

PERSONAL EXPENSE TRACKER-CLOUD APPLICATION DEVELOPMENT Assignment 4

1. Pull an Image from docker hub and run it in docker playground.

The image displays two screenshots of the Docker Playground interface, showing the process of pulling and running a Docker image.

Top Screenshot: The interface shows a session titled "cdosjg79_cdosjk791rrg00fbp5qg" with IP 192.168.0.8. The terminal output shows the user running the command `docker pull hello-world`. The output indicates that the image was successfully pulled from the Docker Hub.

```
# completely the user's responsibilities.
#
# The PWD team.
#####
(node1) (local) root@192.168.0.8 ~
$
#####
# WARNING!!!!
# This is a sandbox environment. Using personal credentials
# is HIGHLY! discouraged. Any consequences of doing so are
# completely the user's responsibilities.
#
# The PWD team.
#####
(node1) (local) root@192.168.0.8 ~
$ docker pull hello-world
Using default tag: latest
latest: Pulling from library/hello-world
2db29710123e: Pull complete
Digest: sha256:faa03e786c97f07ef34423fccceec2398ec8a5759259f94d99078f264e9d7af
Status: Downloaded newer image for hello-world:latest
docker.io/library/hello-world:latest
(node1) (local) root@192.168.0.8 ~
$
```

Bottom Screenshot: The interface shows the same session. The terminal output shows the user running the command `docker run hello-world`. The output displays the "Hello from Docker!" message and provides instructions on how to generate this message and how to run an Ubuntu container.

```
(node1) (local) root@192.168.0.8 ~
$ docker run hello-world

Hello from Docker!
This message shows that your installation appears to be working correctly.

To generate this message, Docker took the following steps:
1. The Docker client contacted the Docker daemon.
2. The Docker daemon pulled the "hello-world" image from the Docker Hub.
   (amd64)
3. The Docker daemon created a new container from that image which runs the
   executable that produces the output you are currently reading.
4. The Docker daemon streamed that output to the Docker client, which sent it
   to your terminal.

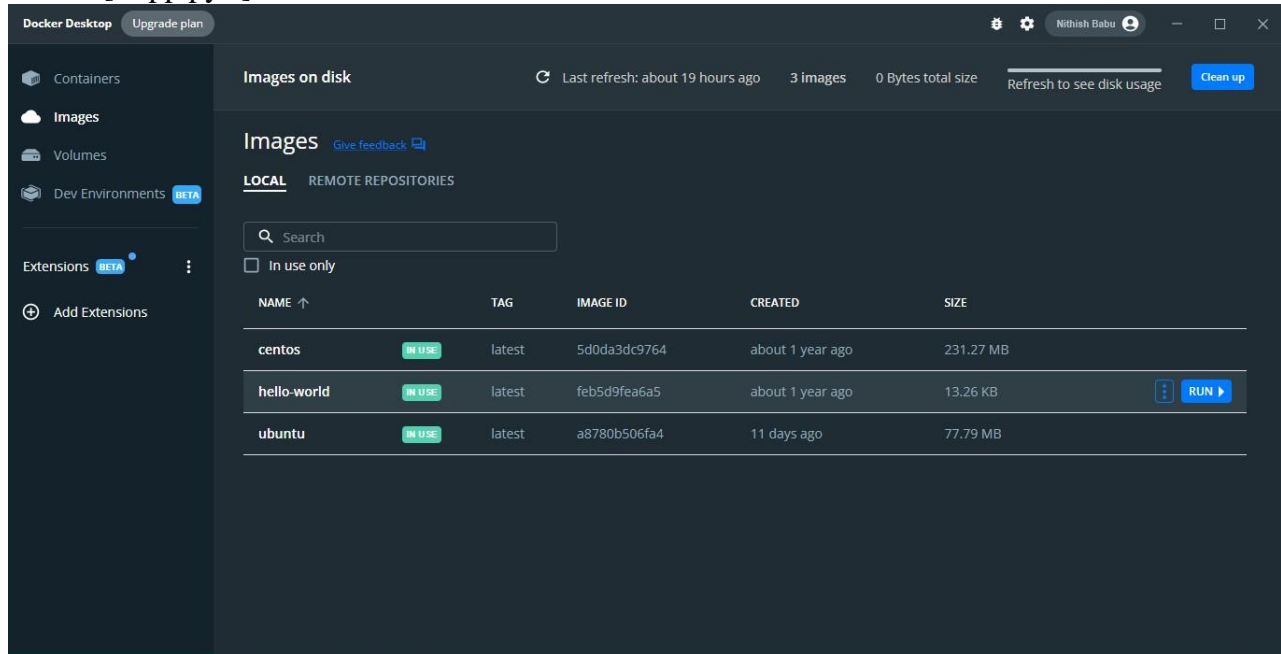
To try something more ambitious, you can run an Ubuntu container with:
$ docker run -it ubuntu bash

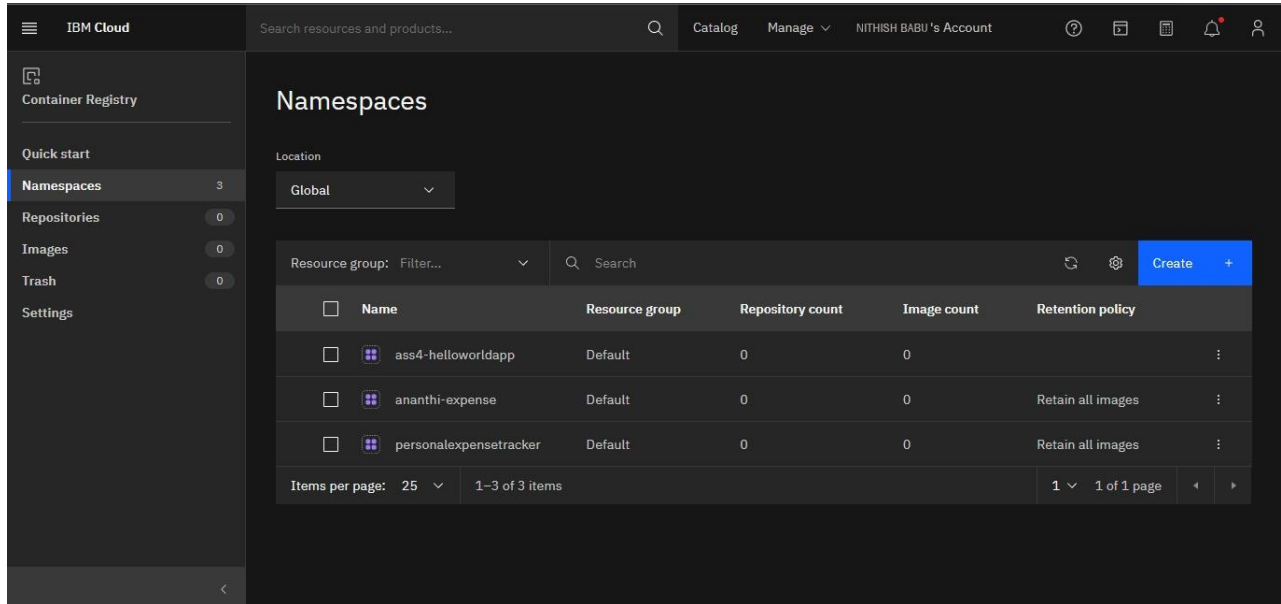
Share images, automate workflows, and more with a free Docker ID:
https://hub.docker.com/

For more examples and ideas, visit:
https://docs.docker.com/get-started/
(node1) (local) root@192.168.0.8 ~
```

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

```
FROM python:3.7
COPY ./app
WORKDIR /app
COPY requirements.txt /app
RUN python -m pip install -r requirements.txt
EXPOSE 5001
ENTRYPOINT [ "python" ]
CMD [ "app.py" ]
```



3. Create a IBM container registry and deploy helloworld app or jobportalapp.

Hello World



4. Create a Kubernetes cluster in IBM cloud and deploy helloworld image or jobportal image and also expose the same app to run in nodeport.