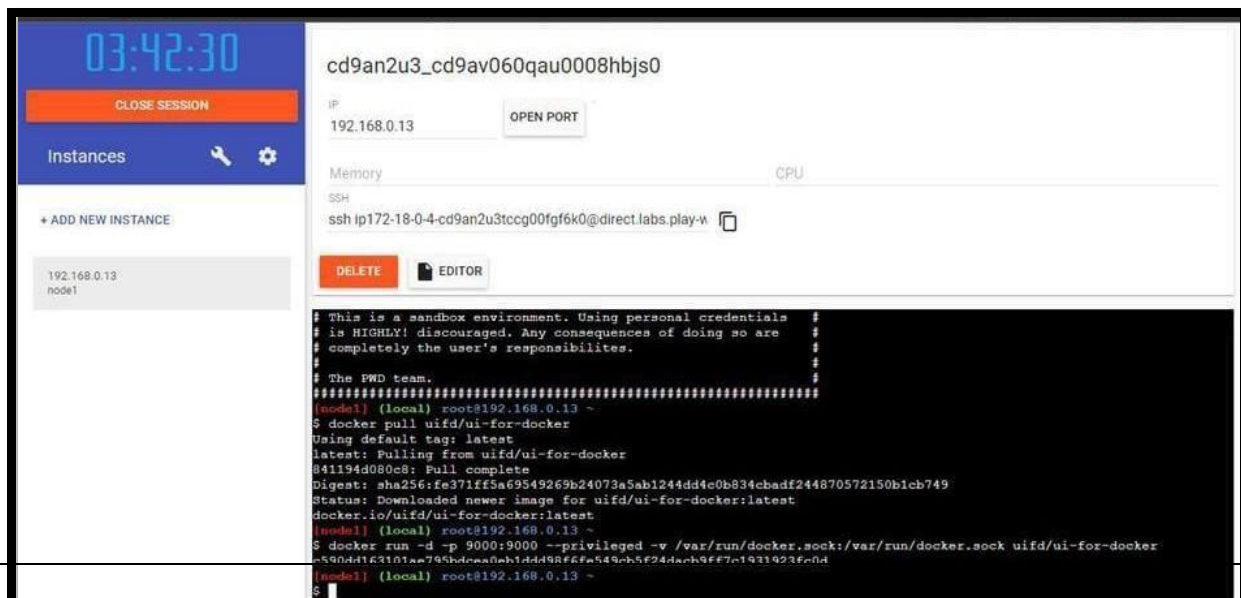
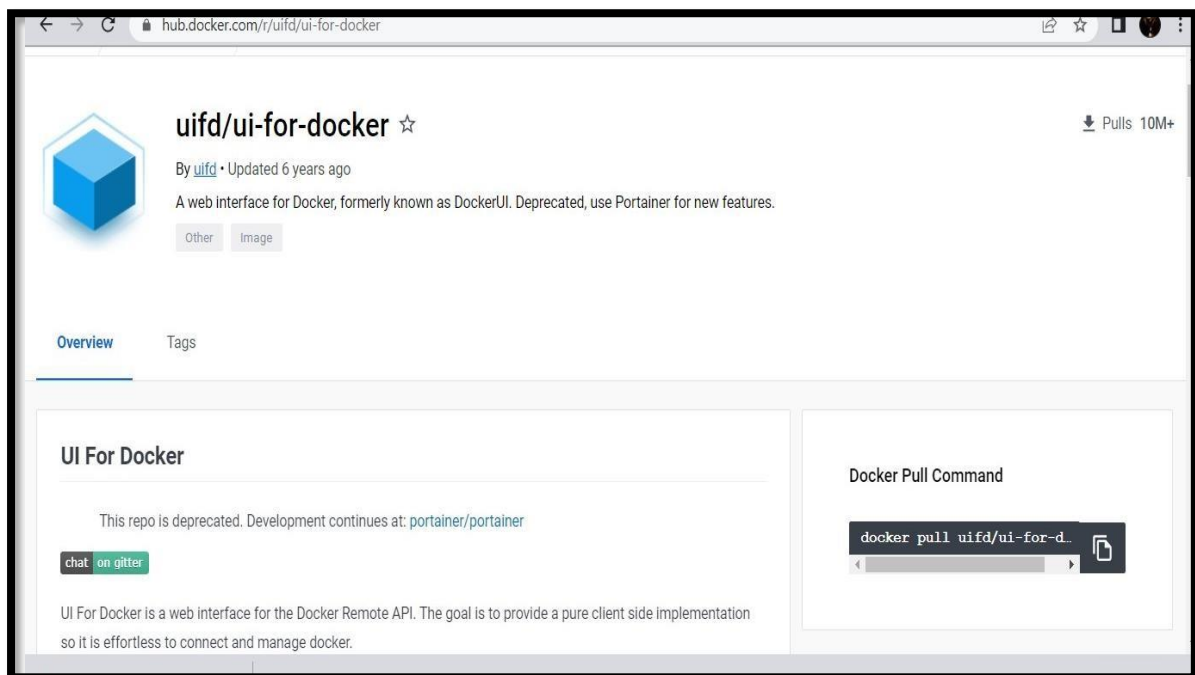


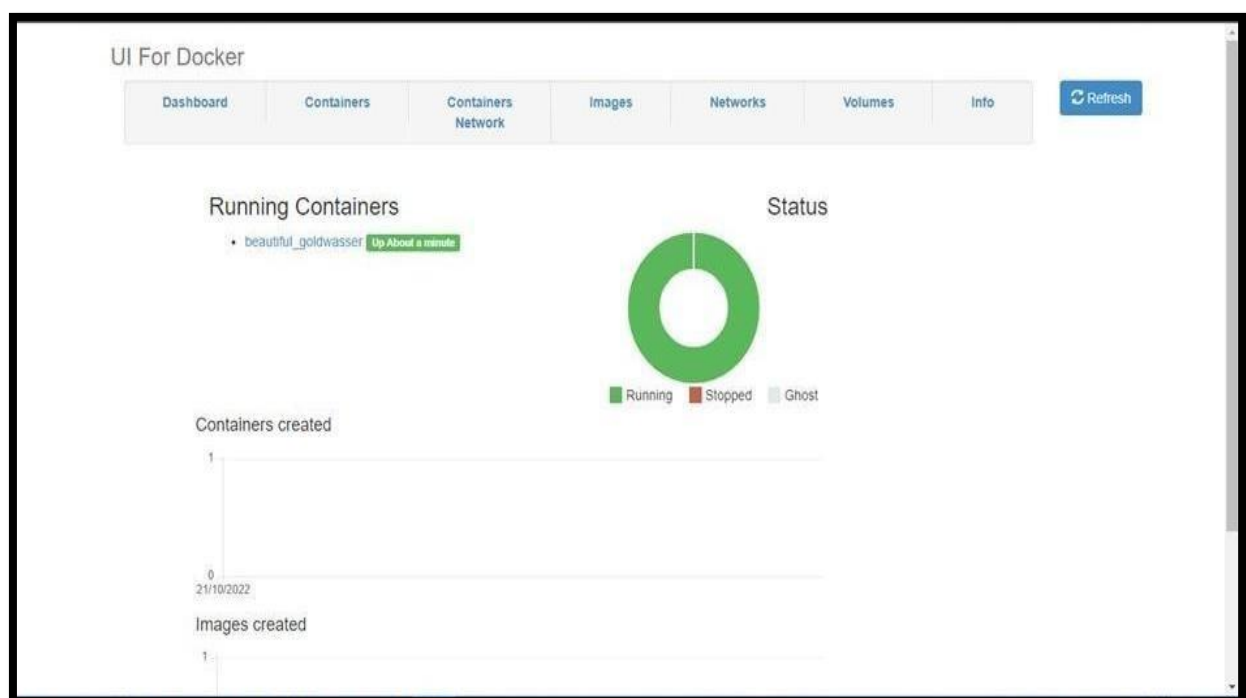
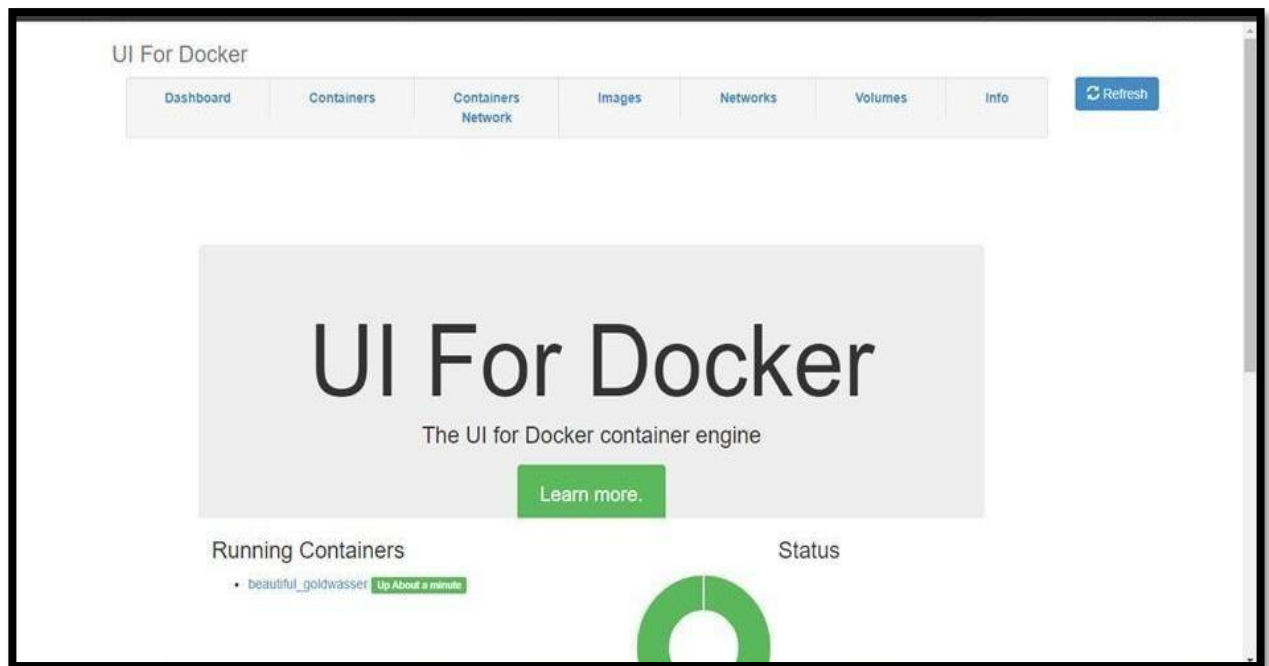
## DOCKER AND KUBERNETES

Assignment Date	4 November 2022
Student Name	MATHU NEGA G
Student Roll Number	7376192IT179
Team ID	PNT2022TMID02056
Maximum Marks	2 Marks

### Question 1:

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

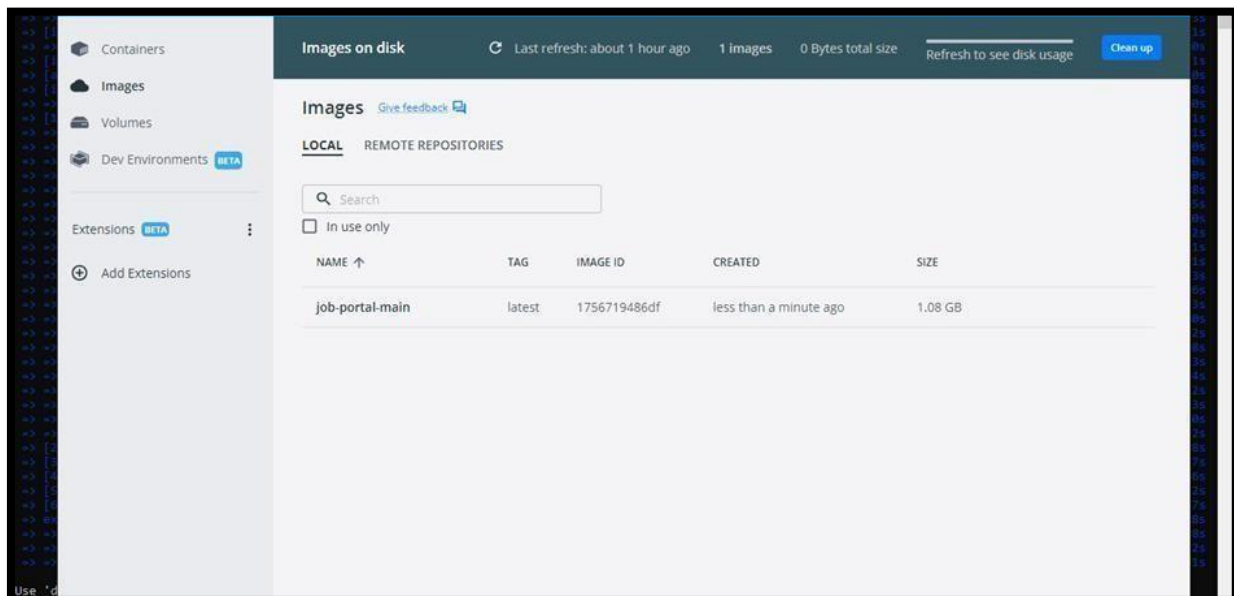




## Question 2:

Create a docker file for the job portal application and deploy it in Docker Desktop Application

```
> [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:f8652afa88c25f0d22354d547d892591067aa4026a7fa9a6819df9f300af6fc
=> resolve docker.io/library/python:3.6@sha256:f8652afa88c25f0d22354d547d892591067aa4026a7fa9a6819df9f300af6fc
=> sha256:f8652afa88c25f0d22354d547d892591067aa4026a7fa9a6819df9f300af6fc 1.06kB / 1.06kB
=> sha256:d892591067aa4026a7fa9a6819df9f300af6fc 2.22kB / 2.22kB
=> sha256:54708c3807c63ed34c6a21f889abbc8486a2763c8092886ff77f3f44b104 9.27kB / 9.27kB
=> sha256:0a39546d54c0bd389281d21a73a6d1db78665c1b55b74f32b009e0b77a6e1e3 54.92MB / 54.92MB
=> sha256:9b828c7352b02b97d5c07a54fb0f3e921995a296c714b53a32ae67d19231fcd 5.15MB / 5.15MB
=> sha256:c5b7ae361722f070eca53f35823ed21baa85d61d5d95c5a95ab53d740cdd56 10.87MB / 10.87MB
=> sha256:6494e4811622b31c027ccac322ca463937fd805f569a93e0f15c01aade718793 54.57MB / 54.57MB
=> sha256:6f0f74896df93fe0172f594fab48e0b4e8a481a0fefcd9112efc7e4d3c78f7 196.51MB / 196.51MB
=> sha256:5e3b1213efc56598e78bd02083045c164de2a37205e0a62dada823124dc743 6.29MB / 6.29MB
=> extracting sha256:0a29546d54c0bd389281d21a73a6d1db78665c1b55b74f32b009e0b77a6e1e3 27.35 / 27.35
=> sha256:9fd6d46c5b3f26eefad7e2419f5e7450c48ed186c5478076f41c1244b090752 14.21MB / 14.21MB
=> extracting sha256:9b828c7352b02b97d5c07a54fb0f3e921995a296c714b53a32ae67d19231fcd 2.35 / 2.35
=> extracting sha256:c5b7ae361722f070eca53f35823ed21baa85d61d5d95c5a95ab53d740cdd56 4.40 / 4.40
=> sha256:48af02044bac0432ca522cb9f254b1c91fcea8080fee0b0eb243b2f31ba07 235B / 235B
=> sha256:c4f42be2be53b00ebffcb48c1df13de53843ccc5f5d954a56b48a6169a3af 2.21MB / 2.21MB
=> extracting sha256:6494e4811622b31c027ccac322ca463937fd805f569a93e0f15c01aade718793 27.36 / 27.36
=> extracting sha256:6f0f74896df93fe0172f594fab48e0b4e8a481a0fefcd9112efc7e4d3c78f7 131.44 / 131.44
=> extracting sha256:5e3b1213efc56598e78bd02083045c164de2a37205e0a62dada823124dc743 0.23 / 0.23
=> extracting sha256:9fd6d46c5b3f26eefad7e2419f5e7450c48ed186c5478076f41c1244b090752 11.35 / 11.35
=> extracting sha256:48af02044bac0432ca522cb9f254b1c91fcea8080fee0b0eb243b2f31ba07 0.80 / 0.80
=> extracting sha256:c4f42be2be53b00ebffcb48c1df13de53843ccc5f5d954a56b48a6169a3af 2.25 / 2.25
=> [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 lm_db
=> exporting to image
=> writing image sha256:1756719486df002fa05dae305c5221513f2f2d1b49a8d242b22a28af0379f19
=> 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
```



### Question 3:

Create an IBM container registry and deploy helloworld app or Job portal app.

```
PS C:\Users\HP> docker tag hello-world icr.io/0034ns/helloworld
PS C:\Users\HP> docker push icr.io/0034ns/helloworld
Using default tag: latest
The push refers to repository [icr.io/0034ns/helloworld]
e07ee1baac5f: Pushed
latest: digest: sha256:f54a58bc1aac5ea1a25d796ae155dc228b3f0e11d046ae276b39c4bf2f13d8c4 size: 525
```

### Question 4:

Create a Kubernetes cluster in IBM cloud and deploy helloworld image or job portal image and also expose the same app to run in node port.

