Creating Kubernetes Cluster using IBM Cloud Container Registry
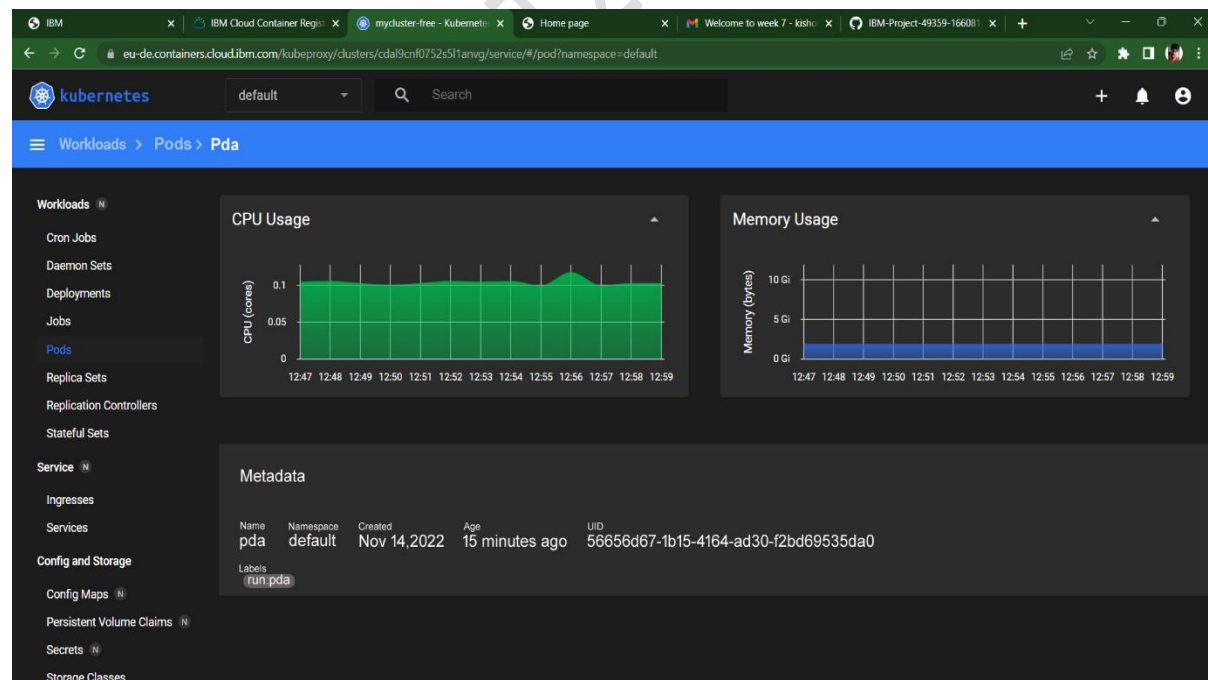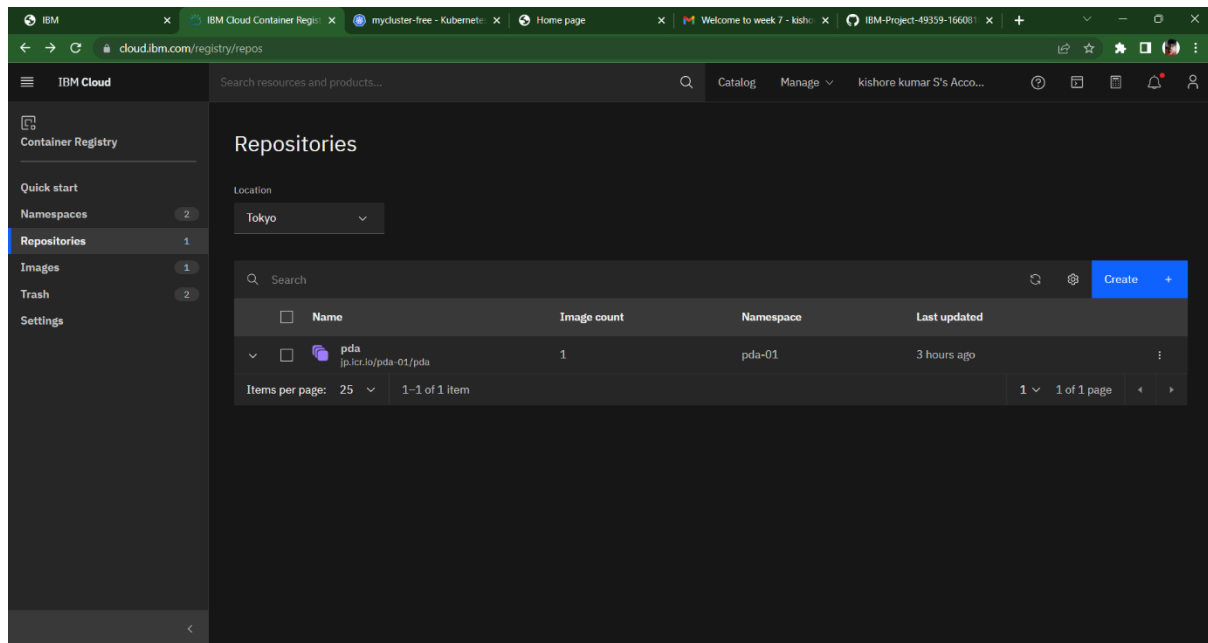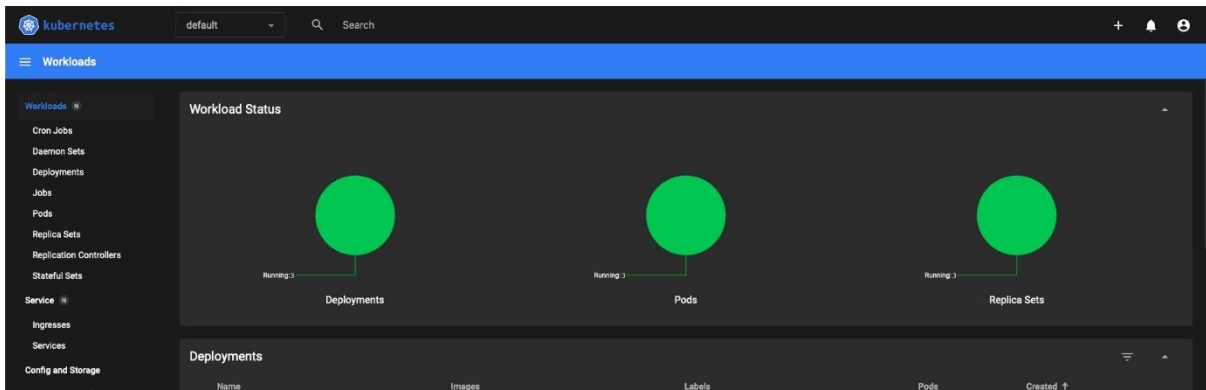
```
bfc1deb8136e: Mounted from mod-01/ibm-db2-docker
1f123186824c: Mounted from mod-01/ibm-db2-docker
3d6eb1152931: Mounted from mod-01/ibm-db2-docker
100796cdf3b1: Mounted from mod-01/ibm-db2-docker
54acb5a6fa0b: Mounted from mod-01/ibm-db2-docker
8d51c618126f: Mounted from mod-01/ibm-db2-docker
9ff6e4d46744: Mounted from mod-01/ibm-db2-docker
a89d1d47b5a1: Mounted from mod-01/ibm-db2-docker
655ed1b7a428: Mounted from mod-01/ibm-db2-docker
latest: digest: sha256:7e60b8c662fa6836bed998ea2f97a3a31e7ddfb131dd7096a2eecdc8288bbf27 size: 3265

C:\Users\kishore kumar\Desktop\Pda>kubectl config get-contexts
CURRENT   NAME            CLUSTER          AUTHINFO          NAMESPACE
*         docker-desktop  docker-desktop   docker-desktop

C:\Users\kishore kumar\Desktop\Pda>kubectl apply -f kubernetes/ibm_deployment.yaml
deployment.apps/pda created

C:\Users\kishore kumar\Desktop\Pda>kubectl apply -f kubernetes/flask_service.yaml
service/flask-app-service created

C:\Users\kishore kumar\Desktop\Pda>kubectl apply -f kubernetes/flask_ingress.yaml
ingress.networking.k8s.io/pda-ingress created

C:\Users\kishore kumar\Desktop\Pda>kubectl get ing
NAME          CLASS     HOSTS    ADDRESS    PORTS    AGE
pda-ingress   <none>    *                   80       25s

C:\Users\kishore kumar\Desktop\Pda>kubectl get svc
NAME                TYPE        CLUSTER-IP      EXTERNAL-IP    PORT(S)     AGE
flask-app-service   ClusterIP   10.97.238.223   <none>         5000/TCP    2m5s
kubernetes          ClusterIP   10.96.0.1       <none>         443/TCP     38h

C:\Users\kishore kumar\Desktop\Pda>kubectl get nodes -o wide
NAME             STATUS   ROLES          AGE    VERSION   INTERNAL-IP    EXTERNAL-IP   OS-IMAGE         KERNEL-VERSION                    CONTAINER-RUNTIM
E
docker-desktop   Ready    control-plane  38h    v1.25.0   192.168.65.4   <none>        Docker Desktop   5.10.16.3-microsoft-standard-WSL2  docker://20.10.1
7
```

```
C:\Users\kishore kumar\Desktop\Pda>kubectl describe svc flask-app-service
Name:              flask-app-service
Namespace:         default
Labels:            <none>
Annotations:       <none>
Selector:          app=pda
Type:              ClusterIP
IP Family Policy:  SingleStack
IP Families:       IPv4
IP:                10.97.238.223
IPs:               10.97.238.223
Port:              <unset>  5000/TCP
TargetPort:        5000/TCP
Endpoints:
Session Affinity:  None
Events:            <none>

C:\Users\kishore kumar\Desktop\Pda>kubectl describe svc pda
Error from server (NotFound): services "pda" not found

C:\Users\kishore kumar\Desktop\Pda>kubectl run flask-app-service --image=jp.icr.io/pda-01/pda
pod/flask-app-service created

C:\Users\kishore kumar\Desktop\Pda>kubectl apply -f kubernetes/ibm_deployment.yaml
deployment.apps/pda unchanged

C:\Users\kishore kumar\Desktop\Pda>kubectl apply -f kubernetes/flask_service.yaml
service/flask-app-service unchanged

C:\Users\kishore kumar\Desktop\Pda>kubectl apply -f kubernetes/flask_ingress.yaml
ingress.networking.k8s.io/pda-ingress unchanged

C:\Users\kishore kumar\Desktop\Pda>kubectl get nodes -o wide
NAME             STATUS   ROLES          AGE    VERSION   INTERNAL-IP    EXTERNAL-IP   OS-IMAGE         KERNEL-VERSION                    CONTAINER-RUNTIM
E
docker-desktop   Ready    control-plane  38h    v1.25.0   192.168.65.4   <none>        Docker Desktop   5.10.16.3-microsoft-standard-WSL2  docker://20.10.1
7

C:\Users\kishore kumar\Desktop\Pda>
```

Team Id – PNT2022TMID39818

Project – Plasma Donar Application