# Project Development Phase Delivery of Sprint-4

Date	19 November 2022
Team ID	PNT2022TMID24001
Project Name	Inventory Management System For Retailer

# **Deploying it on our Kubernetes services:**

## Step 1:

Open command prompt in the location where the project file is in.

#### Step 2:

Login to docker, ibmcloud and ibmcloud cr by using [docker login], [ibmcloud login] and [ibmcloud cr login] commands.

#### Step 3:

Build the image to docker hub.

## Step 4:

Tag the docker image with our IBM container register namespaces.

#### Step 5:

Push to the namespaces of IBM container registry.

## Step 6:

View the pushed image on IBM container registry.

#### Step 5:

Launch Kubernetes service and connect via CLI

#### **Step 5:**

Apply the yaml files using command prompt.

#### Step 5:

View the public IP and port number.

#### Step 5:

Go to the Public IP with the respected port number.

# **Output:**

Login to the docker, ibmcloud & ibmcloud cr in Command Prompt:



**Building, Tagging and Pushing the Image to Container Registry:** 

```
Install the latest PowerShell or new features and improvements! https://aka.ms/PSWindows

PS C:\Users\Yaseen\Desktop\Final Code> docker login
Authenticating with existing credentials...
Login Succeeded

Logging in with your password grants your terminal complete access to your account.
For better security, log in with a limited-privilege personal access token. Learn more at https://docs.docker.com/go/access-tokens/

PS C:\Users\Yaseen\Desktop\Final Code> docker build -t yaseen-project .

[+] Building 78.25 (12/12) FINISHED

> [internal] load build definition from Dockerfile

>> transferring dockerfile: 2888

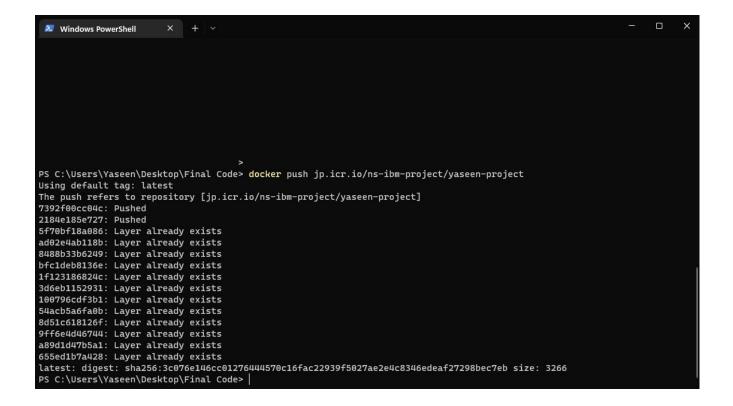
>> transferring context: 288

| 0.85

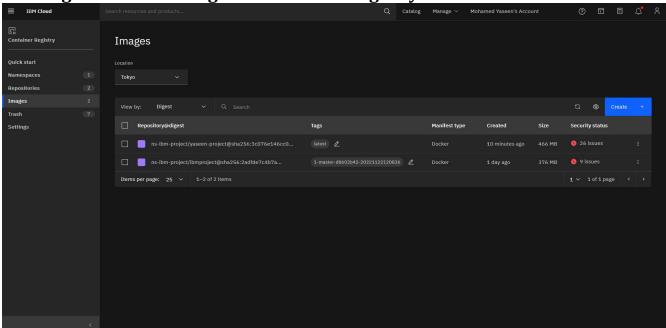
>> [internal] load metadata for docker.io/library/python:3.18.6

| [auth] library/python:pull token for registry-1.docker.io
| [internal] load build context
| 0.85

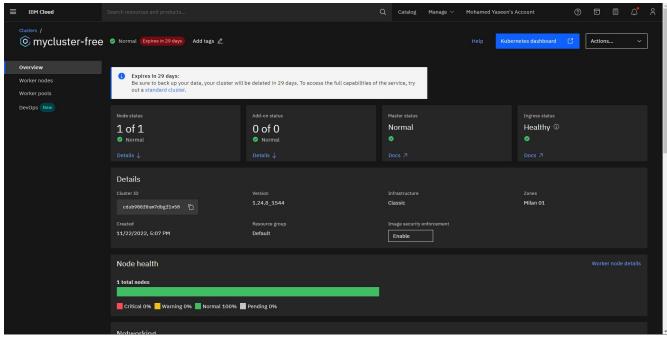
| [internal] load build con
```

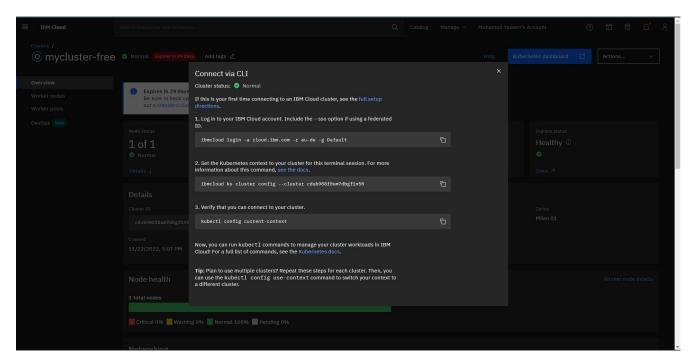


Viewing the Pushed Image on Container Registry:



# **Launch Kubernetes Service and Connect Via CLI:**





**Apply the yaml Files Using Command Prompt:** 

```
Windows PowerShell
PS C:\Users\Yaseen\Desktop\Final Code>
PS C:\Users\Yaseen\Desktop\Final Code> kubectl run yaseen-project --image=jp.icr.io/ns-ibm-project/yaseen-project
pod/yaseen-project created
PS C:\Users\Yaseen\Desktop\Final Code> kubectl apply -f .\deployment.yaml
deployment.apps/yaseen-project created
PS C:\Users\Yaseen\Desktop\Final Code> kubectl apply -f .\service.yaml
service/project-service unchanged
PS C:\Users\Yaseen\Desktop\Final Code> kubectl apply -f .\kubernetes\flask_ingress.yaml
ingress.networking.k8s.io/flask-app-ingress unchanged
PS C:\Users\Yaseen\Desktop\Final Code> kubectl apply -f .\kubernetes\flask_service.yaml
service/mycluster-free-service unchanged
PS C:\Users\Yaseen\Desktop\Final Code> kubectl apply -f .\kubernetes\ibm_deployment.yaml
deployment.apps/mycluster-free created
PS C:\Users\Yaseen\Desktop\Final Code>
```

## View the Public IP and Port Number:

