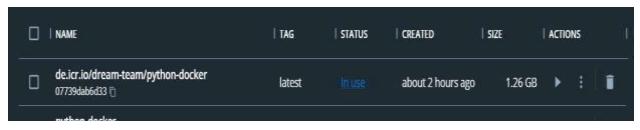
#### **PROJECT DEVELOPMENT PHASE**

# Deployment of app in IBM cloud

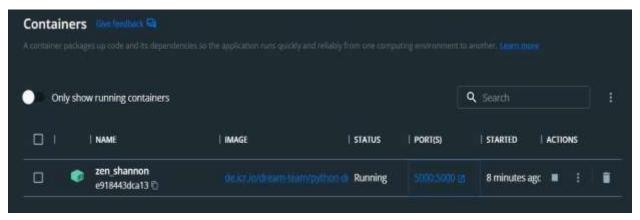
# **SPRINT-4(Final Version)**

Date	19 November 2022
Team ID	PNT2022TMID09785
Project Name	Skill / Job Recommender Application

# Containerize the App









#### Installing the required plugins to connect with Kubernetes

```
D:\Final version of IBM Job Recommendation work\Final>ibmcloud plugin install container-service
Looking up 'container-service' from repository 'IBM Cloud'...
Plug-in 'container-service[kubernetes-service/ks] 1.0.459' found in repository 'IBM Cloud'
Plug-in 'container-service[kubernetes-service/ks] 1.0.459' was already installed. Do you want to re-install it or not? [
y/N] > y
Attempting to download the binary file...
28168192 bytes downloaded
Installing binary...
Plug-in 'container-service 1.0.459' was successfully installed into C:\Users\prasa\.bluemix\plugins\container-service. U
se 'ibmcloud plugin show container-service' to show its details.
D:\Final version of IBM Job Recommendation work\Final>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% 7s
14024704 bytes downloaded
Installing binary...
Plug-in 'observe-service 1.0.82' was successfully installed into C:\Users\prasa\.bluemix\plugins\observe-service. Use 'i
bmcloud plugin show observe-service' to show its details.
```

## Configuring the cluster

izes.

D:\Final version of IBM Job Recommendation work\Final>ibmcloud ks cluster config --cluster cdn8ksdf0kmqti4li5h0 JK The configuration for cdn8ksdf0kmqti4li5h0 was downloaded successfully. Added context for cdn8ksdf0kmqti4li5h0 to the current kubeconfig file. You can now execute 'kubectl' commands against your cluster. For example, run 'kubectl get nodes'. If you are accessing the cluster for the first time, 'kubectl' commands might fail for a few seconds while RBAC synchron

D:\Final version of IBM Job Recommendation work\Final>kubectl config current-context mycluster-free/cdn8ksdf0kmqti41i5h0

### Tagging and pushing the image using docker

```
D:\Final version of IBM Job Recommendation work\Final>docker tag python-docker de.icr.io/dream-team/python-docker:latest
D:\Final version of IBM Job Recommendation work\Final>docker push de.icr.io/dream-team/python-docker:latest
The push refers to repository [de.icr.io/dream-team/python-docker]
18a77b7592f7: Pushed
e5a5f7fd7fc1: Pushed
191fecf6c431: Pushed
b785e3b4b157: Pushed
4c9ede4ddbda: Pushed
c134b6c064f6: Pushed
8eb8b96ceebb: Pushed
d62f0ea9a15e: Pushed
9978d084fd77: Pushed
1191b3f5862a: Pushed
08a01612ffca: Pushed
8bb25f9cdc41: Pushed
f715ed19c28b: Pushed
latest: digest: sha256:fb44f87ee055ba7d82afb797a1842789c54b5acdc1b2dd7f2fd8bbed354c2e14 size: 3055
```

## We can view the list of images that are there in the container

```
D:\Final version of IBM Job Recommendation work\Final>ibmcloud cr image-list
Listing images...

Repository Tag Digest Namespace Created Size Security status
de.icr.io/dream-team/python-docker latest fb44f87ee055 dream-team 2 hours ago 522 MB -

OK
```

## Kubernetes configuration

```
D:\Final version of IBM Job Recommendation work\Final>ibmcloud ks cluster config --cluster cdn8ksdf0kmqti41i5h0

The configuration for cdn8ksdf0kmqti41i5h0 was downloaded successfully.

Added context for cdn8ksdf0kmqti41i5h0 to the current kubeconfig file.

You can now execute 'kubectl' commands against your cluster. For example, run 'kubectl get nodes'.

If you are accessing the cluster for the first time, 'kubectl' commands might fail for a few seconds while RBAC synchron izes.

D:\Final version of IBM Job Recommendation work\Final>kubectl config current-context

mycluster-free/cdn8ksdf0kmqti41i5h0

D:\Final version of IBM Job Recommendation work\Final> kubectl get nodes

NAME STATUS ROLES AGE VERSION

10.144.183.114 Ready <none> 129m v1.24.7+IKS
```

D:\Final version of IBM Job Recommendation work\Final> kubectl create -f deployment.yaml deployment.apps/flask-node-deployment created

D:\Final version of IBM Job Recommendation work\Final> kubectl create -f service.yaml service/flask-node-deployment created

