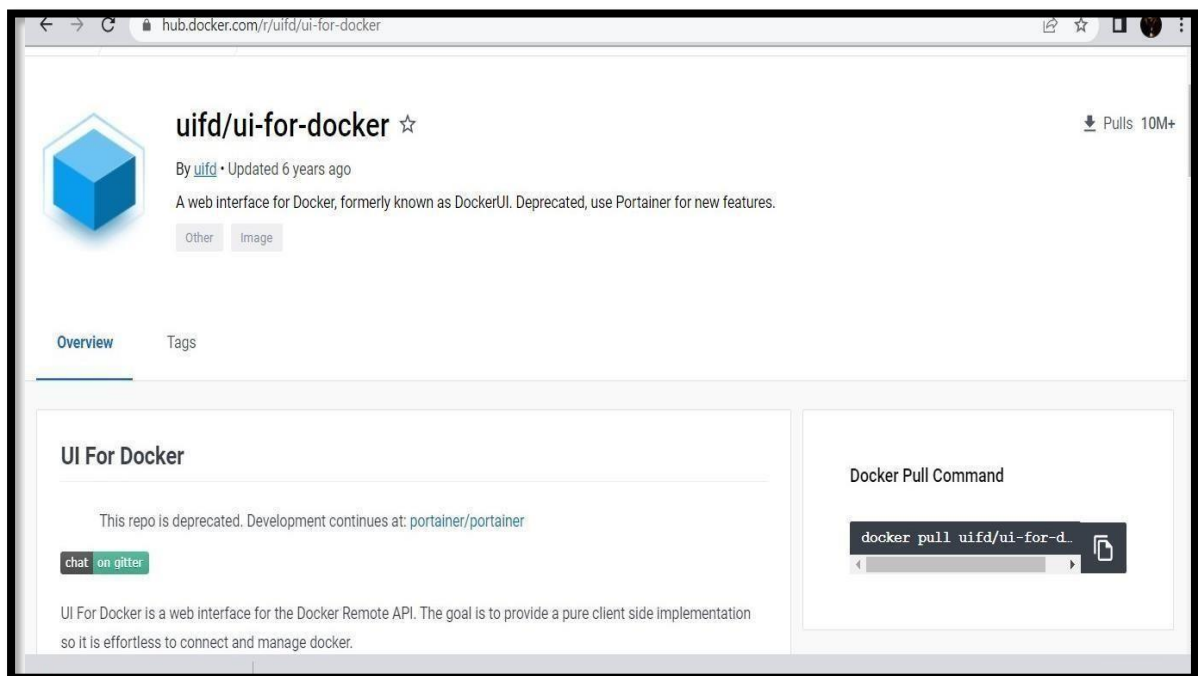


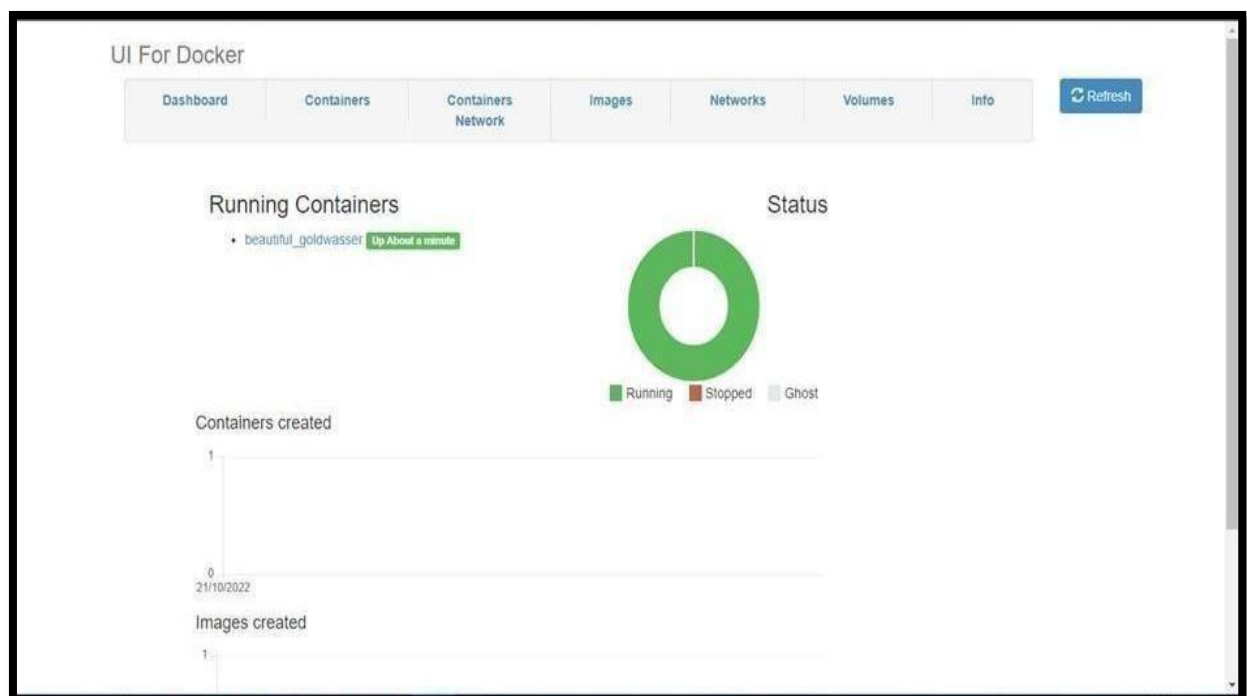
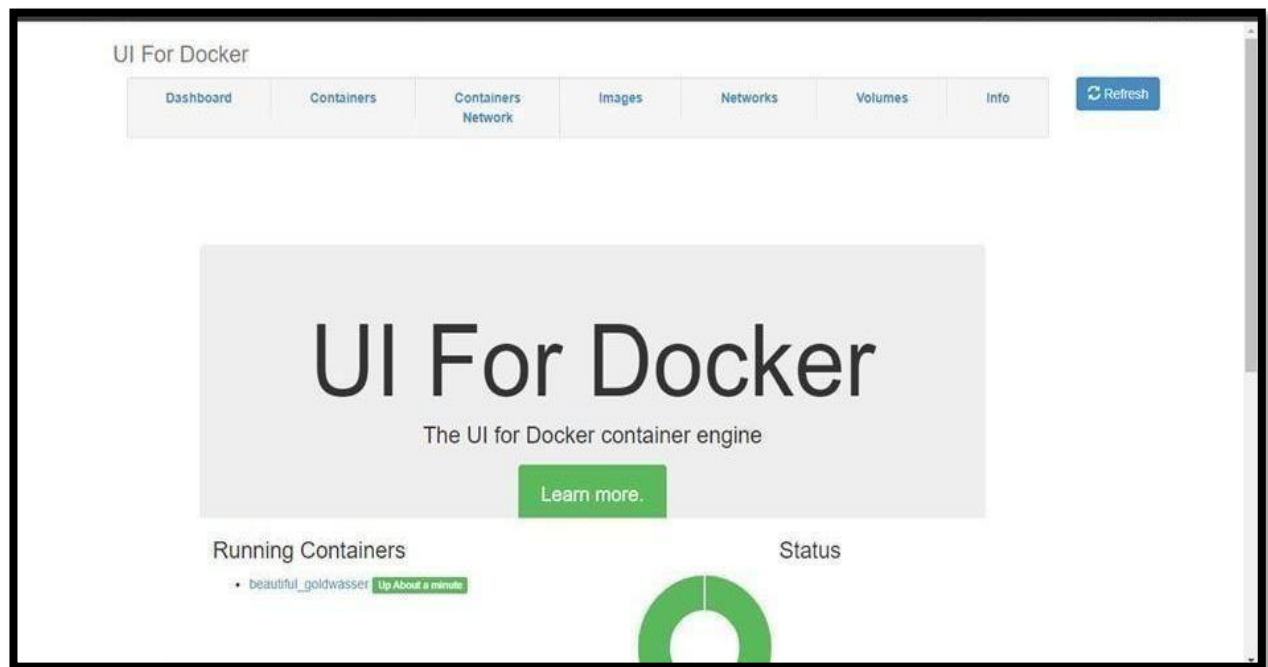
## DOCKER AND KUBERNETES

Assignment Date	19 September 2022
Student Name	MOHAMED THAHIR.S
Student Roll Number	820419104034
Maximum Marks	2 Marks

### Question 1:

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



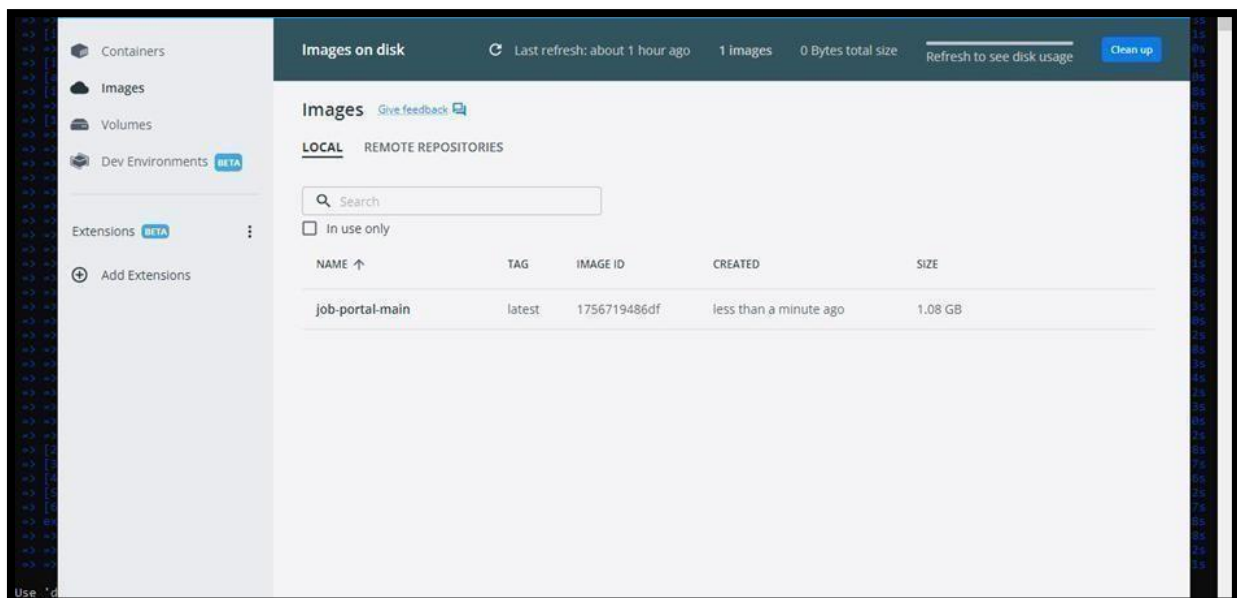


## Question 2:

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:3.8
>> [auth] library/python:pull token for registry-1.docker.io
>> [internal] load build context
>> transferring context: 687B
>> [1/6] FROM docker.io/library/python:3.8@sha256:f852afaf88c25f0d22354d547d892591067aa4826a7fa9a6819df9f380afefc
>> resolve docker.io/library/python:3.8@sha256:f852afaf88c25f0d22354d547d892591067aa4826a7fa9a6819df9f380afefc
>> sha256:f852afaf88c25f0d22354d547d892591067aa4826a7fa9a6819df9f380afefc 1.06GB / 1.06GB
>> sha256:d0074a007d0c070df5ac31872350c2de510f82214c8448e826303b376d3b66d4 2.22KB / 2.22KB
>> sha256:5420863807c6e3ad4c6031fc889abb0486a27634c8092886ff71f3f44d104 0.27KB / 0.27KB
>> sha256:0e29546d541cdd309281d21a73a6d1db78665c1b95b74f73b009e0b77ade1e3 54.92MB / 54.92MB
>> sha256:98829c73b52b92b97d5c07a54fb0f3e921995a296c714b53a32ae67d19231fcd 5.15MB / 5.15MB
>> sha256:cb5b7ae361722f070eca53f35823ed21baa85d61d5d95cd5a95ab53d748cdd56 10.07MB / 10.07MB
>> sha256:6494e4811622b31c027ccac322ca463937fd805f569a93ee6f5c01aade718793 54.57MB / 54.57MB
>> sha256:6f9f74090dfay3fe0172f594faba25e0b4e8a481a0fef09112efc7e4d3c78f7 196.51MB / 196.51MB
>> sha256:5e3b1211efc56508e78d6d070835c15d662a3720ee0e6d3ada02124dc743 6.29MB / 6.29MB
>> extracting sha256:0e29546d541cdd309281d21a73a6d1db78665c1b95b74f73b009e0b77ade1e3
>> sha256:9f0ddc5633af2a6efad7e241bf5e7459c40ed185c5470676f41c1244bd06752 14.21MB / 14.21MB
>> extracting sha256:98829c73b52b92b97d5c07a54fb0f3e921995a296c714b53a32ae67d19231fcd
>> extracting sha256:cb5b7ae361722f070eca53f35823ed21baa85d61d5d95cd5a95ab53d748cdd56
>> sha256:48af02844bac0432ca522cbb9f25401c91fcea0806bfee0ba0b243b2f31bab7 235B / 235B
>> sha256:c4f42be2be53b900ebffc040c1df13de538434ccc5f5d054a56b48a6169a3a3f 2.21MB / 2.21MB
>> extracting sha256:6494e4811622b31c027ccac322ca463937fd805f569a93ee6f5c01aade718793
>> extracting sha256:6f9f74090dfay3fe0172f594faba25e0b4e8a481a0fef09112efc7e4d3c78f7
>> extracting sha256:5e3b1211efc56508e78d6d070835c15d662a3720ee0e6d3ada02124dc743
>> extracting sha256:9f0ddc5633af2a6efad7e241bf5e7459c40ed185c5470676f41c1244bd06752
>> extracting sha256:48af02844bac0432ca522cbb9f25401c91fcea0806bfee0ba0b243b2f31bab7
>> extracting sha256:c4f42be2be53b900ebffc040c1df13de538434ccc5f5d054a56b48a6169a3a3f
>> [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
>> exporting layers
>> writing image sha256:1756719486df002fad5dae305c5221513f2ff3d1ba9add242b22a28af0379f19
>> 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.

