x | uifd/ui-for-docker - x | +

labs.play-with-docker.com/p/cdj5psm3tccg008jm220#cdj5psm3_cdj5qqu0qau000fq94n0

02:58:37

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.18
node1

cdj5psm3_cdj5qqu0qau000fq94n0

IP: 192.168.0.18 OPEN PORT: 9000

Memory: 1.69% (67.65MiB / 3.906GiB) CPU: 0.21%

SSH: ssh ip172-18-0-46-cdj5psm3tccg008jm220@direct.labs.play

DELETE EDITOR

```
invalid reference format
(node1) (local) root@192.168.0.18 ~
$ docker pull ajishaj/docker_flask_with_form
Using default tag: latest
Error response from daemon: manifest for ajishaj/docker_flask_with_form:latest not found: manifest unknown: manifest unknown
(node1) (local) root@192.168.0.18 ~
$ docker pull ajishaj/docker_flask_with_form:latest
Error response from daemon: manifest for ajishaj/docker_flask_with_form:latest not found: manifest unknown: manifest unknown
(node1) (local) root@192.168.0.18 ~
$ docker pull uifd/ui-for-docker
Using default tag: latest
latest: Pulling from uifd/ui-for-docker
841194d080c8: Pull complete
Digest: sha256:fe371fff5a69549269b24073a5ab124dd4c0b834cbadf244870572150b1cb749
Status: Downloaded newer image for uifd/ui-for-docker:latest
docker.io/uifd/ui-for-docker:latest
(node1) (local) root@192.168.0.18 ~
$ docker run -d -p 9000:9000 --privileged -v /var/run/docker.sock:/var/run/docker.sock uifd/ui-for-docker
1401dc3cbbd22f741f40a84ceda028c2e23ca98480bd4d9cb0bc89471a3f81ce
(node1) (local) root@192.168.0.18 ~
$
```

IBM x | CAD-88-244E (A) x | uifd/ui-for-docker - x | Docker Playground x | UI For Docker x | Docker Desktop - Do x | +

Not secure | ip172-18-0-4-cd9an2u3tccg00lgf6k0-9000.direct.labs.play-with-docker.com/#/

UI For Docker

Dashboard Containers Containers Network Images Networks Volumes Info Refresh

UI For Docker

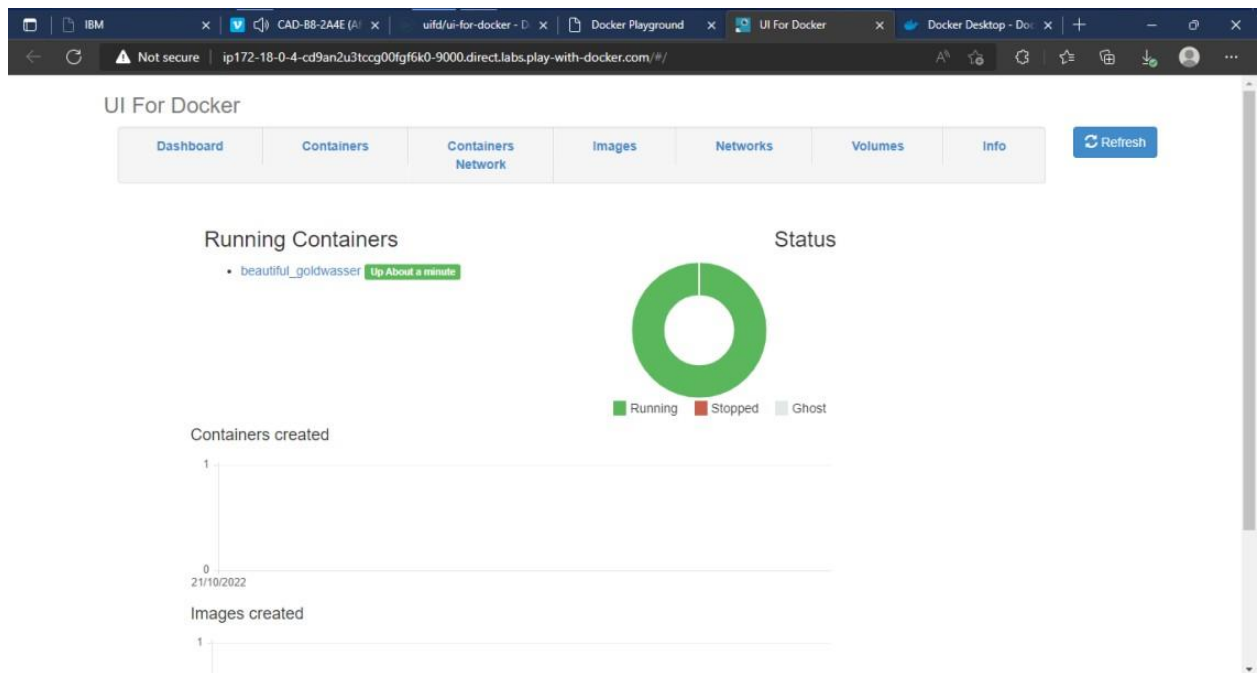
The UI for Docker container engine

Learn more.

Running Containers

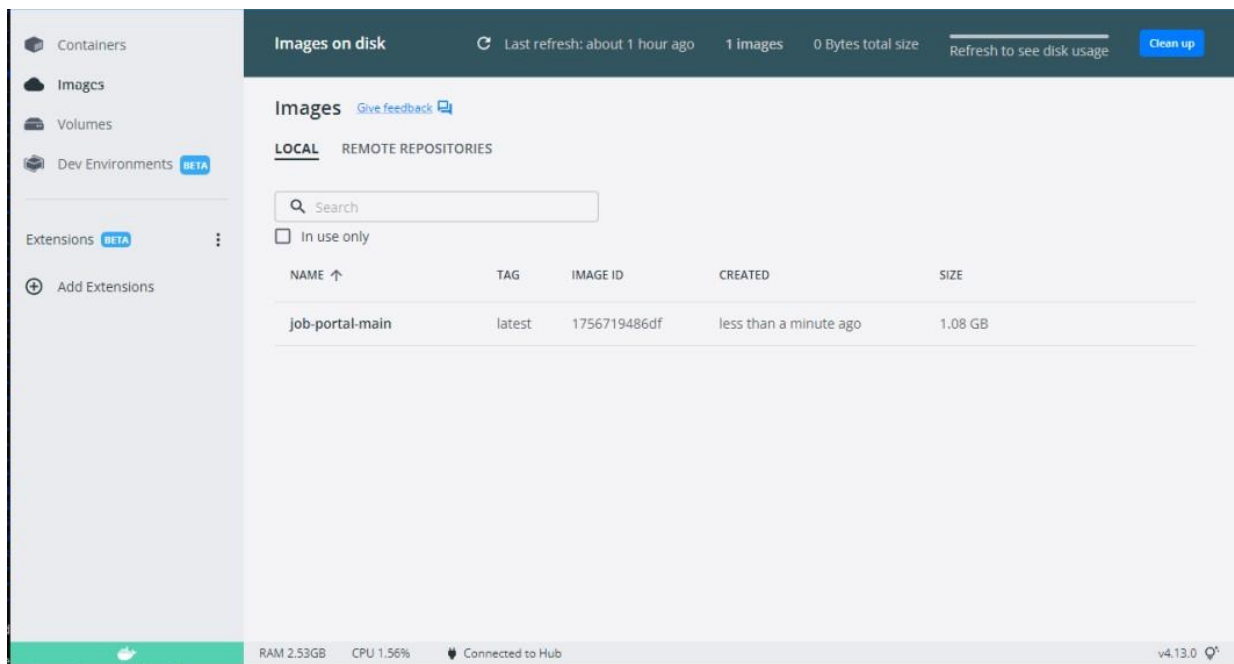
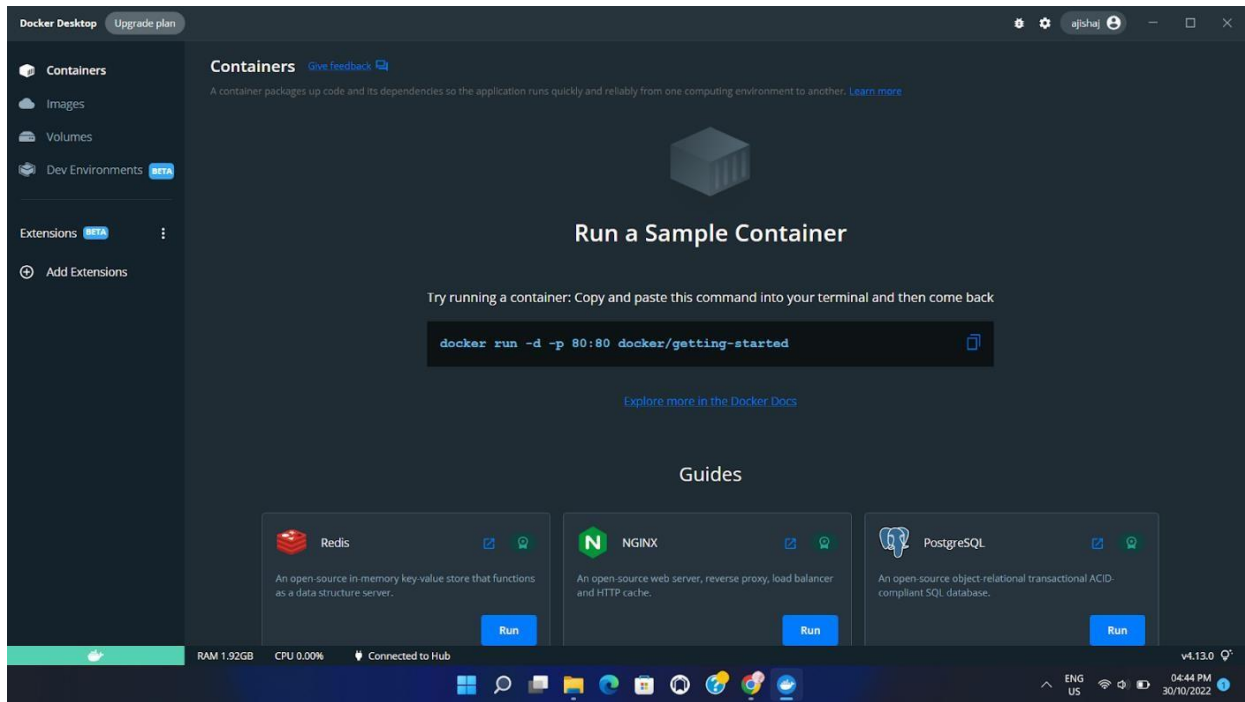
- beautiful_goldwasser Up About a minute

Status



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: 28B
>> [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: 28B
>> [1/6] FROM docker.io/library/python:3.6@sha256:f8652afa788c25f0d22354d547d892591067aa4026a7fa9a6810df9f300af6fc
>> resolve docker.io/library/python:3.6@sha256:f8652afa788c25f0d22354d547d892591067aa4026a7fa9a6810df9f300af6fc
>> sha256:f8652afa788c25f0d22354d547d892591067aa4026a7fa9a6810df9f300af6fc 1.86kB / 1.86kB
>> sha256:d097a907a0e079df5a31072359c2d510f82214c0448e926393b376d3b64d 2.22kB / 2.22kB
>> sha256:5425063d07c5e3ad24ce21fc089abbc0486a27634c0892086ff71f3f44b104 9.27kB / 9.27kB
>> sha256:0e29546d541c0bd300281d21a73a0d1b78665c1b95b74f32b000e0b77a0e1e3 54.92MB / 54.92MB
>> sha256:90829c73b52b92b07d5c07a54fb0f3e921995a296c714b53a32ae67d19231fcd 5.15MB / 5.15MB
>> sha256:cb5b7ae361722f070eca53f35023ed21baa85d61d5d95cd5a9a53d740cdd56 10.87MB / 10.87MB
>> sha256:0494e4811622b31c027ccac322ca463937f8005f569a93ee6f15c01aad6718793 27.35MB / 27.35MB
>> sha256:04974896df291f0d172f59afab08e0d4e8a081a0f0f0b112af7e4dc7067 131.45MB / 131.45MB
>> sha256:5e3b1213efc56598e78b0d02983945c164de2a37205e0e6c2dad823124d743 8.22kB / 8.22kB
>> extracting sha256:0e29546d541c0bd300281d21a73a0d1b78665c1b95b74f32b000e0b77a0e1e3 27.35MB / 27.35MB
>> sha256:9fd9dc56334f2e0efad7e241bf5e7459c40ed105c5478676f41c1244b06752 14.21MB / 14.21MB
>> extracting sha256:90829c73b52b92b07d5c07a54fb0f3e921995a296c714b53a32ae67d19231fcd 2.38MB / 2.38MB
>> extracting sha256:cb5b7ae361722f070eca53f35023ed21baa85d61d5d95cd5a9a53d740cdd56 4.85MB / 4.85MB
>> sha256:404f02044bac0432ca522cbb9f254b1c91fca6800b0f0be0b243b2f31bab7 235B / 235B
>> sha256:c4f42be2be53b900ebff040c1df13de538434ccc5f5d954a56848a6169a3a3f 2.21MB / 2.21MB
>> extracting sha256:0494e4811622b31c027ccac322ca463937f8005f569a93ee6f15c01aad6718793 27.35MB / 27.35MB
>> extracting sha256:04974896df291f0d172f59afab08e0d4e8a081a0f0f0b112af7e4dc7067 131.45MB / 131.45MB
>> extracting sha256:5e3b1213efc56598e78b0d02983945c164de2a37205e0e6c2dad823124d743 8.22kB / 8.22kB
>> extracting sha256:9fd9dc56334f2e0efad7e241bf5e7459c40ed105c5478676f41c1244b06752 14.21MB / 14.21MB
>> extracting sha256:404f02044bac0432ca522cbb9f254b1c91fca6800b0f0be0b243b2f31bab7 0.05MB / 0.05MB
>> extracting sha256:c4f42be2be53b900ebff040c1df13de538434ccc5f5d954a56848a6169a3a3f 2.25MB / 2.25MB
>> [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 image
>> writing image sha256:1756719486df002fad5dae305c5221513f2f2d1b49a0d24b22a28af0379f19
>> 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>
```



3. Create a IBM container registry and deploy hello world app or job portal app:

The screenshot shows the IBM Cloud Deploy console. At the top, there's a 'DEPLOY' header with a 'DELETE' button. Below it are tabs for 'INPUT', 'JOBS', and 'ENVIRONMENT PROPERTIES'. The 'JOBS' tab is active, showing a 'Rolling Deploy' job. The job configuration is as follows:

- Deploy configuration**
- Deployer type**: Cloud Foundry
- IBM Cloud region**: US South - <https://api.ng.bluemix.net>
- Organization**: bluemix_devops@ibm.com
- Space**: demo
- Application name**: simple-website-ae7f5ff6

```
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 IMB cloud and deploy hello world image or job portal image and expose the same app to run node port

