

Assignment 4

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Project Name	Skill/Job Recommender Application

1) Pull an Image from the docker hub and run it in the docker playground

```
PS D:\Projects\Cloud> docker pull hello-world
Using default tag: latest
latest: Pulling from library/hello-world
Digest: sha256:faa03e786c97f07ef34423fccceec2398ec8a5759259f94d99078f264e9d7af
Status: Image is up to date for hello-world:latest
docker.io/library/hello-world:latest
PS D:\Projects\Cloud> docker run hello-world
```

Hello from Docker!

This message shows that your installation appears to be working correctly.

To generate this message, Docker took the following steps:

1. The Docker client contacted the Docker daemon.
2. The Docker daemon pulled the "hello-world" image from the Docker Hub.
(amd64)
3. The Docker daemon created a new container from that image which runs the executable that produces the output you are currently reading.
4. The Docker daemon streamed that output to the Docker client, which sent it to your terminal.

To try something more ambitious, you can run an Ubuntu container with:

```
$ docker run -it ubuntu bash
```

Share images, automate workflows, and more with a free Docker ID:

<https://hub.docker.com/>

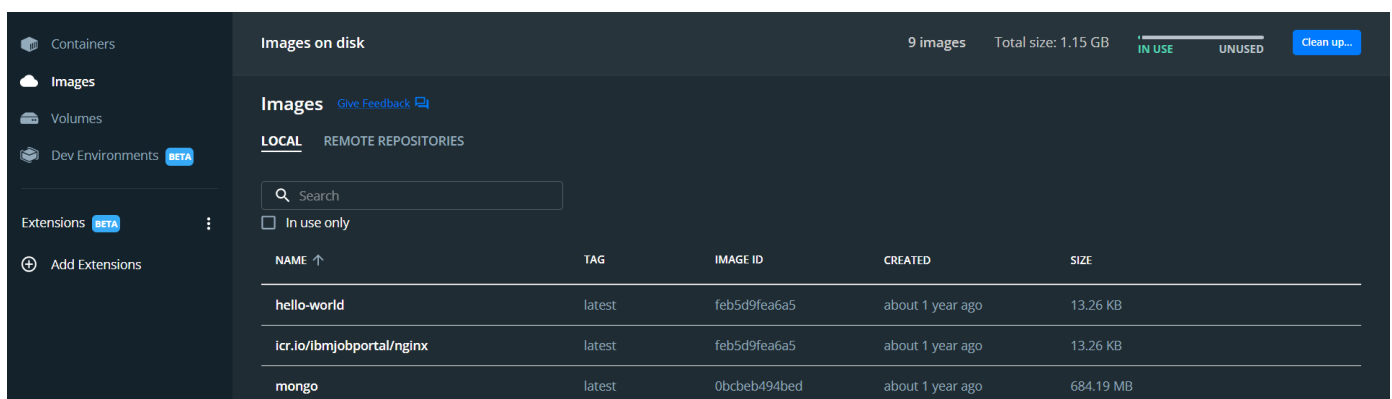
For more examples and ideas, visit:

<https://docs.docker.com/get-started/>

```
PS D:\Projects\Cloud>
```

2) Create a docker file for the job portal application and deploy it in Docker desktop application

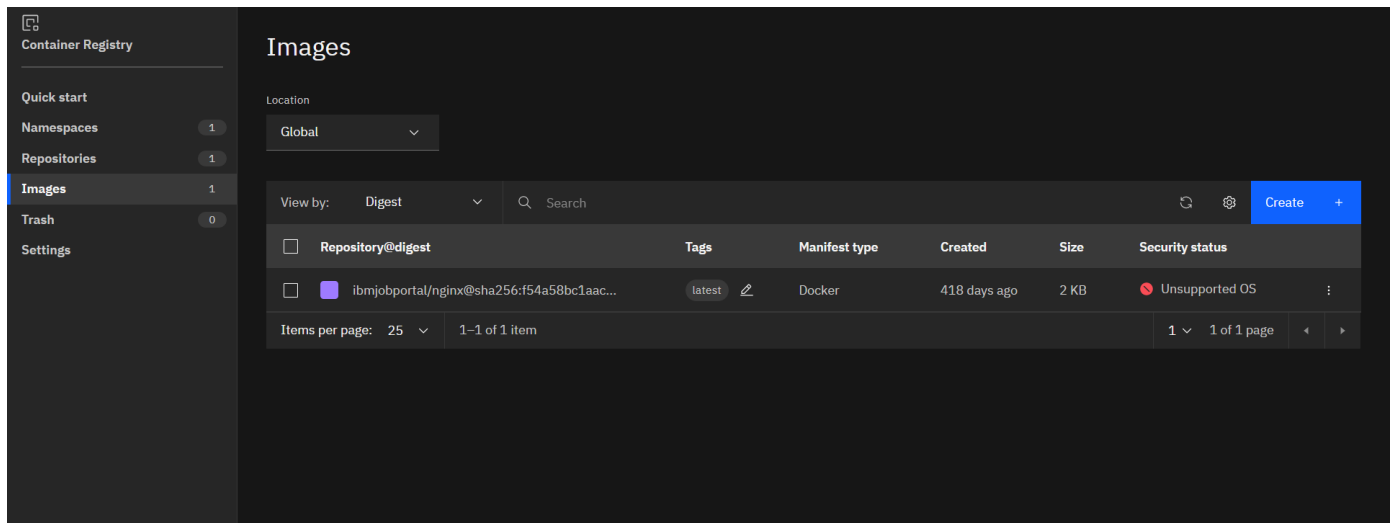
```
1 FROM python:3.8
2
3 WORKDIR /app
4
5 COPY requirements.txt /app/
6
7 RUN pip install -r requirements.txt
8
9 COPY . /app/
10
11 RUN cp .env.dev.sample .env
12
13 EXPOSE 8080
14
15 RUN chmod +x entrypoint.sh
16
17 CMD ["sh", "entrypoint.sh"]
```



The screenshot shows the Docker Desktop application window. On the left is a sidebar with navigation options: Containers, Images, Volumes, Dev Environments (with a BETA badge), Extensions (with a BETA badge), and Add Extensions. The main panel is titled 'Images on disk' and shows '9 images' with a 'Total size: 1.15 GB'. A progress bar indicates 'IN USE' and 'UNUSED' status, with a 'Clean up...' button. Below this, the 'Images' section is active, showing a list of local images. A search bar and a checkbox for 'In use only' are at the top of the list. The list has columns for NAME, TAG, IMAGE ID, CREATED, and SIZE. Three images are listed: 'hello-world', 'icr.io/libmjobportal/nginx', and 'mongo'.

NAME ↑	TAG	IMAGE ID	CREATED	SIZE
hello-world	latest	feb5d9fea6a5	about 1 year ago	13.26 KB
icr.io/libmjobportal/nginx	latest	feb5d9fea6a5	about 1 year ago	13.26 KB
mongo	latest	0bcbeb494bed	about 1 year ago	684.19 MB

3) Create an IBM container registry and deploy HelloWorld app or job portal app



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

