Project Development Phase
Sprint-4

Date	19 November 2022
Team ID	PNT2022TMID29142
Project Name	Personal Expense Tracker Application

In this sprint, we created the image flask application, and containerized the flask application in docker.

Container registry is created and image is pushed into it. And Kubernetes cluster is created and image is uploaded.

Sprint -4 Screenshots:

Image building and pushing into docker hub:

Creating container in container registry and pushing image from docker desktop:

```
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C:\Users\nmani>ibmcloud plugin install container-registry
Looking up 'container-registry' from repository 'IBM Cloud'...
Plug-in 'container-registry[cr] 1.0.2' found in repository 'IBM Cloud'
Plug-in 'container-registry 1.0.2' was already installed. Do you want to update it with 'container-registry[cr] 1.0.2' or not? [y/N] > y
Attempting to download the binary file...
 11.90 MiB / 11.90 MiB [===================================] 100.00% 0s
12476416 bytes downloaded
Installing binary...
OK
Plug-in 'container-registry 1.0.2' was successfully installed into C:\Users\nmani\.bluemix\plugins\container-registry. Use 'ibmcloud plugin show container-registry' to show its de
tails.

C:\Users\nmani>ibmcloud login -a https://cloud.ibm.com
API endpoint: https://cloud.ibm.com

Email> sec19cs095@sairamtap.edu.in

Password>
Authenticating...
OK

Targeted account Prem Kashyap Chilakamarthi's Account (c50714902c8f4427b45032b104b525a1)


Select a region (or press enter to skip):
1. au-syd
2. in-che
3. jp-osa
4. jp-tok
5. kr-seo
6. eu-de
7. eu-gb
8. ca-tor
9. us-south
10. us-east
11. br-sao
Enter a number> 4
Targeted region jp-tok


API endpoint:      https://cloud.ibm.com
Region:            jp-tok
User:              sec19cs095@sairamtap.edu.in
Account:           Prem Kashyap Chilakamarthi's Account (c50714902c8f4427b45032b104b525a1)
Resource group:    No resource group targeted, use 'ibmcloud target -g RESOURCE_GROUP'
CF API endpoint:
```

```
Enter a number> 2
Targeted region in-che


API endpoint:      https://cloud.ibm.com
Region:            in-che
User:              sec19cs095@sairamtap.edu.in
Account:           Prem Kashyap Chilakamarthi's Account (c50714902c8f4427b45032b104b525a1)
Resource group:    No resource group targeted, use 'ibmcloud target -g RESOURCE_GROUP'
CF API endpoint:
Org:
Space:

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

OK

C:\Users\nmani>ibmcloud cr namespace-add peta_application
No resource group is targeted. Therefore, the default resource group for the account ('Default') is targeted.

Adding namespace 'peta_application' in resource group 'Default' for account Prem Kashyap Chilakamarthi's Account in registry icr.io...

Successfully added namespace 'peta_application'

OK

C:\Users\nmani>ibmcloud cr login
Logging 'docker' in to 'icr.io'...
Logged in to 'icr.io'.

OK

C:\Users\nmani>docker prem0046/pull peta_application
docker: 'prem0046/pull' is not a docker command.
See 'docker --help'

C:\Users\nmani>docker pull prem0046/peta_application
Using default tag: latest
latest: Pulling from prem0046/peta_application
Digest: sha256:a2bb9f2d05c3d3e8c3868967cf414fcc4f03549dffc1eb09e8a90fe98a91eff4
Status: Image is up to date for prem0046/peta_application:latest
docker.io/prem0046/peta_application:latest

C:\Users\nmani>docker tag peta_application icr.io/peta_application/peta_application:latest

C:\Users\nmani>
```

```
OK

C:\Users\nmani>ibmcloud cr login
Logging 'docker' in to 'icr.io'...
Logged in to 'icr.io'.

OK

C:\Users\nmani>docker prem0046/pull peta_application
docker: 'prem0046/pull' is not a docker command.
See 'docker --help'

C:\Users\nmani>docker pull prem0046/peta_application
Using default tag: latest
latest: Pulling from prem0046/peta_application
Digest: sha256:a2bb9f2d05c3d3e8c3868967cf414fcc4f03549dffc1eb09e8a90fe98a91eff4
Status: Image is up to date for prem0046/peta_application:latest
docker.io/prem0046/peta_application:latest

C:\Users\nmani>docker tag peta_application icr.io/peta_application/peta_application:latest

C:\Users\nmani>docker push icr.io/peta_application/peta_application:latest
The push refers to repository [icr.io/peta_application/peta_application]
6c2bf6b12403: Pushed
b8f8cb4b0c55: Pushed
31e1979cd832: Pushed
94b76bc8510f: Mounted from create_flask/hello_world
cf399be408ea: Mounted from create_flask/hello_world
793b971ccb99: Mounted from create_flask/hello_world
d172a9e6f9e6: Mounted from create_flask/hello_world
0c7daf9a72c8: Mounted from create_flask/hello_world
75ba02937496: Mounted from create_flask/hello_world
288cf3a46e32: Mounted from create_flask/hello_world
186da837555d: Mounted from create_flask/hello_world
955c9335e041: Mounted from create_flask/hello_world
8e079fee2186: Mounted from create_flask/hello_world
latest: digest: sha256:a2bb9f2d05c3d3e8c3868967cf414fcc4f03549dffc1eb09e8a90fe98a91eff4 size: 3056

C:\Users\nmani>ibmcloud cr image-list
Listing images...

Repository                                Tag      Digest         Namespace          Created          Size      Security status
icr.io/create_flask/hello_world           latest   a66e001d30bf   create_flask       1 week ago       356 MB    -
icr.io/peta_application/peta_application   latest   a2bb9f2d05c3   peta_application   20 minutes ago   558 MB    -

OK

C:\Users\nmani>
```
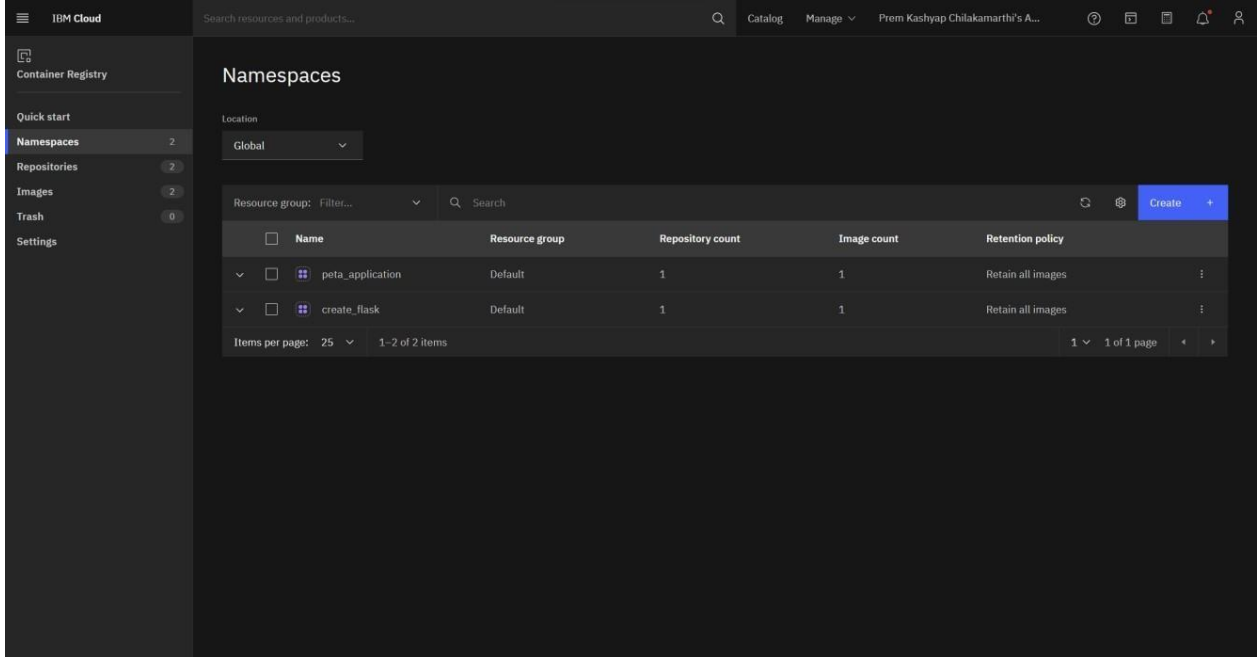
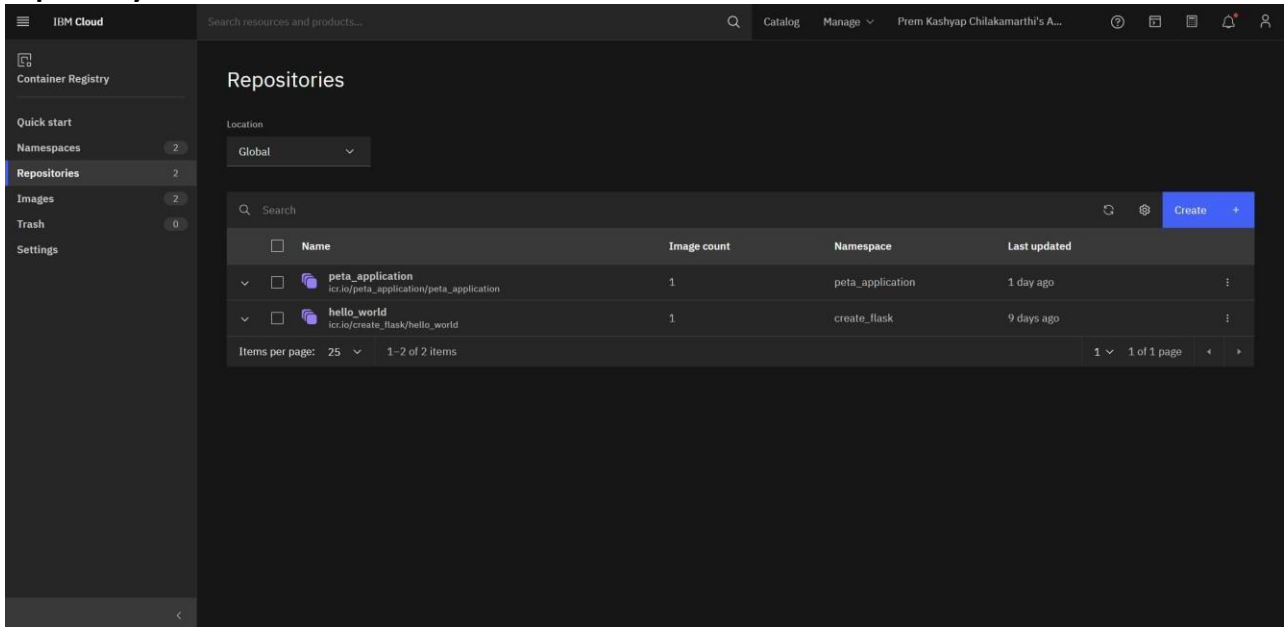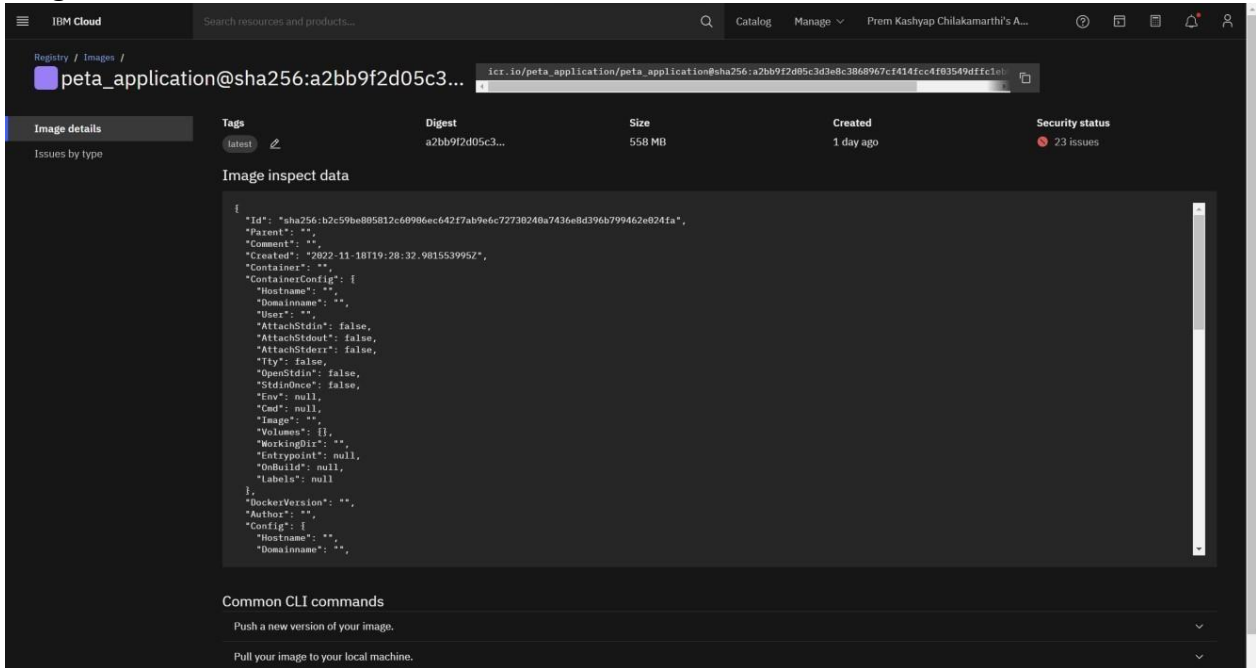## Container registry namespaces:

Repository:

Image:

Kubernetes cluster: