

# Sprint-4

Team Members:

VISHALI R

VISHAGAN C SU

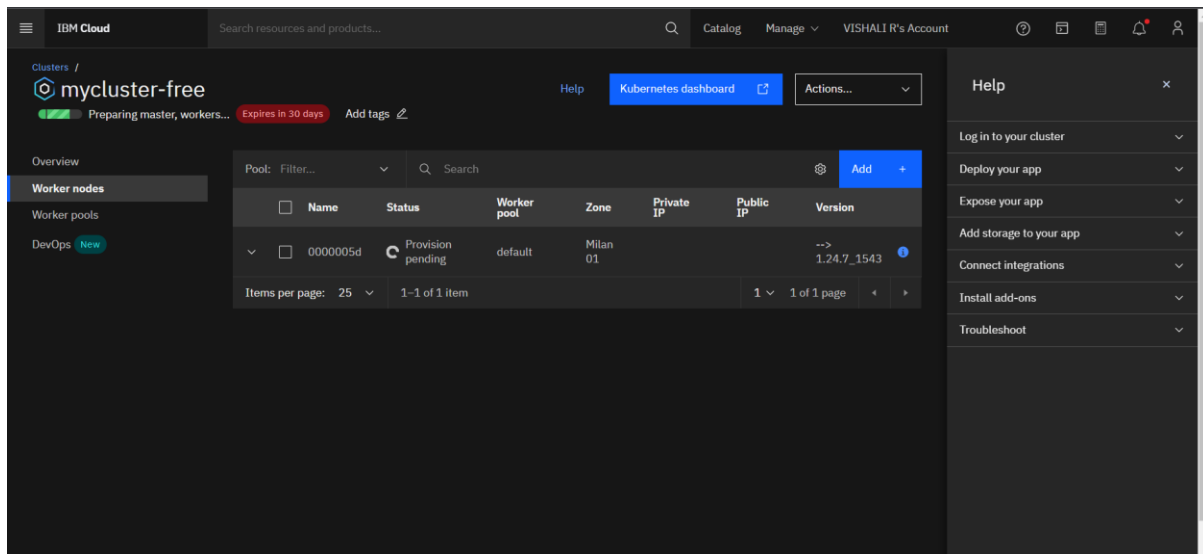
SOWMIYAA S

ASHOK KUMAR CV

Team ID: PNT2022TMID21475

## TASK COMPLETED:

- Containerize the flask app
- Upload in docker hub
- Building Image
- Pushing docker image
- Running on Docker playground
- Setting up container registry
- Uploading image in container registry
- Deploy in Docker





```
Expires in 30 days Add tags ↗

C:\Windows\System32\cmd.exe - docker run -p 5000:5000 app

=> [internal] load build context
=> => transferring context: 17.31MB
=> [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 ibm_db
=> exporting to image
=> => exporting layers
=> => writing image sha256:c820252c22de66f7e8e78f57fd0ed7ee40e327ddce6d3e42b9827094118e0fb8
=> => naming to docker.io/library/app

Use 'docker scan' to run Snyk tests against images to find vulnerabilities and learn how to fix them

C:\Users\91950\Desktop\final-deliverables>docker run -p 5000:5000 app
connection successful...
* Serving Flask app 'app' (lazy loading)
* Environment: production
  WARNING: This is a development server. Do not use it in a production deployment.
  Use a production WSGI server instead.
* Debug mode: on
* Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)
* Restarting with stat
* Debugger is active!
* Debugger PIN: 830-947-049
```

```
C:\Windows\System32\cmd.exe

9. us-south
10. us-east
11. br-sao
Enter a number> 9
Targeted region us-south

API endpoint:      https://cloud.ibm.com
Region:            us-south
User:              vishali@student.tce.edu
Account:           VISHALI R's Account (869224bab5004a67bada8ddc354b1ce4)
Resource group:    No resource group targeted, use 'ibmcloud target -g RESOURCE_GROUP'
CF API endpoint:
Org:
Space:

C:\Users\91950\Desktop\final-deliverables>ibmcloud cr region-set global

Warning: plug-in 'container-registry 0.1.584' may have compatibility issue with current version of IBM Cloud CLI.
Use 'ibmcloud plugin update container-registry' to upgrade the plug-in.
Use 'ibmcloud config --check-version=false' to disable update check.

The region is set to 'global', the registry is 'icr.io'.

OK
```

IBM Cloud

Search resources and products...

Catalog Manage VISHALI R's Account

Container Registry

Quick start

Namespaces 0

Repositories 0

Images 0

Trash 0

Settings

ibmcloud cr namespace-add <my\_namespace>

C:\Windows\System32\cmd.exe

Push the

1. Log your

ibmcloud

2. Pull a tes

3. Choose a9783349657e6: Pushed

the rest of t5a3a5b616b8e: Pushed

4. Push the

5. Verify that

ibmcloud cr image-list

Search Docker Hub

[Explore](#)
[Repositories](#)
[Organizations](#)
[Help](#)

Upgrade

ssowmiyaa

ssowmiyaa

Repositories

customercareregistry-app

Using 1 of 1 private repositories. [Get more](#)

[General](#)
[Tags](#)
[Builds](#)
[Collaborators](#)
[Webhooks](#)
[Settings](#)

Add a short description for this repository

The short description is used to index your content on Docker Hub and in search engines. It's visible to users in search results.

Update

ssowmiyaa / customercareregistry-app

Description

This repository does not have a description

Last pushed: 30 minutes ago

Docker commands

To push a new tag to this repository,

docker push ssowmiyaa/customercareregistry-app:tagname

Public View

Tags and scans

VULNERABILITY SCANNING - DISABLED

Enable

This repository contains 1 tag(s).

Tag	OS	Type	Pulled	Pushed
latest	linux	Image	—	30 minutes ago

Automated Builds

Manually pushing images to Hub? Connect your account to GitHub or Bitbucket to automatically build and tag new images whenever your code is updated, so you can focus your time on creating.

Available with Pro, Team and Business subscriptions.

```

C:\Windows\System32\cmd.exe

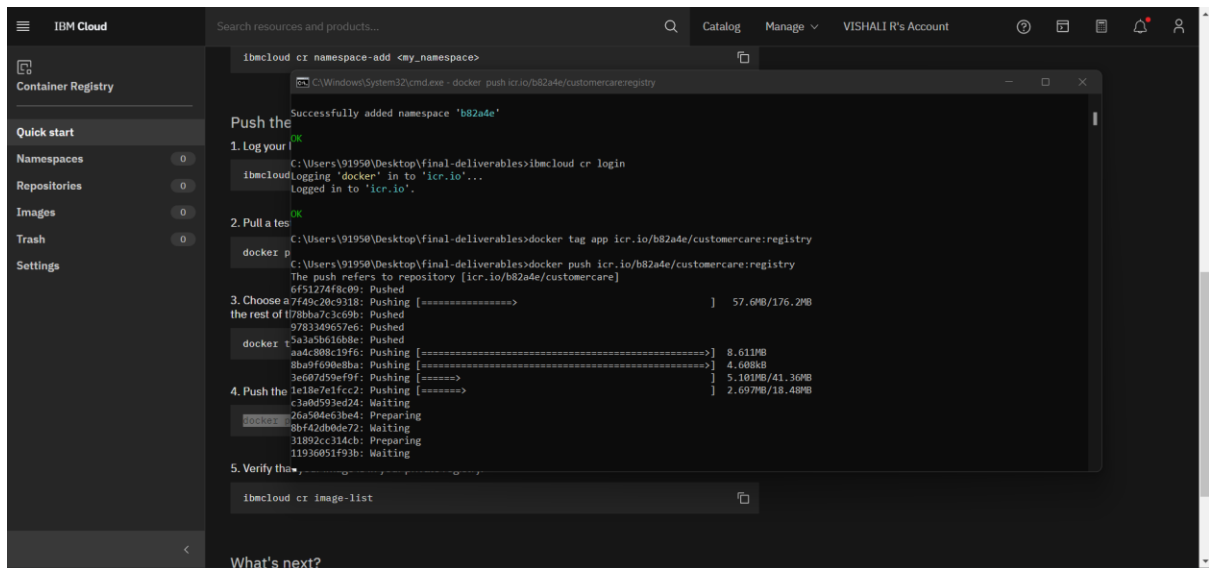
C:\Users\91950\Desktop\final-deliverables>docker tag app icr.io/b82a4e/customercare:registry

C:\Users\91950\Desktop\final-deliverables>docker push icr.io/b82a4e/customercare:registry
The push refers to repository [icr.io/b82a4e/customercare]
6f51274f8c09: Pushed
7f49c20c9318: Pushed
78bba7c3c69b: Pushed
9783349657e6: Pushed
5a3a5b616b8e: Pushed
aa4c808c19f6: Pushed
8ba9f690e8ba: Pushed
3e607d59ef9f: Pushed
1e18e7e1fcc2: Pushed
c3a0d593ed24: Pushed
26a504e63be4: Pushed
8bf42db0de72: Pushed
31892cc314cb: Pushed
11936051f93b: Pushed
registry: digest: sha256:7c35bd2c40204ff8a3a1c9e26a6ca2a2bcaff3fd4e4d17a4a6e6aa1ae58ae8fa size: 3262

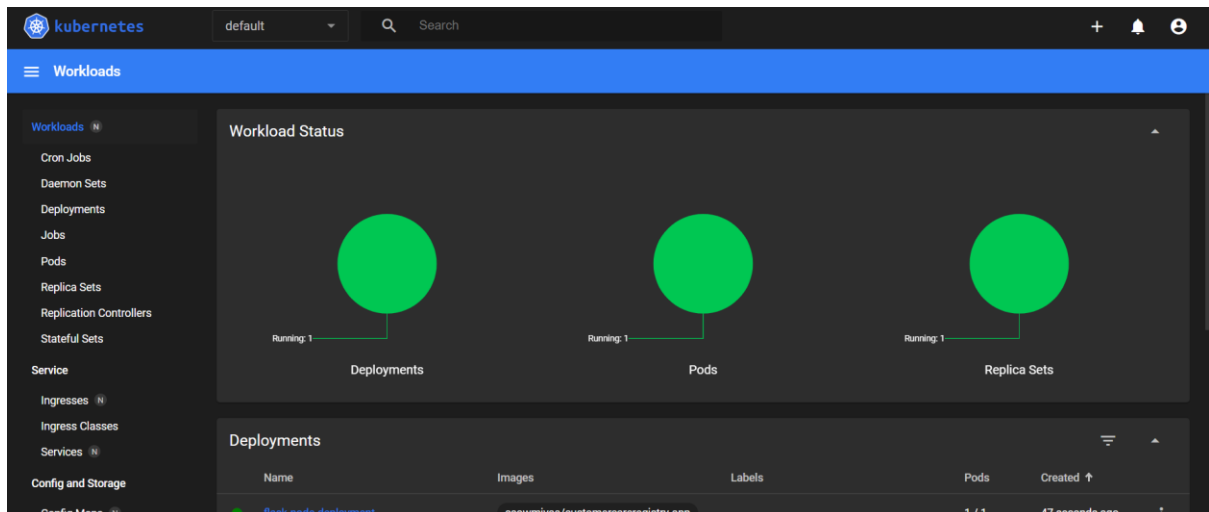
C:\Users\91950\Desktop\final-deliverables>ibmcloud cr image-list
Listing images...

Repository          Tag      Digest      Namespace    Created      Size      Security status
icr.io/b82a4e/customercare registry  7c35bd2c4020 b82a4e       28 minutes ago 441 MB    102 Issues
OK

```



```
C:\Users\91950\Desktop\final-deliverables>kubectl apply -f https://raw.githubusercontent.com/kubernetes/dashboard/v2.0.0/manifests/install.yaml
namespace/kubernetes-dashboard created
serviceaccount/kubernetes-dashboard created
service/kubernetes-dashboard created
secret/kubernetes-dashboard-certs created
secret/kubernetes-dashboard-csrf created
secret/kubernetes-dashboard-key-holder created
configmap/kubernetes-dashboard-settings created
role.rbac.authorization.k8s.io/kubernetes-dashboard created
clusterrole.rbac.authorization.k8s.io/kubernetes-dashboard configured
rolebinding.rbac.authorization.k8s.io/kubernetes-dashboard created
clusterrolebinding.rbac.authorization.k8s.io/kubernetes-dashboard configured
deployment.apps/kubernetes-dashboard created
service/dashboard-metrics-scraper created
deployment.apps/dashboard-metrics-scraper created
```



```

C:\Windows\System32\cmd.exe

1bn0i0nsibmFtZSI6ImFkbWluLXVzZXIiOiJ1aWQ1Ii5N2N1MTBmNi1iMjVklTQyZTktYjhmNS0yOwM3NjNhYWVhZmZlIiF0sIm5iZiI6MTY2ODg0NzE4MSwic3ViIjoic3lzdGVtOnNlcnZpY2VhY2NvdH500mt1YmVY
bmV0ZW9MTZGFzaG3vYXJkOmFkbWluLXVzZXIiOiQ_RmFqcGDLfw7iWvCQO0rm1NrCEzD6M%Wm4HVKeI5mMSWcpETo6DiC03qK6AbgmfiXwmK4Ad285BorKMBv7ooVMQsIwkg7asL7aEcepeQJsaOIzQ4r06SISmwYU58tsQT
4clgx9APJ2a0E3pYgy_zrdgWYgzFUz99dXdhcuXroNsUwST3CcEbDtBqXgt_cFQ3bUv7bTi3ZRo9oYv-HUYDoGejQQtuekiSiY5ZtKPUBvyh2Mx_Y_KrFppYcIBIwchxuBrcRv7235SAbymeAK8nn4ozE-Sy1Cxuc8-_y
v10DL-HJBvokkcCTF2KZeEbnYn_MGNHUZLram92JYpMk_mhEU4eG3EccZh18v2nvsGDo5cB4fe9fK0IcZYLk2I4wK80Y38k0AKkZK-FYVQilnu2Hn8yO6CnpXLfx8seS7QJjQr4ehTdA0MgRw3A0sPJfjBKdWxV-IKdbn
RcJrrrNS01RD0QKF7bNE_xPFHbWmThkKb812FkCnm6cmxYgITmLYF756mkugrh-46UN14mCZc3BVRMKb1_sMgm-yhc6Ai92Kd-JxTUVe0q0_CXnCihniJDBcJenP-p681GAkrZsZAgKKOC2pa8WM5BiQvLYUTYzRrcIrIr
_n9-TEPASZh2dq1cuE7Sc78QShaGroyc7GKLva5qEkJp0Q16wpnTU9hokQ1D4

C:\Users\91950\Desktop\final-deliverables>kubect1 proxy
Starting to serve on 127.0.1:8001
^C
C:\Users\91950\Desktop\final-deliverables>kubect1 create -f deployment.yaml
Error from server (AlreadyExists): error when creating "deployment.yaml": deployments.apps "flask-node-deployment" already exists

C:\Users\91950\Desktop\final-deliverables>kubect1 create -f deployment.yaml
deployment.apps/flask-node-deployment created

C:\Users\91950\Desktop\final-deliverables>kubect1 proxy
Starting to serve on 127.0.1:8001
^C
C:\Users\91950\Desktop\final-deliverables>kubect1 apply -f service.yaml
service/flask-node-deployment created

C:\Users\91950\Desktop\final-deliverables>kubect1 get nodes -o wide

```

NAME	STATUS	ROLES	AGE	VERSION	INTERNAL-IP	EXTERNAL-IP	OS-IMAGE	KERNEL-VERSION	CONTAINER-RUNTIME
10.144.180.218	Ready	<none>	102m	v1.24.7+IKS	10.144.180.218	169.51.195.72	Ubuntu 18.04.6 LTS	4.15.0-194-generic	containerd://1.6.8

```

C:\Users\91950\Desktop\final-deliverables>

```

```

C:\Users\91950\Desktop\final-deliverables>kubect1 get nodes -o wide

```

NAME	STATUS	ROLES	AGE	VERSION	INTERNAL-IP	EXTERNAL-IP	OS-IMAGE	KERNEL-VERSION	CONTAINER-RUNTIME
10.144.180.218	Ready	<none>	102m	v1.24.7+IKS	10.144.180.218	169.51.195.72	Ubuntu 18.04.6 LTS	4.15.0-194-generic	containerd://1.6.8