

Assignment-4

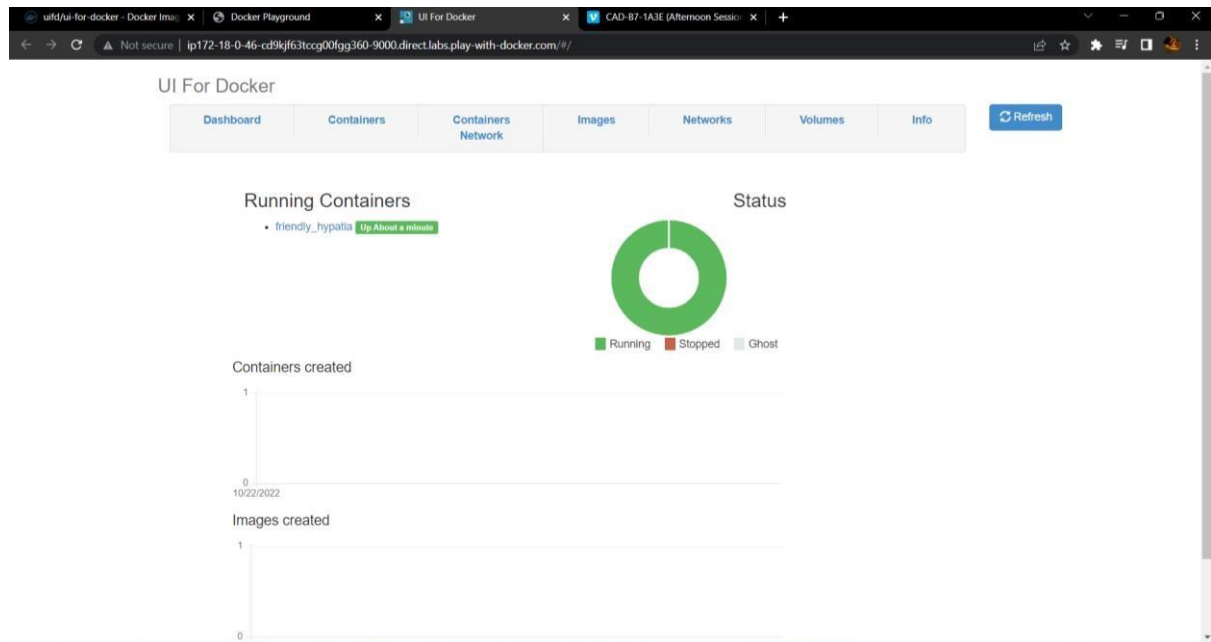
Date	20 October 2022
Team ID	PNT2022TMID15282
Project Name	Personal Expense Tracker Application
Maximum Marks	2 Marks

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

The screenshot shows the Docker Playground interface for an instance named 'cd9kjf63_cd9kj63tccg00fgg36g'. The instance has IP 192.168.0.13. The terminal shows the following commands and output:

```
# The PWD team.
(node1) (local) root@192.168.0.13 ~
$ docker ps -a
CONTAINER ID        IMAGE               COMMAND             CREATED             STATUS              PORTS              NAMES
(node1) (local) root@192.168.0.13 ~
$ docker pull uifd/ui-for-docker
Using default tag: latest
latest: Pulling from uifd/ui-for-docker
841194d080c8: Pull complete
Digest: sha256:fe371ff5a69549269b24073a5ab1244dd4c0b834cbadf244870572150b1cb749
Status: Downloaded newer image for uifd/ui-for-docker:latest
docker.io/uifd/ui-for-docker:latest
(node1) (local) 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
40592613046c0e90ad9757849a942b162bb56067034f73a5ccf38883fdecbe7d
(node1) (local) root@192.168.0.13 ~
$ docker ps -a
CONTAINER ID        IMAGE               COMMAND             CREATED             STATUS              PORTS              NAMES
40592613046c        uifd/ui-for-docker  "/ui-for-docker"    13 seconds ago      Up 11 seconds      0.0.0.0:9000->9000/tcp  friendly_hypatia
(node1) (local) root@192.168.0.13 ~
```

The screenshot shows the Docker Playground interface for the same instance. A dialog box is open asking 'What port would you like to open?' with '9000' entered. The terminal output is the same as the previous screenshot, showing the successful pull and run of the 'uifd/ui-for-docker' image.



2. Create a docker file for the jobportal application and deploy it in Docker desktop application.

Dockerfile

```
FROM python:3.10
```

```
WORKDIR /app
```

```
ADD . /app
```

```
COPY requirements.txt /app
```

```
RUN python3 -m pip install -r requirements.txt
```

```
EXPOSE 3000
```

```
CMD ["python", "app.py", "--host", "0.0.0.0"]
```



```
Command Prompt
E:\Visual studio code\Assignment-2>docker images
REPOSITORY          TAG             IMAGE ID        CREATED         SIZE
assignment-4         latest          b7fcd607a6ae   2 days ago     1.21GB
docker101tutorial   latest          db15a082fb78   11 days ago    28.9MB
alpine/git           latest          42a1cda0ba24   13 days ago    43.6MB

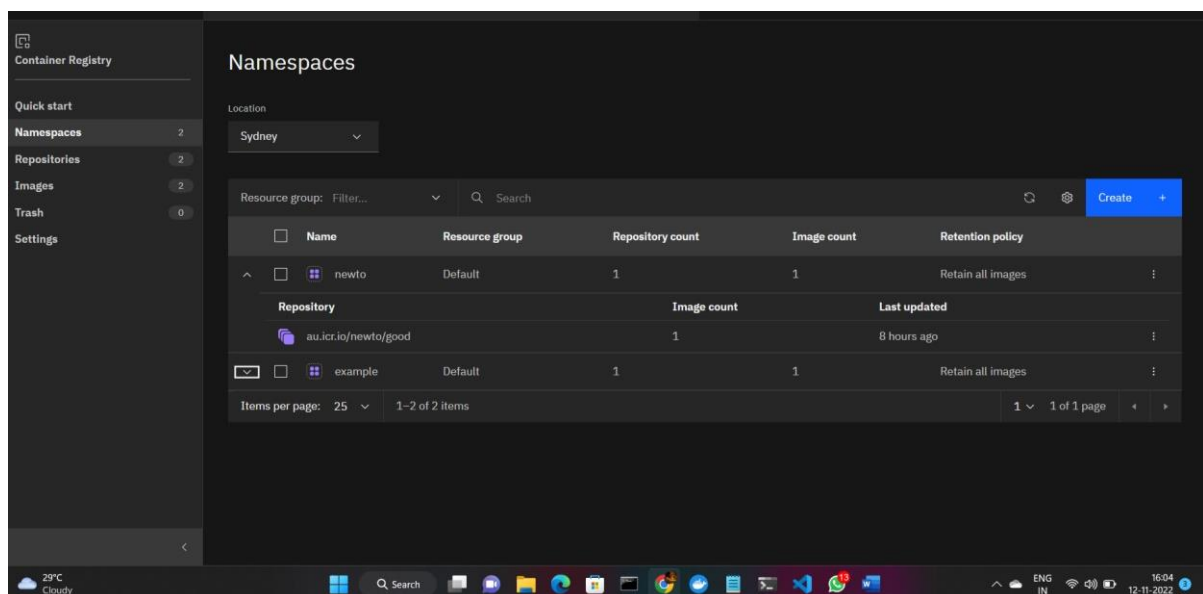
E:\Visual studio code\Assignment-2>docker tag assignment-4:0.1 saranyadavid/assignment-4
Error response from daemon: No such image: assignment-4:0.1

E:\Visual studio code\Assignment-2>docker tag assignment-4 saranyadavid/assignment-4

E:\Visual studio code\Assignment-2>docker push saranyadavid/assignment-4
Using default tag: latest
The push refers to repository [docker.io/saranyadavid/assignment-4]
a7b4e8805e32: Pushed
1567259ba749: Pushed
6a60c6d89d9b: Pushed
1b1bd540ac0: Pushed
cf399be408ea: Mounted from library/python
793b971ccb99: Mounted from library/python
d172a9e6f9e6: Mounted from library/python
0c7daf9a72c8: Mounted from library/python
75ba02937496: Mounted from library/python
288cf3a46e32: Mounted from library/python
186da837555d: Mounted from library/python
955e9335e041: Mounted from library/python
8e079fae2186: Mounted from library/python
latest: digest: sha256:9cba9a4becdaff23d1d83f775196f7877d483cc87326b1d653641736bef9836 size: 3056

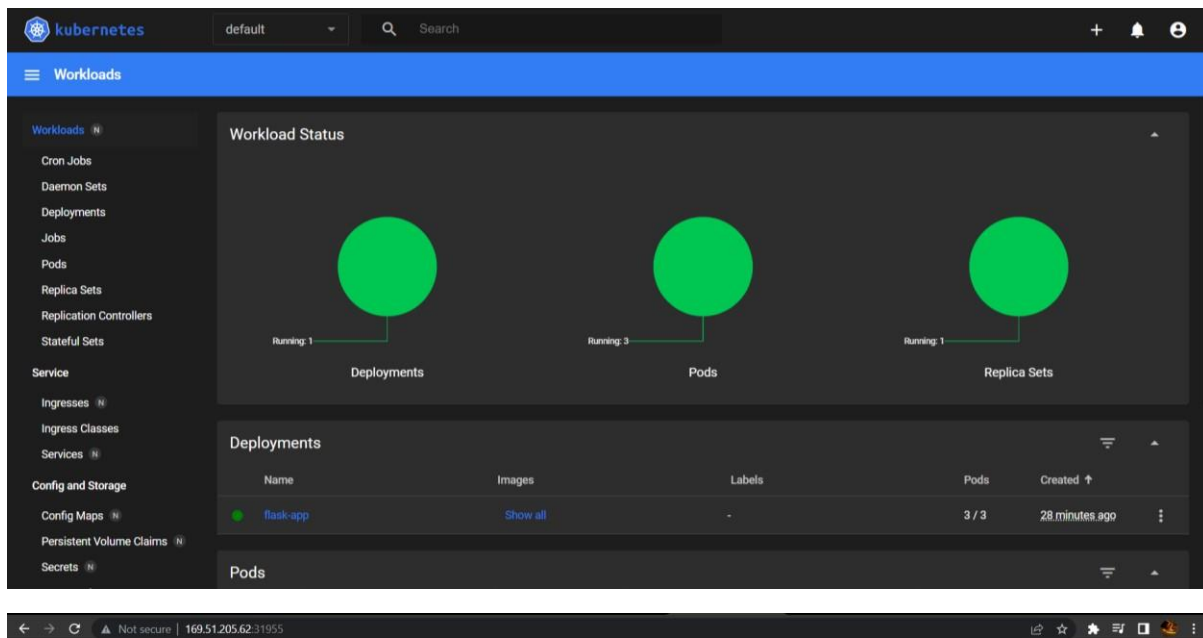
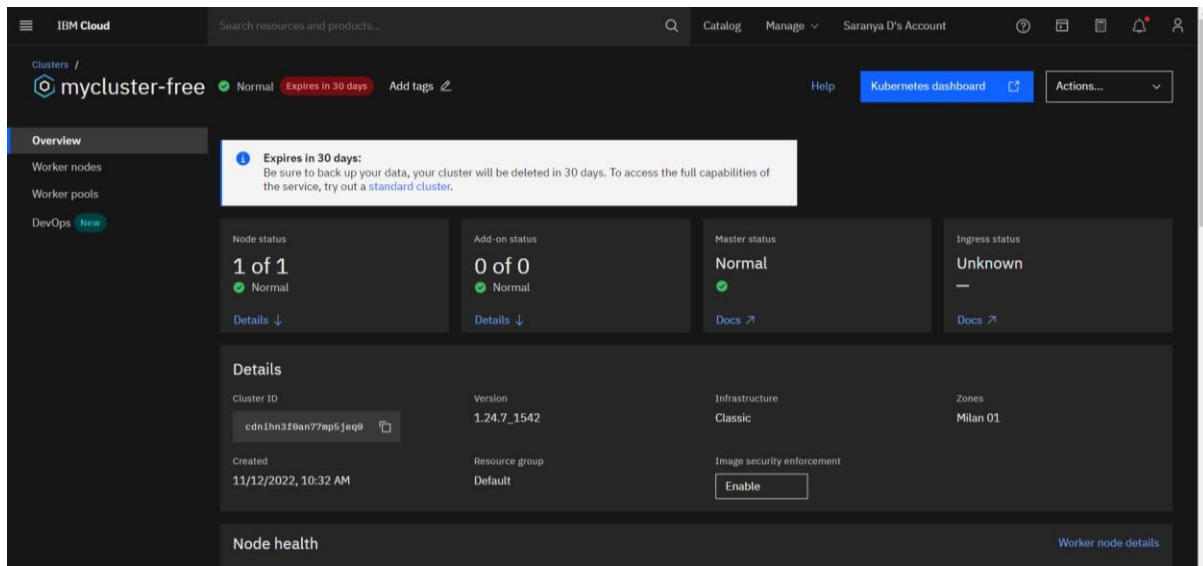
E:\Visual studio code\Assignment-2>
```

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



```
10.144.214.208 Ready <none> 4h28m v1.24.7+IKS

E:\> cd E:\Visual studio code\Assignment-2
E:\Visual studio code\Assignment-2>kubectcl create -f deployment.yaml
deployment.apps/flask-app created
E:\Visual studio code\Assignment-2>kubectcl create -f service.yaml
service/flask-app created
E:\Visual studio code\Assignment-2>kubectcl expose deployment flask-app --type=NodePort --name=flask-app
Error from server (AlreadyExists): services "flask-app" already exists
E:\Visual studio code\Assignment-2>kubectcl get services flask-app
NAME      TYPE      CLUSTER-IP    EXTERNAL-IP    PORT(S)    AGE
flask-app ClusterIP  172.21.224.6  <none>         3002/TCP   3m33s
E:\Visual studio code\Assignment-2>kubectcl get pods
NAME                                READY    STATUS    RESTARTS    AGE
flask-app-74b97586c4-c9kfb         1/1      Running   0            8m28s
flask-app-74b97586c4-m9bpr         1/1      Running   0            8m28s
flask-app-74b97586c4-wsjtc         1/1      Running   0            8m28s
E:\Visual studio code\Assignment-2>kubectcl delete -f service.yaml
service "flask-app" deleted
E:\Visual studio code\Assignment-2>kubectcl create -f service.yaml
service/flask-app created
E:\Visual studio code\Assignment-2>
```



Student Registration Portal

Enter Email ID:

Enter Username:

Enter Password:

Enter Roll number:

