

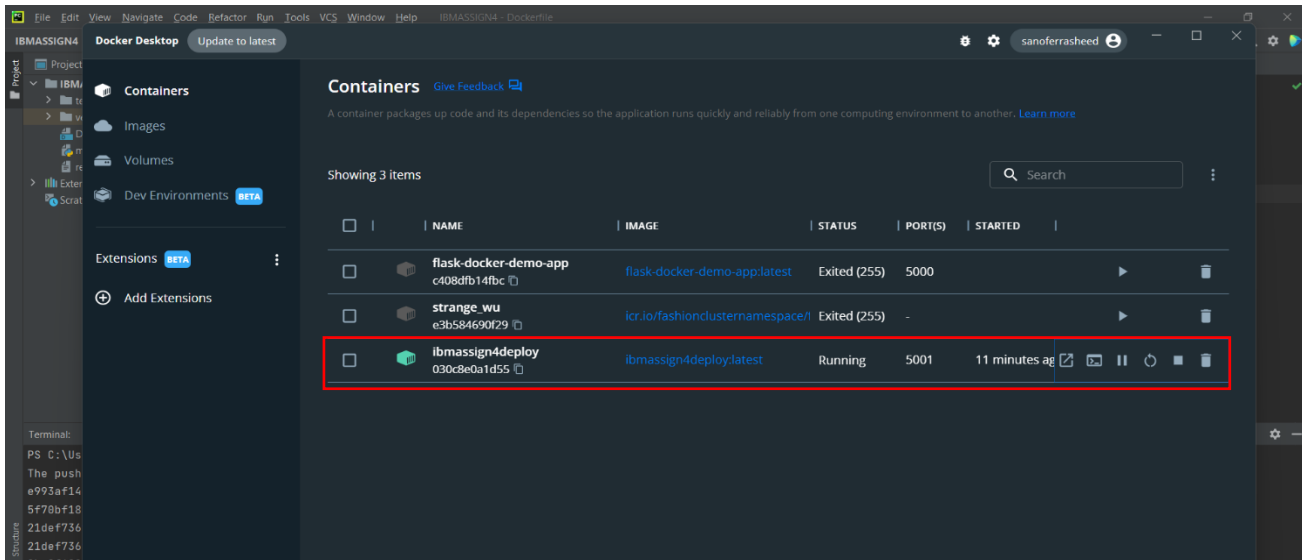
ASSIGNMENT 4

CLOUD APPLICATION DEVELOPMENT

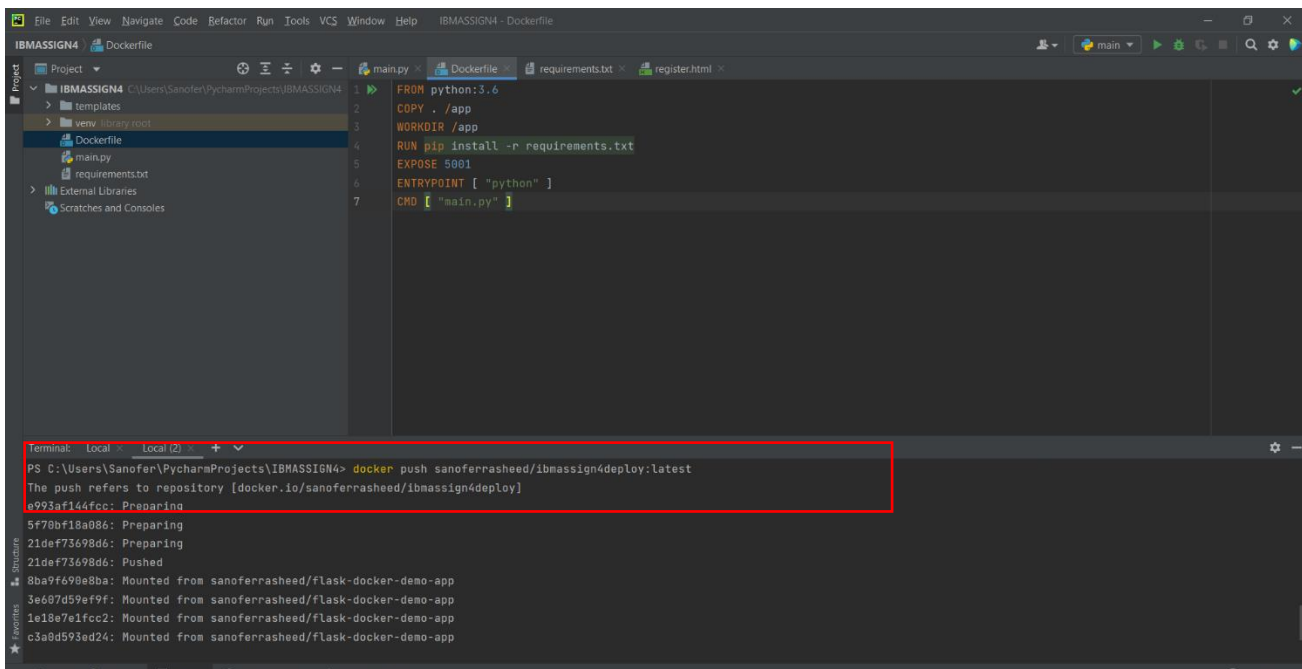
Student Name	Sanofer Fathima AR
Student Roll Number	813819104084
Maximum Marks	2 Marks

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

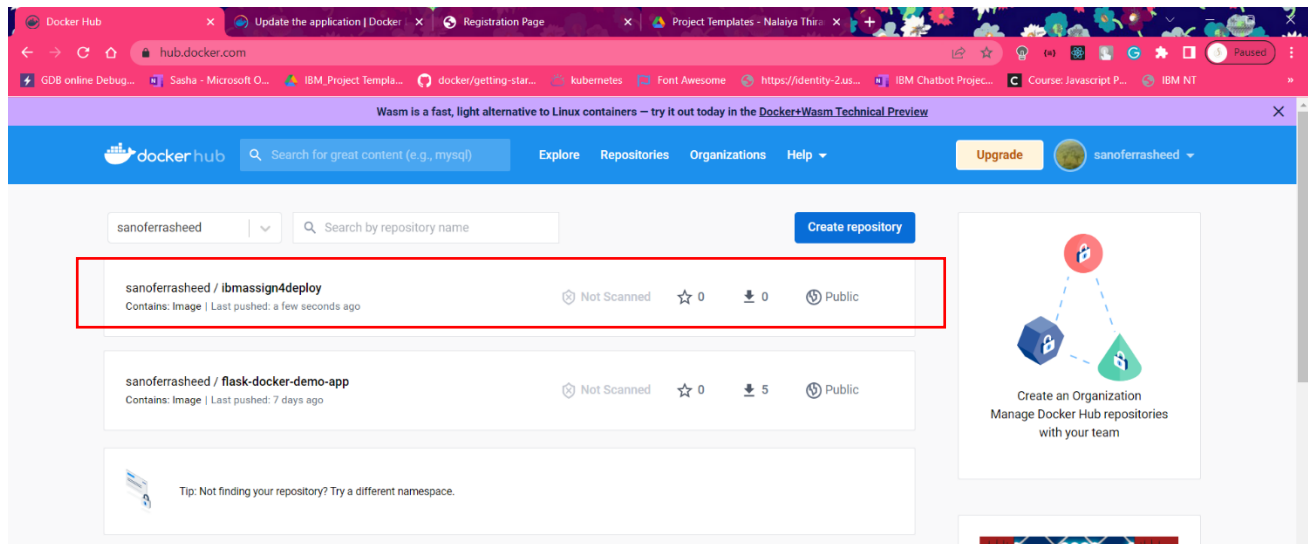
The image is built.



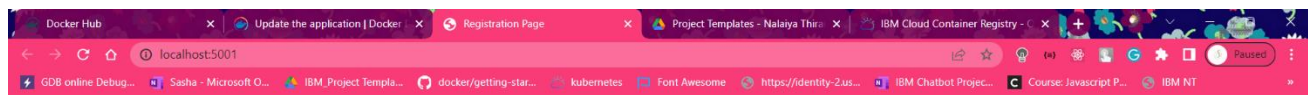
The same image is pushed to docker hub using the command



Here image name is `ibmassign4deploy`. Thus it is pushed in docker hub.



The app is running at the specified port.



Registration Form

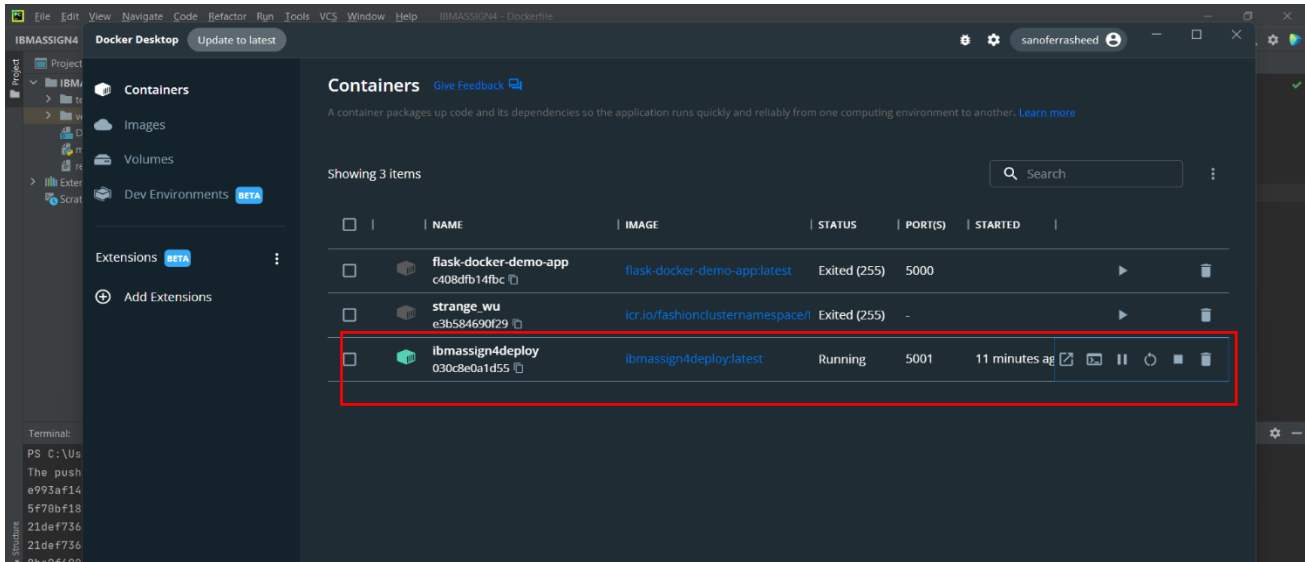
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2. Create a docker file for the application and deploy it in Docker desktop application.

Dockerfile:

```
FROM python:3.6
COPY . /app
WORKDIR /app
RUN pip install -r requirements.txt
EXPOSE 5001
ENTRYPOINT [ "python" ]
CMD [ "main.py" ]
```

Thus docker file created and deployed in docker desktop.

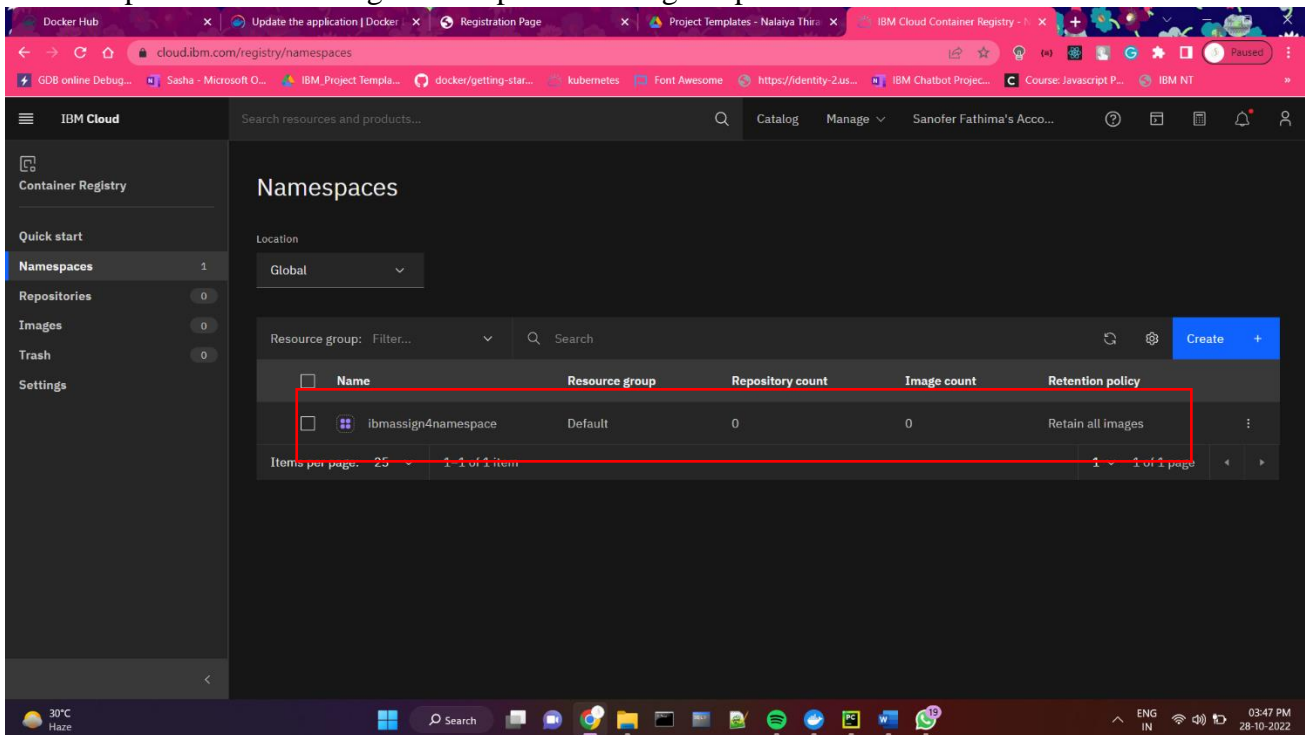


3. Create a IBM container registry and deploy hello world app.

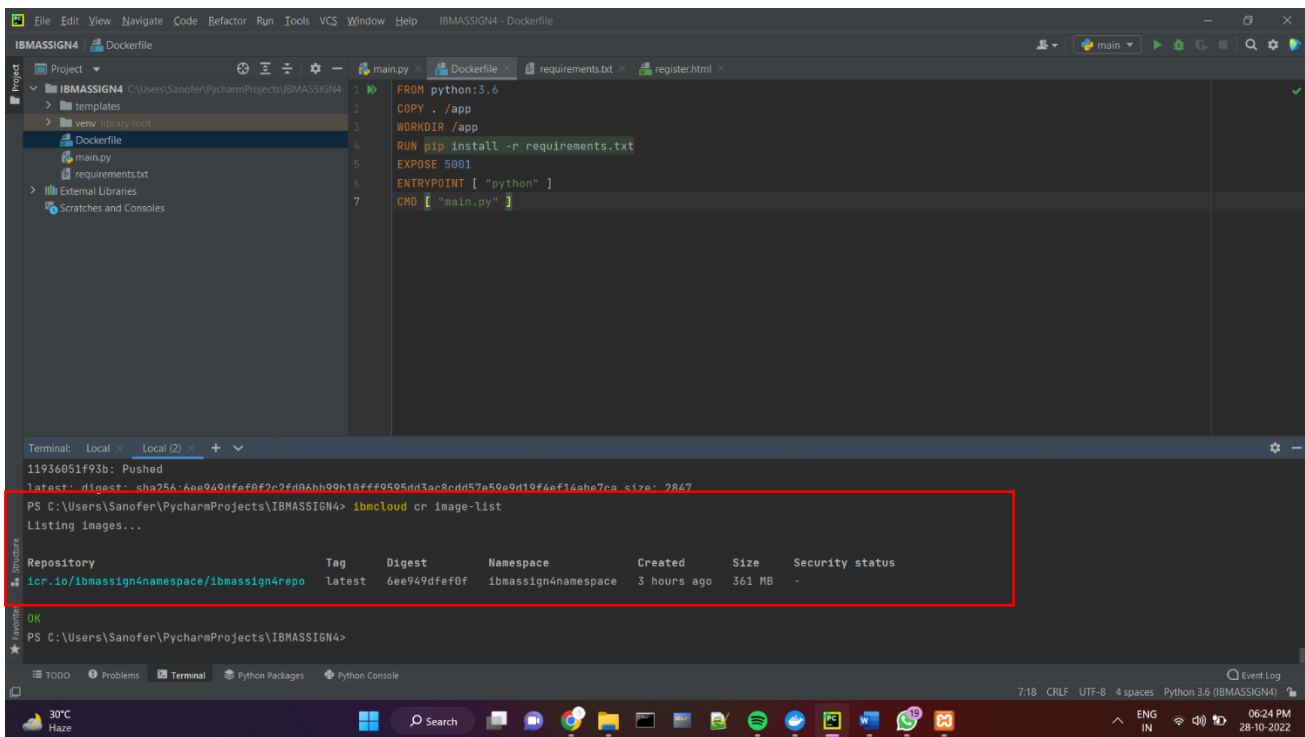
Container registry created using

```
> docker tag sanoferrasheed/ibmassign4deploy:latest  
icr.io/ibmassign4namespace/ibmassign4repo:latest
```

```
> docker push icr.io/ibmassign4namespace/ibmassign4repo:latest
```

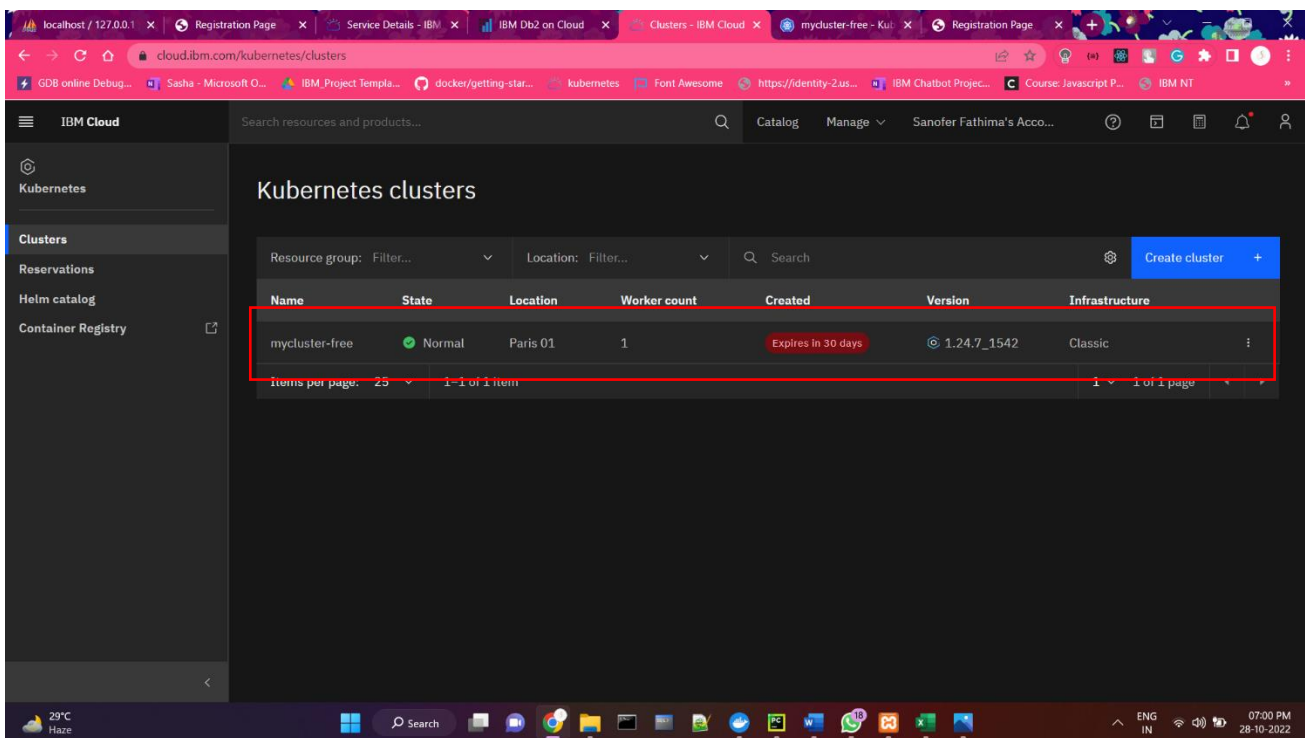


Thus, images in container registry are listed



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

Thus, cluster is created.



localhost / 127.0.0.1 x Registration Page x Service Details - IBM x IBM Db2 on Cloud x mycluster-free - IBM x mycluster-free - K... x Registration Page x

eu-de.containers.cloud.ibm.com/kubeproxy/clusters/cdd12egf0rh8i3bv3crg/service/#/service?namespace=default

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Service > Services

Cron Jobs
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Replica Sets
Replication Controllers
Stateful Sets

Service

Ingresses N
Ingress Classes
Services N

Config and Storage

Config Maps N
Persistent Volume Claims N
Secrets N

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Services

Name	Labels	Type	Cluster IP	Internal Endpoints	External Endpoints	Created
ibmassign4appln	Show all	LoadBalancer	172.21.216.77	ibmassign4appln:5001 TCP ibmassign4appln:30878 TCP	-	7 minutes ago
kubernetes	Show all	ClusterIP	172.21.0.1	kubernetes:443 TCP kubernetes:0 TCP	-	28 minutes ago

APP IS LIVE AT <http://159.122.174.152:30878/>