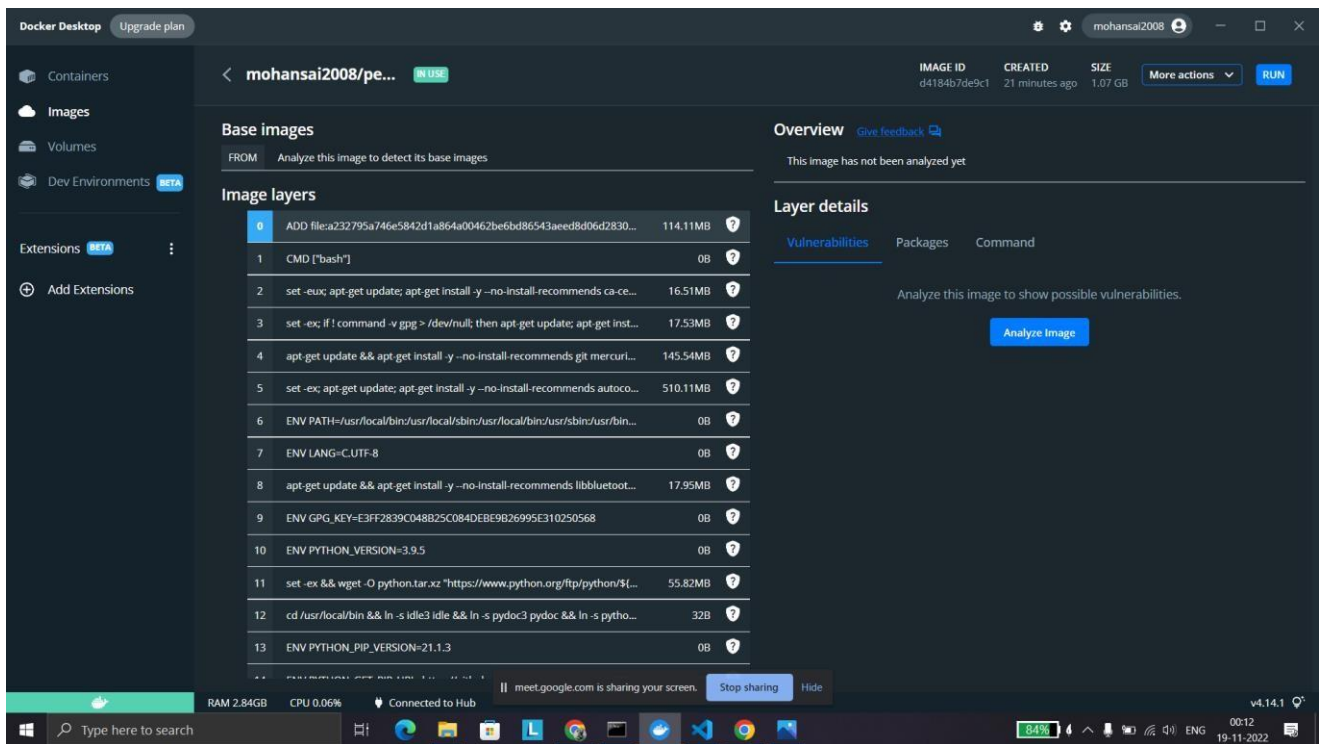


## Cloud Registry: Uploading docker image to IBM Cloud registry:

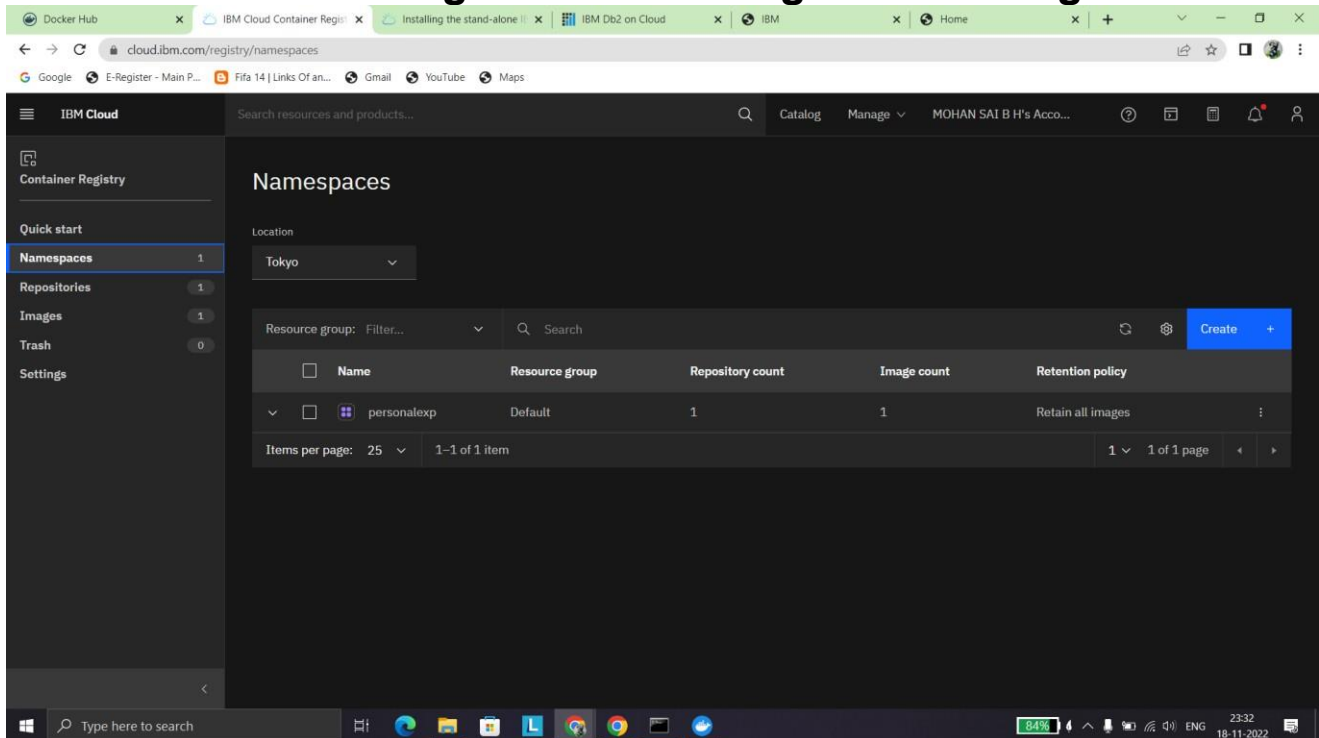
```
Command Prompt
Microsoft Windows [Version 10.0.19044.2251]
(c) Microsoft Corporation. All rights reserved.

C:\Users\ompra>docker run -d -p 80:80 docker/getting-started
Unable to find image 'docker/getting-started:latest' locally
latest: Pulling from docker/getting-started
4f9b9388f04a: Pull complete
5867cba5fcbd: Pull complete
4b639e65cb3b: Pull complete
061ed9e2b976: Pull complete
bc19f3e8eeb1: Pull complete
4d71be97c256: Pull complete
72b586f1c54b: Pull complete
8c972f525d6: Pull complete
Digest: sha256:b558be874169471bd4e65bd6eac8c383b271a7ee8553ba47481b73b2bf597aae
Status: Downloaded newer image for docker/getting-started:latest
c2d3e1b9a028775c6c9eb3c76574a29392ea41b80f6132a2f39327857d28b1fc

C:\Users\ompra>
```



## Kubernetes: Create container using the docker image and hosting the site:



```
C:\Windows\system32\cmd.exe
11. br-sao
Enter a number> 4
Targeted region jp-tok

API endpoint: https://cloud.ibm.com
Region: jp-tok
User: 218619184865@martintermz.com
Accounts: RAJAGOPALAN T's Account (4980c4995adff44298296ac46e551f9a)
Resource group: No resource group targeted, use 'ibmcloud target -g RESOURCE_GROUP'
CF API endpoint:
Org:
Space:

C:\Users\rajas\OneDrive\Desktop\Final Deliverables>ibmcloud ks cluster config --cluster cdt16a0f0vhg6i21rbug
The configuration for cdt16a0f0vhg6i21rbug was downloaded successfully.
Added context for cdt16a0f0vhg6i21rbug 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 synchronizes.

C:\Users\rajas\OneDrive\Desktop\Final Deliverables>kubectl config current-context
mycluster-free/cdt16a0f0vhg6i21rbug

C:\Users\rajas\OneDrive\Desktop\Final Deliverables>kubectl apply -f Kubernetes/ibm_deployment.yaml
deployment.apps/flask-app created

C:\Users\rajas\OneDrive\Desktop\Final Deliverables>kubectl apply -f Kubernetes/flask_service.yaml
service/flask-app-service created

C:\Users\rajas\OneDrive\Desktop\Final Deliverables>kubectl apply -f Kubernetes/flask_ingress.yaml
ingress.networking.k8s.io/flask-app-ingress created

C:\Users\rajas\OneDrive\Desktop\Final Deliverables>kubectl get ing
NAME CLASS HOSTS ADDRESS PORTS AGE
flask-app-ingress <none> * 80 12s

C:\Users\rajas\OneDrive\Desktop\Final Deliverables>kubectl get svc
NAME TYPE CLUSTER-IP EXTERNAL-IP PORT(S) AGE
flask-app-service ClusterIP 172.21.0.13 <none> 5000/TCP 37s
kubernetes ClusterIP 172.21.0.1 <none> 443/TCP 39m

C:\Users\rajas\OneDrive\Desktop\Final Deliverables>kubectl get nodes -o wide
NAME STATUS ROLES AGE VERSION INTERNAL-IP EXTERNAL-IP OS-IMAGE KERNEL-VERSION CONTAINER-RUNTIME
10.144.222.171 Ready <none> 32m v1.24.7+IKS 10.144.222.171 159.122.186.15 Ubuntu 18.04.6 LTS 4.15.0-154-generic containerd://1.6.8

C:\Users\rajas\OneDrive\Desktop\Final Deliverables>kubectl expose deployment flask-app --type=NodePort --name=flask-app
service/flask-app exposed

C:\Users\rajas\OneDrive\Desktop\Final Deliverables>kubectl expose deployment flask-app --type=NodePort --name=testingpage1
service/testingpage1 exposed

C:\Users\rajas\OneDrive\Desktop\Final Deliverables>kubectl get svc
NAME TYPE CLUSTER-IP EXTERNAL-IP PORT(S) AGE
flask-app NodePort 172.21.132.86 <none> 5000:31740/TCP 53s
flask-app-service ClusterIP 172.21.0.13 <none> 5000/TCP 2m21s
kubernetes ClusterIP 172.21.0.1 <none> 443/TCP 40m
testingpage1 NodePort 172.21.0.135 <none> 5000:31740/TCP 17s

C:\Users\rajas\OneDrive\Desktop\Final Deliverables>
```

## Exposing: Exposing IP/Ports for the site:

<http://159.122.186.15:31740/>

