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

Activities   Terminal ▾   Nov 6 13:56

sethuram@sethu: ~

```
sethuram@sethu:~$ docker ps
CONTAINER ID    IMAGE       COMMAND     CREATED       STATUS       PORTS       NAMES
sethuram@sethu:~$ docker images
REPOSITORY       TAG          IMAGE ID       CREATED         SIZE
mongo            latest       d98599fdfd65   3 months ago    696MB
mongo            <none>       aad77ae58e0c   15 months ago   682MB
redis            latest       aa4d65e670d6   15 months ago   105MB
mongo-express    latest       f8fe1b7702e7   16 months ago   136MB
hello-world      latest       d1165f221234   20 months ago   13.3kB
redis            4.0          191c4017dcdd   2 years ago     89.3MB
sethuram@sethu:~$ 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/

sethuram@sethu:~$ docker run mongo
{"t":{"$date":"2022-11-06T08:26:09.463+00:00"},"s":"I",  "c":"NETWORK",  "id":4915701, "ctx":"-","msg":"Initialized wire specification","att
r":{"spec":{"incomingExternalClient":{"minWireVersion":0,"maxWireVersion":13},"incomingInternalClient":{"minWireVersion":0,"maxWireVersion":
```

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

Activities   Visual Studio Code ▾   Nov 6 16:08

app.py - JobPortal - Visual Studio Code

File Edit Selection View Go Run Terminal Help

Get Started   sendemail.py   <> apply.html U   app.py ✕   ≡ requirements.txt   Dockerfile

app.py
```
      Gayathrri222, 3 weeks ago | 1 author (Gayathrri222)                Gayathrri222, 3 weeks ago • Add files via upload
  1   from flask import Flask, render_template, request, redirect, url_for, session
  2   import ibm_db
  3   import re
  4
  5   app = Flask(__name__)
  6
  7   app.secret_key = 'a'
  8
  9   conn = ibm_db.connect("DATABASE=bludb;HOSTNAME=b70af05b-76e4-4bca-a1f5-23dbb4c6a74e.clogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=32
 10
 11   @app.route('/')
 12
 13   def homer():
```

PROBLEMS   OUTPUT   TERMINAL   GITLENS   DEBUG CONSOLE   docker + ∨ ⊞ 🗑 ∧ ✕

```
○ sethuram@sethu:~/Desktop/CLG/IBM/JobPortal$ docker run  -p 8080:8080  de5f6faaff52
  * Serving Flask app 'app' (lazy loading)
  * Environment: production
    WARNING: This is a development server. Do not use it in a production deployment.
    Use a production WSGI server instead.
  * Debug mode: off
  * Running on all addresses.
    WARNING: This is a development server. Do not use it in a production deployment.
  * Running on http://172.17.0.2:5000/ (Press CTRL+C to quit)
  172.17.0.1 - - [06/Nov/2022 10:37:28] "GET / HTTP/1.1" 200 -
  172.17.0.1 - - [06/Nov/2022 10:37:28] "GET /css/style.css HTTP/1.1" 404 -
  172.17.0.1 - - [06/Nov/2022 10:37:29] "GET /static/img/smartinternz.png HTTP/1.1" 404 -
  172.17.0.1 - - [06/Nov/2022 10:37:29] "GET /assets/img/favicon-32x32.png HTTP/1.1" 404 -
```

main*   ⊗ 0 ⚠ 0   Gayathrri222, 3 weeks ago   Ln 1, Col 1   Spaces: 4   UTF-8   CRLF   Python   Go Live   Prettier

Aboutus

Mission

SMARTBRIDGE is an edTech organization with a vision to bridge the gap between academia & industry. Our outcome-based experiential learning programs on emerging technologies (Internet of Things, Machine Learning, Data Science, Artificial Intelligence, Robotics) are building skilled entry - level engineers, for the corporate world. .

Vision

Our main objective is to bridge the existing gaps between prevailing industry standards and what the academics offer to the graduates while passing out of university. SmartBridge offers suitable skill deployment and training to the young talent before on boarding their first job. Our skill development programs are designed considering the present expectations in the industry.

Objective

Well directed career guidance programs for educational institutions Appropriate certification courses that suit the industry need Train the trainers; expanded awareness about the current industry standards Liaise with corporates to offer niche internships Establish technology development centers in colleges Specialised incubation centers in collaboration with corporates

JobPortal

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Get in Touch

- jobportal@gmail.com
- +91 8977787657

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

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:

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☰   Workloads › **Pods**

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Cron Jobs

Daemon Sets

Deployments

Jobs

Pods

Replica Sets

Replication Controllers

Stateful Sets

Service

Ingresses Ⓝ

Ingress Classes

Pods

	Name	Images	Labels	Node	Status	Restarts	CPU Usage (cores)	Memory Usage (bytes)
●	hello-world-ccfdb8f84-6rspb	Show all	Show all	10.144.195.52	CrashLoopE	3	-	-

https://eu-de.containers.cloud.ibm.com/kubeproxy/clusters/cdjp7uuf05artqhfith0/service/#/pod?namespace=default