

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

```
Activities Terminal Tue Nov 1 14:50 yeswanth@yeswanth-Latitude-3520: ~/Downloads

Processing triggers for hicolor-icon-theme (0.17-2) ...
Processing triggers for gnome-menus (3.36.0-1ubuntu3) ...
Processing triggers for libc-bin (2.35-0ubuntu3.1) ...
Processing triggers for man-db (2.10.2-1) ...
Processing triggers for mailcap (3.70+nmu1ubuntu1) ...
Processing triggers for desktop-file-utils (0.26-1ubuntu3) ...
yeswanth@yeswanth-Latitude-3520:~/Downloads$
yeswanth@yeswanth-Latitude-3520:~/Downloads$ docker pull hello-world
Using default tag: latest
latest: Pulling from library/hello-world
2db29710123e: Pull complete
Digest: sha256:e18f0a777aefabe047a671ab3ec3eed05414477c951ab1a6f352a06974245fe7
Status: Downloaded newer image for hello-world:latest
docker.io/library/hello-world:latest
yeswanth@yeswanth-Latitude-3520:~/Downloads$ docker run hello-world

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

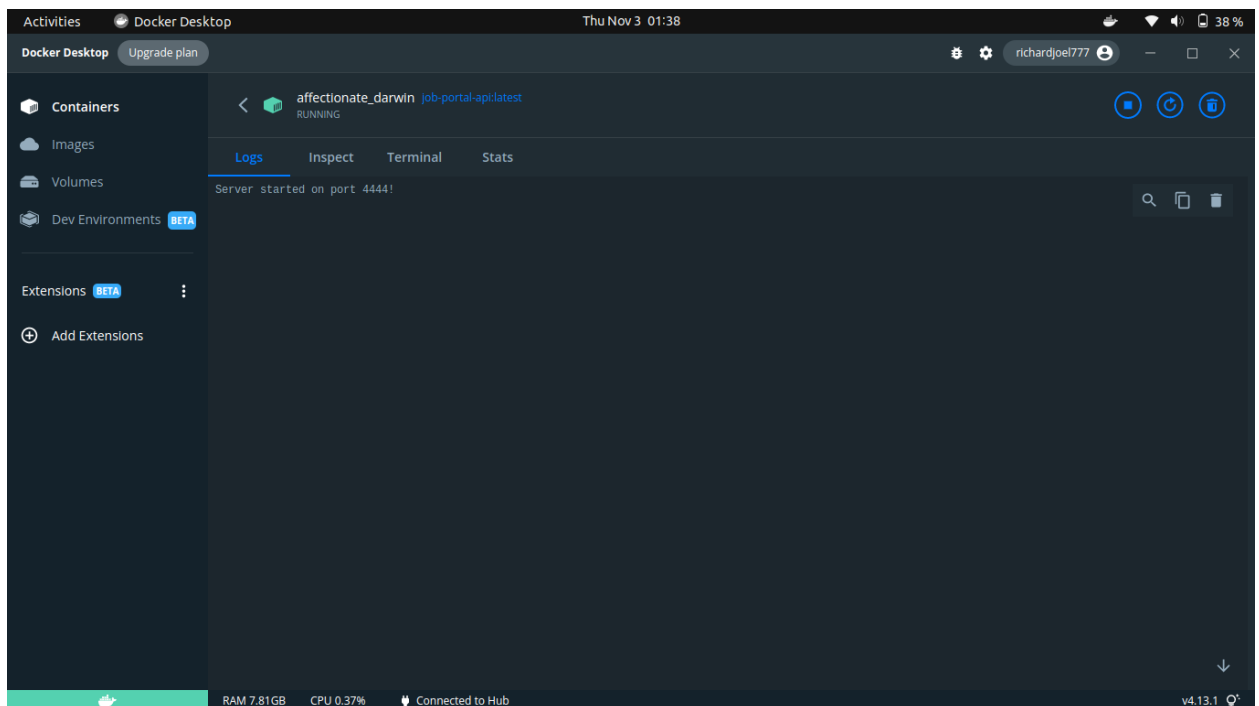
To generate this message, Docker took the following steps:
1. The Docker client contacted the Docker daemon.
2. The Docker daemon pulled the "hello-world" image from the Docker Hub.
   (amd64)
3. The Docker daemon created a new container from that image which runs the
   executable that produces the 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/
yeswanth@yeswanth-Latitude-3520:~/Downloads$
```

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



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

```
yeswanth@yeswanth-Latitude-3520:~$ ibmcloud cr login
Logging 'docker' in to 'icr.io'...
Logged in to 'icr.io'.

OK
yeswanth@yeswanth-Latitude-3520:~$ docker pull hello-world
Using default tag: latest
latest: Pulling from library/hello-world
Digest: sha256:e18f0a777aefabe047a671ab3ec3eed05414477c951ab1a6f352a06974245fe7
Status: Image is up to date for hello-world:latest
docker.io/library/hello-world:latest
yeswanth@yeswanth-Latitude-3520:~$ docker tag hello-world icr.io/kongu-namespace/ibm-assignment:hello-world
yeswanth@yeswanth-Latitude-3520:~$ docker push icr.io/kongu-namespace/ibm-assignment:hello-world
The push refers to repository [icr.io/kongu-namespace/ibm-assignment]
e07ee1baac5f: Pushed
hello-world: digest: sha256:f54a58bc1aac5ea1a25d796ae155dc228b3f0e11d046ae276b39c4bf2f13d8c4 size: 525
yeswanth@yeswanth-Latitude-3520:~$ ibmcloud cr image-list
Listing images...

Repository                                Tag          Digest          Namespace        Created        Size        Security status
icr.io/kongu-namespace/ibm-assignment     hello-world  f54a58bc1aac    kongu-namespace  1 year ago    2.5 kB      -

OK
yeswanth@yeswanth-Latitude-3520:~$
```

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

hello-world

Metadata

Name	Namespace	Created	Age	UID
hello-world	default	Nov 2, 2022	2 hours ago	359d8097-258c-4f44-b1a1-ce78825f9a94

Annotations

cni.projectcalico.org/containerID

cni.projectcalico.org/podIP: 172.30.149.148/32

cni.projectcalico.org/podIPs: 172.30.149.148/32

kubectrl.kubernetes.io/last-applied-configuration

kubernetes.io/psp: ibm-privileged-psp

Resource information

Node	Status	IP	QoS Class	Restarts	Service Account
10.144.182.82	CrashLoopBackOff	172.30.149.148	BestEffort	34	default

Image Pull Secrets

all-icr-io