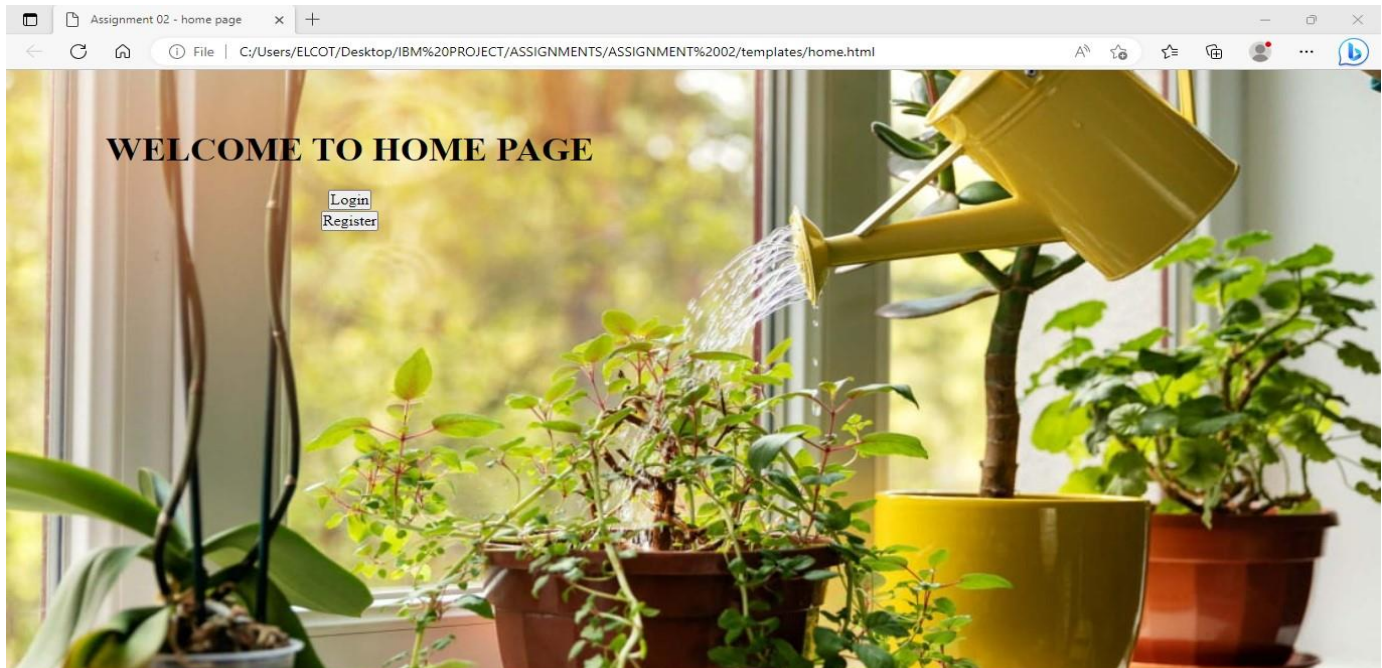


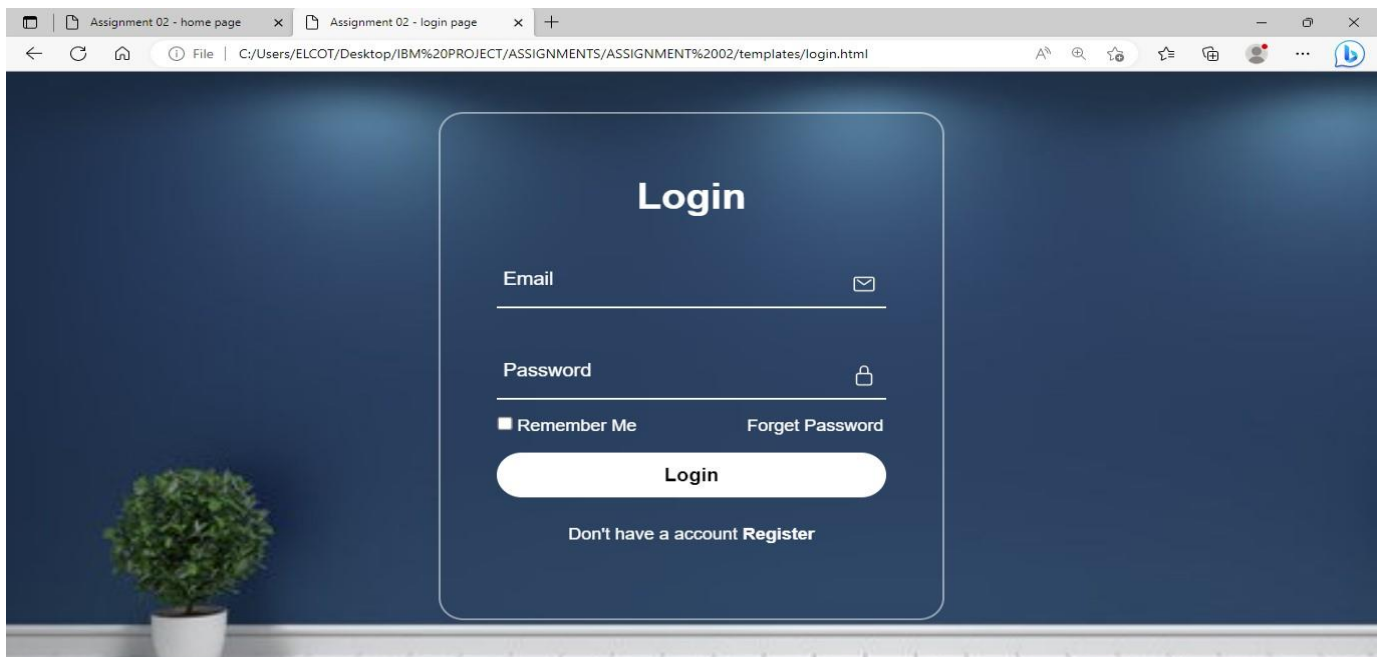
ASSIGNMENT 03

HTML & FLASK FILES IMAGES – OUTPUTS

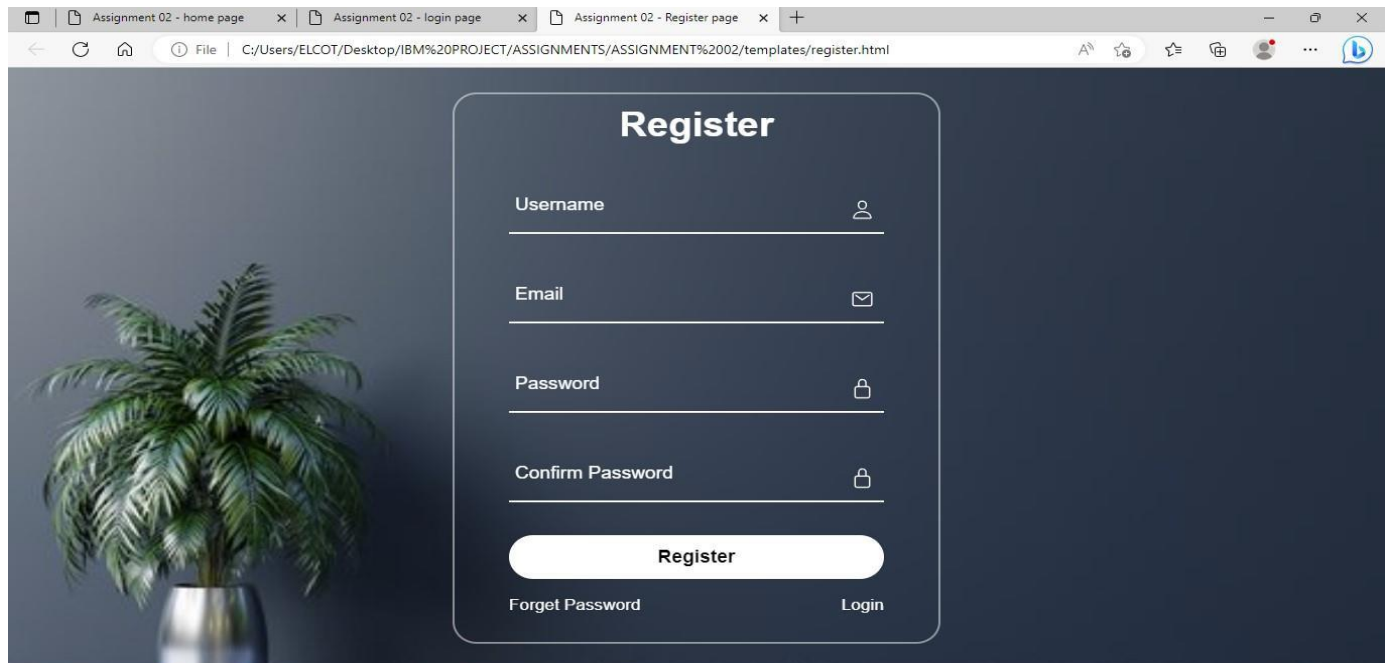
home.html



login.html



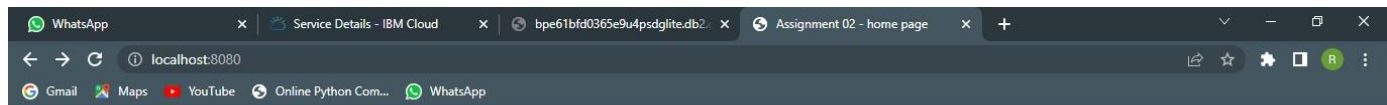
register.html



The screenshot shows a web browser window with the address bar displaying the file path: C:/Users/ELCOT/Desktop/IBM%20PROJECT/ASSIGNMENTS/ASSIGNMENT%2002/templates/register.html. The browser has three tabs open: 'Assignment 02 - home page', 'Assignment 02 - login page', and 'Assignment 02 - Register page'. The 'Register' page features a dark blue background with a large image of a green fern plant on the left. On the right, there is a white registration form with the title 'Register'. The form contains four input fields: 'Username' (with a person icon), 'Email' (with an envelope icon), 'Password' (with a lock icon), and 'Confirm Password' (with a lock icon). Below these fields is a white 'Register' button. At the bottom of the form, there are two links: 'Forget Password' and 'Login'.

Flask

app.py



WELCOME TO HOME PAGE

Login
Register

DOCKER DESKTOP IMAGE CREATION:

```
C:\Windows\System32\cmd.e x + v
Microsoft Windows [Version 10.0.22621.1555]
(c) Microsoft Corporation. All rights reserved.

C:\Users\rekha\OneDrive\Desktop\ibm 3>docker build -t cloudapp .
[+] Building 1156.1s (14/14) FINISHED
=> [internal] load .dockerignore 0.1s
=> => transferring context: 2B 0.0s
=> [internal] load build definition from Dockerfile 0.1s
=> => transferring dockerfile: 231B 0.0s
=> [internal] load metadata for docker.io/library/python:3.6 39.5s
=> [auth] library/python:pull token for registry-1.docker.io 0.0s
=> [internal] load build context 0.1s
=> => transferring context: 78.18kB 0.0s
=> [1/6] FROM docker.io/library/python:3.6@sha256:f8652afaf88c25f0d22354d547d892591067aa4026a7fa9a6819df9f300af6fc 915.4s
=> => resolve docker.io/library/python:3.6@sha256:f8652afaf88c25f0d22354d547d892591067aa4026a7fa9a6819df9f300af6fc 0.0s
=> => sha256:f8652afaf88c25f0d22354d547d892591067aa4026a7fa9a6819df9f300af6fc 1.86kB / 1.86kB 0.0s
=> => sha256:d097a4907a8ec079df5ac31872359c2de510f82214c0448e926393b376d3b60d 2.22kB / 2.22kB 0.0s
=> => sha256:9b829c73b52b92b97d5c07a54fb0f3e921995a296c714b53a32ae67d19231fcd 5.15MB / 5.15MB 271.1s
=> => sha256:cb5b7ae361722f070eca53f35823ed21baa85d61d5d95cd5a95ab53d740cdd56 10.87MB / 10.87MB 452.8s
=> => sha256:54260638d07c5e3ad24c6e21fc889abbc8486a27634c0892086ff7f1f3f44b104 9.27kB / 9.27kB 0.0s
=> => sha256:0e29546d541cddb309281d21a73a9d1db78665c1b95b74f32b009e0b77a6e1e3 54.92MB / 54.92MB 797.2s
=> => sha256:6494e4811622b31c027ccac322ca463937fd805f569a93e6f15c01aade718793 54.57MB / 54.57MB 761.3s
=> => sha256:6f9f74896dfa93fe0172f594faba85e0b4e8a0481a0fef9112efc7e4d3c78f7 196.51MB / 196.51MB 909.8s
=> => sha256:5e3b1213efc56598e78bd602983945c164de2a37205e06a62dada823124dc743 6.29MB / 6.29MB 796.3s
=> => sha256:9fddfdc56334f2e6efad7e241bf5e7459c40ed105c5478676f41c1244bd96752 14.21MB / 14.21MB 828.4s
=> => sha256:404f02044bac0432ca522cbb9f254b1c91fcea6806bfeef0be0b243b2f31bab7 235B / 235B 810.6s
=> => extracting sha256:0e29546d541cddb309281d21a73a9d1db78665c1b95b74f32b009e0b77a6e1e3 1.5s
=> => extracting sha256:9b829c73b52b92b97d5c07a54fb0f3e921995a296c714b53a32ae67d19231fcd 0.2s
=> => extracting sha256:cb5b7ae361722f070eca53f35823ed21baa85d61d5d95cd5a95ab53d740cdd56 0.2s
=> => extracting sha256:6494e4811622b31c027ccac322ca463937fd805f569a93e6f15c01aade718793 1.7s
=> => sha256:c4f42be2be53b900ebffc040c1df13de538434ccc5f5d954a56848a6169a3a3f 2.21MB / 2.21MB 822.7s
=> => extracting sha256:6f9f74896dfa93fe0172f594faba85e0b4e8a0481a0fef9112efc7e4d3c78f7 4.4s
```

```
C:\Windows\System32\cmd.e x + v
=> => sha256:9b829c73b52b92b97d5c07a54fb0f3e921995a296c714b53a32ae67d19231fcd 5.15MB / 5.15MB 271.1s
=> => sha256:cb5b7ae361722f070eca53f35823ed21baa85d61d5d95cd5a95ab53d740cdd56 10.87MB / 10.87MB 452.8s
=> => sha256:54260638d07c5e3ad24c6e21fc889abbc8486a27634c0892086ff7f1f3f44b104 9.27kB / 9.27kB 0.0s
=> => sha256:0e29546d541cddb309281d21a73a9d1db78665c1b95b74f32b009e0b77a6e1e3 54.92MB / 54.92MB 797.2s
=> => sha256:6494e4811622b31c027ccac322ca463937fd805f569a93e6f15c01aade718793 54.57MB / 54.57MB 761.3s
=> => sha256:6f9f74896dfa93fe0172f594faba85e0b4e8a0481a0fef9112efc7e4d3c78f7 196.51MB / 196.51MB 909.8s
=> => sha256:5e3b1213efc56598e78bd602983945c164de2a37205e06a62dada823124dc743 6.29MB / 6.29MB 796.3s
=> => sha256:9fddfdc56334f2e6efad7e241bf5e7459c40ed105c5478676f41c1244bd96752 14.21MB / 14.21MB 828.4s
=> => sha256:404f02044bac0432ca522cbb9f254b1c91fcea6806bfeef0be0b243b2f31bab7 235B / 235B 810.6s
=> => extracting sha256:0e29546d541cddb309281d21a73a9d1db78665c1b95b74f32b009e0b77a6e1e3 1.5s
=> => extracting sha256:9b829c73b52b92b97d5c07a54fb0f3e921995a296c714b53a32ae67d19231fcd 0.2s
=> => extracting sha256:cb5b7ae361722f070eca53f35823ed21baa85d61d5d95cd5a95ab53d740cdd56 0.2s
=> => extracting sha256:6494e4811622b31c027ccac322ca463937fd805f569a93e6f15c01aade718793 1.7s
=> => sha256:c4f42be2be53b900ebffc040c1df13de538434ccc5f5d954a56848a6169a3a3f 2.21MB / 2.21MB 822.7s
=> => extracting sha256:6f9f74896dfa93fe0172f594faba85e0b4e8a0481a0fef9112efc7e4d3c78f7 4.4s
=> => extracting sha256:5e3b1213efc56598e78bd602983945c164de2a37205e06a62dada823124dc743 0.2s
=> => extracting sha256:9fddfdc56334f2e6efad7e241bf5e7459c40ed105c5478676f41c1244bd96752 0.4s
=> => extracting sha256:404f02044bac0432ca522cbb9f254b1c91fcea6806bfeef0be0b243b2f31bab7 0.0s
=> => extracting sha256:c4f42be2be53b900ebffc040c1df13de538434ccc5f5d954a56848a6169a3a3f 0.1s
=> [auth] library/python:pull token for registry-1.docker.io 0.0s
=> [auth] library/python:pull token for registry-1.docker.io 0.0s
=> [2/6] WORKDIR /app 0.3s
=> [3/6] ADD . /app 0.0s
=> [4/6] COPY requirements.txt /app 0.0s
=> [5/6] RUN python3 -m pip install -r requirements.txt 6.5s
=> [6/6] RUN python3 -m pip install ibm_db 193.5s
=> => exporting to image 0.7s
=> => exporting layers 0.6s
=> => writing image sha256:5d007bb2a64037ccf5b227ff592f0010417e62ea7fa7b68cb643dd6543348627 0.0s
=> => naming to docker.io/library/cloudapp 0.0s
```


SCREENSHOTS OF THE DOCKER DESKTOP/DOCKER PLAYGROUND AFTER RUNNING THE IMAGE

```
docker run <image-name-or-  
image-id>docker run nginx
```

```
Administrator: Command Prompt
Microsoft Windows [Version 10.0.17763.1577]
(c) 2018 Microsoft Corporation. All rights reserved.

C:\Windows\system32>ibmcloud login --sso
API endpoint: https://cloud.ibm.com
Region: us-south

Get a one-time code from https://identity-3.uk-south.iam.cloud.ibm.com/identity/passcode to proceed.
Open the URL in the default browser? [Y/n] > y
One-time code >
Authenticating...
Credentials were rejected.
Code: BXNIM0418E, message: Provided passcode is invalid.

Get a one-time code from https://identity-3.uk-south.iam.cloud.ibm.com/identity/passcode to proceed.
Open the URL in the default browser? [Y/n] > y
One-time code >
Authenticating...
OK

Targeted account Rekha Karunakaran's Account (09aad9fa5f124af9bf8381fc024011c)

API endpoint: https://cloud.ibm.com
Region: us-south
User: rekhakarunakaran0212@gmail.com
Account: Rekha Karunakaran's Account (09aad9fa5f124af9bf8381fc024011c)
Resource group: No resource group targeted, use 'ibmcloud target -g RESOURCE_GROUP'
CF API endpoint:
Org:
Space:

C:\Windows\system32>
```

```
Administrator: Command Prompt
Microsoft Windows [Version 10.0.17763.1577]
(c) 2018 Microsoft Corporation. All rights reserved.

C:\Windows\system32>ibmcloud login --sso
API endpoint: https://cloud.ibm.com
Region: us-south

Get a one-time code from https://identity-3.uk-south.iam.cloud.ibm.com/identity/passcode to proceed.
Open the URL in the default browser? [Y/n] > y
One-time code >
Authenticating...
Credentials were rejected.
Code: BXNIM0418E, message: Provided passcode is invalid.

Get a one-time code from https://identity-3.uk-south.iam.cloud.ibm.com/identity/passcode to proceed.
Open the URL in the default browser? [Y/n] > y
One-time code >
Authenticating...
OK

Targeted account Rekha Karunakaran's Account (09aad9fa5f124af9bf8381fc024011c)

API endpoint: https://cloud.ibm.com
Region: us-south
User: rekhakarunakaran0212@gmail.com
Account: Rekha Karunakaran's Account (09aad9fa5f124af9bf8381fc024011c)
Resource group: No resource group targeted, use 'ibmcloud target -g RESOURCE_GROUP'
CF API endpoint:
Org:
Space:

C:\Windows\system32>ibmcloud plugin install container-service
Looking up 'container-service' from repository 'IBM Cloud'...
Plug-in 'container-service[kubernetes-service/ks] 1.0.516' found in repository 'IBM Cloud'
Attempting to download the binary file...
[ 27.93 MiB / 27.93 MiB [=====] 100.00% 51s
29288960 bytes downloaded
Installing binary...
OK
Plug-in 'container-service 1.0.516' was successfully installed into C:\Users\ELCOT\bluemix\plugins\container-service. Use 'ibmcloud plugin show container-service' to show its details.

C:\Windows\system32>ibmcloud plugin install container-registry
```

```

Administrator: Command Prompt
how its details.

C:\Windows\system32>ibmcloud plugin install container-registry
Looking up 'container-registry' from repository 'IBM Cloud'...
Plug-in 'container-registry[cr] 1.0.8' found in repository 'IBM Cloud'
Attempting to download the binary file...
 12.24 MiB / 12.24 MiB [=====] 100.00% 17s
12833792 bytes downloaded
Installing binary...
OK
Plug-in 'container-registry 1.0.8' was successfully installed into C:\Users\ELCOT\bluemix\plugins\container-registry. Use 'ibmcloud plugin show container-registry' to
show its details.

C:\Windows\system32>ibmcloud plugin install observe-service
Looking up 'observe-service' from repository 'IBM Cloud'...
Plug-in 'observe-service 1.0.82' found in repository 'IBM Cloud'
Attempting to download the binary file...
 13.38 MiB / 13.38 MiB [=====] 100.00% 30s
14024704 bytes downloaded
Installing binary...
OK
Plug-in 'observe-service 1.0.82' was successfully installed into C:\Users\ELCOT\bluemix\plugins\observe-service. Use 'ibmcloud plugin show observe-service' to show its
details.

C:\Windows\system32>ibmcloud plugin list
Listing installed plug-ins...

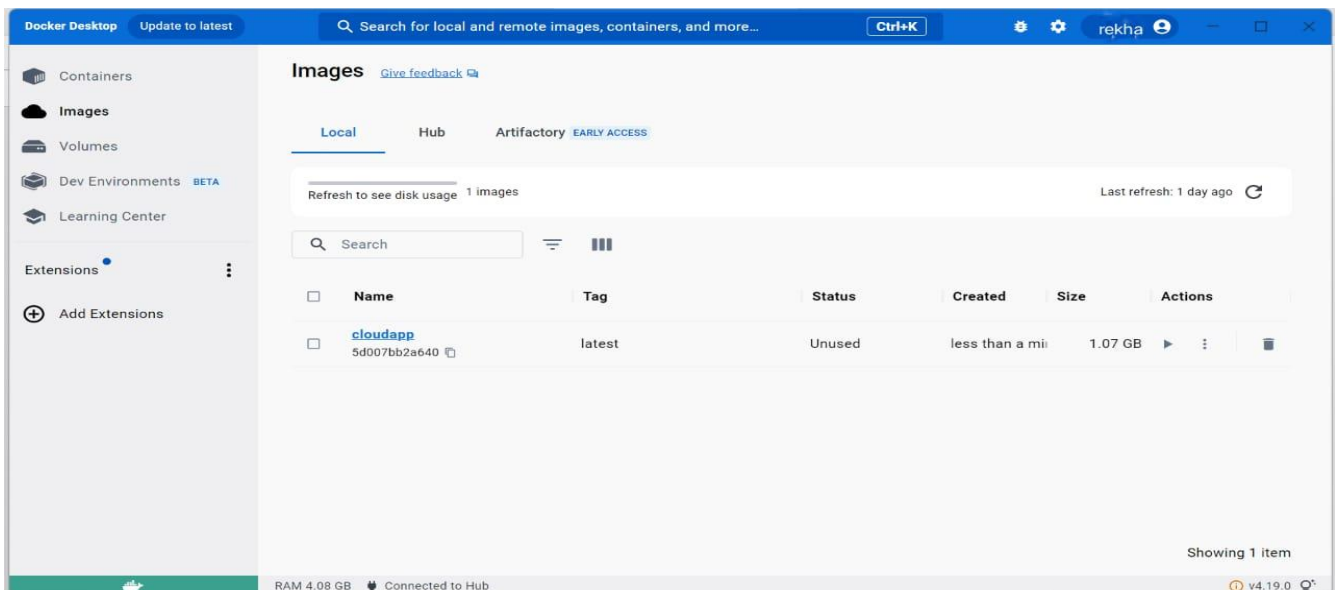
Plugin Name          Version  Status  Private endpoints supported
container-registry[cr] 1.0.8    true
container-service[kubernetes-service/ks] 1.0.516  false
observe-service[ob] 1.0.82    false

C:\Windows\system32>ibmcloud cr region-set global
The region is set to 'global', the registry is 'icr.io'.

OK

```

IMAGE IN DOCKER



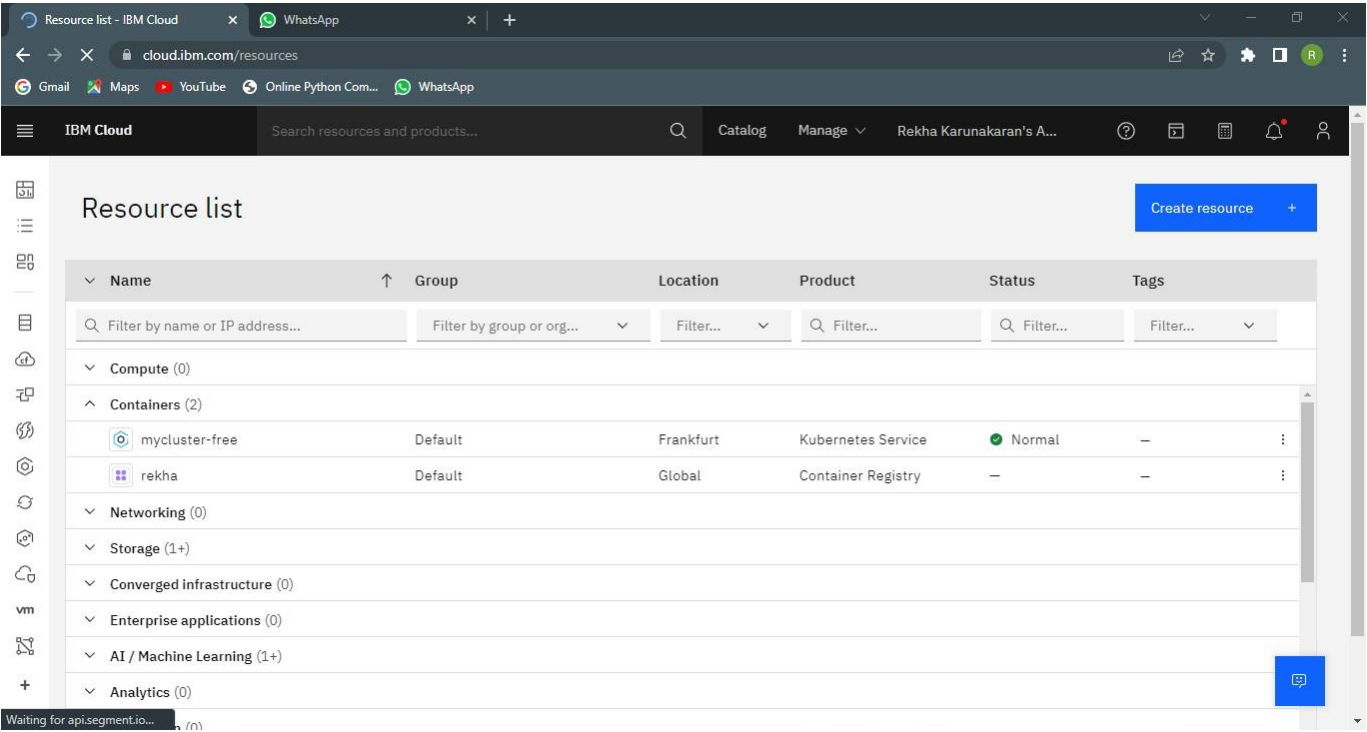
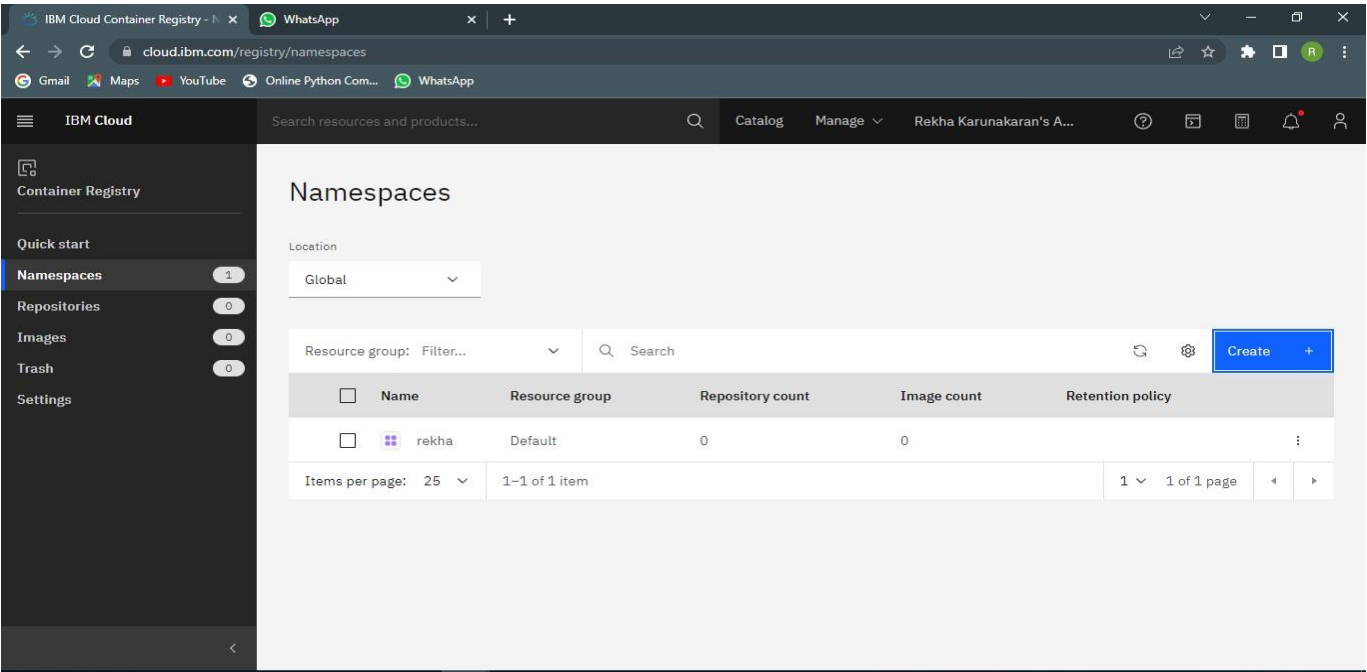
DOCKER IMAGE PULL

```

admin@docker-host ~$ docker run nginx
Unable to find image 'nginx:latest' locally
latest: Pulling from library/nginx
f1f26f570256: Pull complete
84181e80d10e: Pull complete
1ff0f94a8007: Pull complete
d776269cad10: Pull complete
e9427fcfa864: Pull complete
d4ceccbfcc269: Pull complete
Digest: sha256:6176613e7846a63de069a85333bb4778a822f853df67fe46a688b3f0e4d9cb87
Status: Downloaded newer image for nginx:latest
/docker-entrypoint.sh: /docker-entrypoint.d/ is not empty, will attempt to perform
onfiguration
/docker-entrypoint.sh: Looking for shell scripts in /docker-entrypoint.d/
/docker-entrypoint.sh: Launching /docker-entrypoint.d/10-listen-on-ipv6-by-default.sh
10-listen-on-ipv6-by-default.sh: info: Getting the checksum of /etc/nginx/conf.d/de
fault.conf
10-listen-on-ipv6-by-default.sh: info: Enabled listen on IPv6 in /etc/nginx/conf.d/
default.conf
/docker-entrypoint.sh: Launching /docker-entrypoint.d/20-envsubst-on-templates.sh
/docker-entrypoint.sh: Launching /docker-entrypoint.d/30-tune-worker-processes.sh
/docker-entrypoint.sh: Configuration complete; ready for start up
2023/03/24 04:20:17 [notice] 1#1: using the "epoll" event method
2023/03/24 04:20:17 [notice] 1#1: nginx/1.23.3
2023/03/24 04:20:17 [notice] 1#1: built by gcc 10.2.1 202110110 (Debian 10.2.1-6)
2023/03/24 04:20:17 [notice] 1#1: OS: Linux 5.4.0-1101-gcp
2023/03/24 04:20:17 [notice] 1#1: getrlimit(RLIMIT_NOFILE): 1048576:1048576
2023/03/24 04:20:17 [notice] 1#1: start worker processes
2023/03/24 04:20:17 [notice] 1#1: start worker process 83
2023/03/24 04:20:17 [notice] 1#1: start worker process 84
2023/03/24 04:20:17 [notice] 1#1: start worker process 85
2023/03/24 04:20:17 [notice] 1#1: start worker process 86
2023/03/24 04:20:17 [notice] 1#1: start worker process 87

```

CONTAINER REGISTRY



KUBERNETES DASHBOARD

Workloads

Workloads

Cron Jobs

Daemon Sets

Deployments

Jobs

Pods

Replica Sets

Replication Controllers

Stateful Sets

Service

Ingresses

Ingress Classes

Services

Config and Storage

There is nothing to display here

You can deploy a containerized app, select other namespace or take the Dashboard Tour to learn more.

Cluster > Nodes

Cluster Role Bindings

Cluster Roles

Events

Namespaces

Network Policies

Nodes

Persistent Volumes

Role Bindings

Roles

Service Accounts

Custom Resource Definitions

Settings

About

CPU Usage

Memory Usage

Nodes

Name	Labels	CPU Ready	CPU requests (cores)	CPU limits (cores)	CPU capacity (cores)	Memory requests (bytes)	Memory limits (bytes)	Memory capacity (bytes)	Pods	Create
10.144.51.100	Show all	True	955.00m (49.74%)	498.00m (25.94%)	1.92	724.52Mi (26.93%)	5.43Gi (206.83%)	2.63Gi	13 (11.82%)	9 days ago


mycluster-free - IBM Cloud

mycluster-free - Kubernetes Dashboard

nmcareereducation.smartintern...

eu-de.containers.cloud.ibm.com/kubeproxy/clusters/chctcf6f06p75ors0etg/service/#/namespace?namespace=default

GmailMapsYouTubeOnline Python Com...WhatsApp

kubernetes

default

Search

+🔔👤

Cluster > Namespaces

Service

Ingresses N

Ingress Classes

Services N

Config and Storage

Config Maps N

Persistent Volume Claims N

Secrets N

Storage Classes

Cluster

Cluster Role Bindings








Cluster Roles

Events N

Namespaces

Network Policies N

Namespaces

Name	Labels	Phase	Created ↑
 ibm-cert-store	Show all	Active	9 days ago
 ibm-operators	Show all	Active	9 days ago
 ibm-system	Show all	Active	9 days ago
 default	Show all	Active	9 days ago
 kube-node-lease	Show all	Active	9 days ago
 kube-public	Show all	Active	9 days ago
 kube-system	Show all	Active	9 days ago