Assignment -4 Docker and kubernetes

Assignment Date	10 OCTOBER 2022
Student Name	Mr. Arjun A.M
Student Roll Number	211519205016
Maximum Marks	2 Marks

Question-1:

pull an image from docker hub and run it in docker playground.

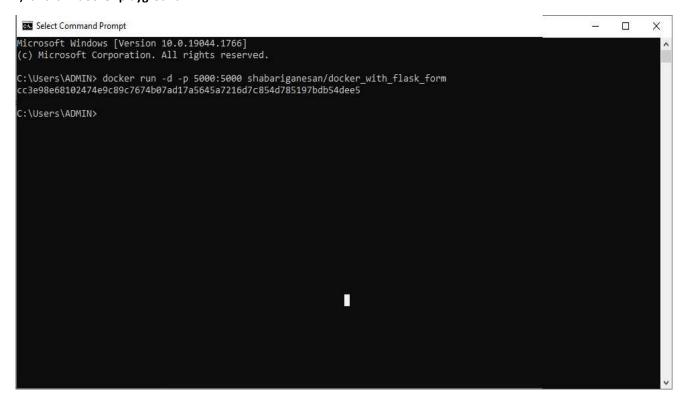
1) pull an image form docker hub

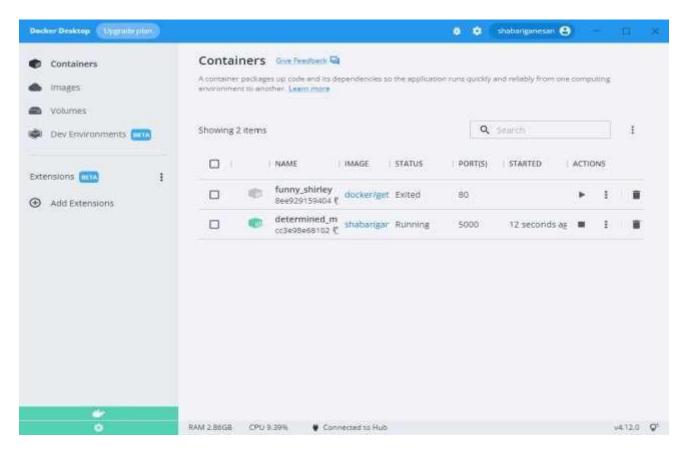
```
All Command Prompt

Ricrosoft Windows (Version 10.0.19044.1766)
(c) Microsoft Corporation. All rights reserved.

C:\Users\ADMIN>docker push shabariganesan/docker_with_flask_form
Using default tag: latest
The push refers to repository [docker.io/shabariganesan/docker_with_flask_form]
An image does not exist locally with the tag: shabariganesan/docker_with_flask_form
Using default tag: latest
Using default
Using defa
```

2) runt it in docker playground







Question-2:

Create a docker file for the jobportal application and deploy it in docker application.

1) Creating a docker file for the jobportal application

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2) deploy in in dokcer application

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Question-3:Create albm container registry and deploy helloworld app or jobportalapp

1) create a ibm container registry

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Command Prompt
                                                                                                                                                                                                                                                                                                                   X
   Account:
                                                    Ganesan 5's Account (2a239674b9ba463891acc3c4fcbe0a99)
                                                    No resource group targeted, use 'ibmcloud target -g RESOURCE GROUP'
 Resource group:
 CF API endpoint:
 Org:
 Space:
 Change logs: https://github.com/IBM-Cloud/ibm-cloud-cli-release/releases/tag/v2.11.1
 TIP: use 'ibmcloud config --check-version=false' to disable update check.
Do you want to update? [y/N] > y
Installing version '2.11.1'...
 Downloading..
                                                                           14.88 MiB / 14.88 MiB [===
 15604696 bytes downloaded
 Saved in C:\Users\ADMIN\.bluemix\tmp\bx_2625690972\IBM_Cloud_CLI_2.11.1_amd64.exe
 C:\Users\ADMIN>ibmcloud plugin install container-registry
Charles I to the container registry in the container registry in the cloud in the container registry in the cloud in the container registry container registry in the containe
                                                                                                                                                                                             -----] 100.00% 15
 12476416 bytes downloaded
 Installing binary...
Plug-in 'container-registry 1.0.2' was successfully installed into C:\Users\ADMIN\.bluemix\plugins\container-registry. U
 se 'ibmcloud plugin show container-registry' to show its details.
 C:\Users\ADMIN>
```

2) deployhelloworld or jobportal

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Question-4: Create a kubernetes cluster in ibm cloud and deploy helloworld image or jobportal image and also expose the same app to run in noteport

1) Creating a kubernetes cluster in ibm cloud



2) deploy helloworld image or jobportal image and also expose the same app to run in noteport

```
C:\Windows\System32\cmd.exe
                                                                                                                                           ×
                                         3,721 windows shortcut.txt
                 3,721 windows sho
2,897 YouTube.lnk
24 File(s) 804,677,196 bytes
9 Dir(s) 79,221,886,976 bytes free
              08:40 PM
08/25/2022
                 24 File(s)
C:\Users\gani\Desktop>cd deploy
The system cannot find the path specified.
C:\Users\gani\Desktop>kubectl apply -f kubernetes/depoly.yaml
error: the path "kubernetes/depoly.yaml" does not exist
C:\Users\gani\Desktop>kubectl apply -f depoly.yaml
error: the path "depoly.yaml" does not exist
C:\Users\gani\Desktop>kubectl apply -f C:\Users\gani\Desktop\deploy.yaml
deployment.apps/flask-app created
C:\Users\gani\Desktop>
```





O C//Windows/System32/cmd.acc 'Mindows'ystem32'whocil expose deployment flask-app - type-modePort - name-flask service
be Service "flask sorvice" is invalid: metadata.name: Invalid value: "flask service": a DNS:3835 label must consist of lower case alphanumenic characters or 'with an alphabetic character, and end with an alphanumenic character (e.g. "my name", or "abc-123", regex used for validation is "[a-2]([-a-26-9]*[a-26-9])?") '(Nindows)system32:kubectl expose deployment flask app ...type=NodePort - name=flask service
he Service "flask service" is invalid: metadata.name: Invalid value: "flask service": a DNS-1035 label must consist of lower case alphanumeric characters or 'with an alphabetic character, and end with an alphanumeric character (e.g. "my-name", or "abc-123", regex used for validation is "[a-z]([-a-zH-9]*[a-zH-9])?") (Windows\system32>kuhectl expose deployment flask-app - type-NodePort - name-Flask service
he Service "flask_service" is invalid: metadata.name: Invalid value: "flask_service": a DNS-1035 label must consist of lower case alphanumeric characters or "with an alphabetic character, and end with an alphanumeric character (e.g. "my-name", or "abc-123", regex used for validation is [a-z]([-a-z0-9]*[a-z0-9])?") 'Nindows\system12>kubectl expose deployment flask-app --type-NodePort --name-flask-service rrow from server (Alreadytxists): services "flask-service" already exists \Mindows\system32> \Mindows\system32>kubecti -n kubernetes-deshboard get depploy \Mindows\system12:kubert1 -n kubernetes-dashboard get deploy resources found in kubernetes-dashboard namespace. \Windows\system32\kubert1 -n kubernetus-dashboard gut deploy o resources found in Kubernetes-dashboard namespace. :\Windows\system32>kubect1 proxy tarting to serve on 127,0,0,1:0001 \Mindows\system32*kubectl -n kubernetes-dashboard get deplou \Mindows\system32>kubectl -n kubernetes-deshboard get deploy o resources found in kubernetes-dashboard namespace. \Mindows\system32>kubectl -n kubernetes-dashboard get pods presources found in kubernetes-dashboard namespace. -Nulmdows\systemIZ>kubectl expose deployment flask-app --type-NudeFort --name-flask-service rror from server (Alreadytmists): services "Flask-service" already exists :\Mindows\Aystem32>kubectl get ing
MMI CLASS HOSTS ADDRESS PORTS AGE
Eask-app-ingress cnone> * 80 27m :\Mindows\system32>kubect1 get avc AME TYPE CLUSTER-IP