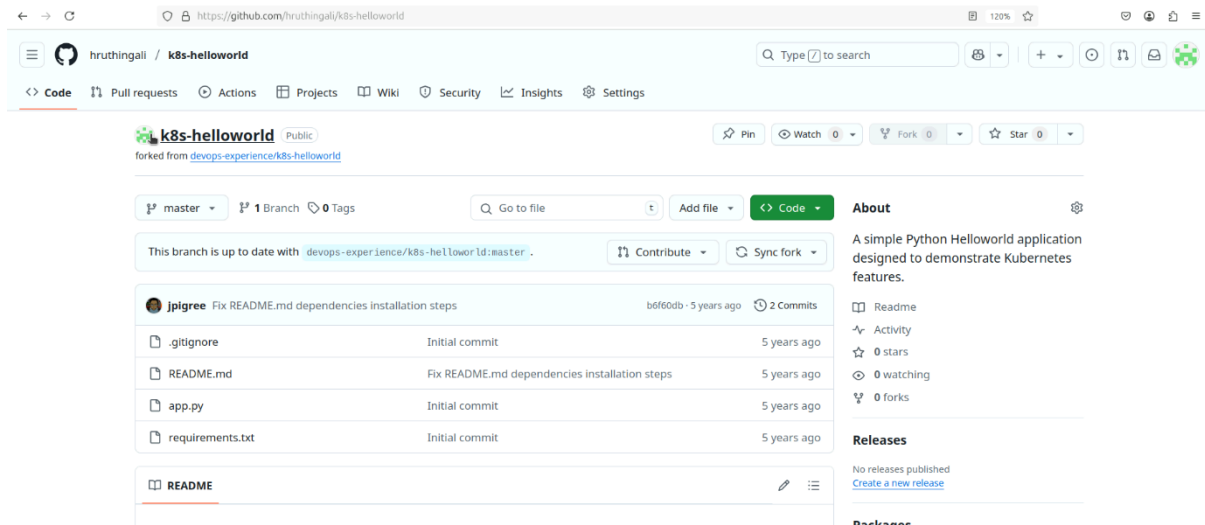


Docker and container Internals question 4

Forking the repository



Cloning the repo

```
master@master~$ git clone https://github.com/hruthingali/k8s-helloworld.git
Cloning into 'k8s-helloworld'...
remote: Enumerating objects: 9, done.
remote: Counting objects: 100% (5/5), done.
remote: Compressing objects: 100% (4/4), done.
remote: Total 9 (delta 2), reused 1 (delta 1), pack-reused 4 (from 1)
Receiving objects: 100% (9/9), done.
Resolving deltas: 100% (2/2), done.

master@master~$ cd k8s-helloworld/
master@master~$ ls
app.py  README.md  requirements.txt

master@master~$ cd k8s-helloworld/
mkdir -p ../devops-commontrack-mocktest/question4
cp -r . ../devops-commontrack-mocktest/question4/
cd ../devops-commontrack-mocktest/question4/
master@master~$ ls
app.py  README.md  requirements.txt
```

building the docker image

```
app.py  README.md  requirements.txt
master@master~$ cd ../devops-commontrack-mocktest/question4
master@master~$ docker build -t flask-helloworld .
DEPRECATED: The legacy builder is deprecated and will be removed in a future release.
Install the buildx component to build images with BuildKit:
https://docs.docker.com/go/buildx/

Sending build context to Docker daemon 71.17kB
Step 1/6 : FROM python:3.9-slim
--> 1a47c1aa089f
Step 2/6 : WORKDIR /app
--> Using cache
--> 7443cd44a5fe
Step 3/6 : COPY . /app
--> 7908c93194bb
Step 4/6 : RUN pip install flask
--> Running in 13e8f25d5f4c
Collecting flask
  Downloading flask-3.1.0-py3-none-any.whl (102 kB)
    103.0/103.0 kB 1.7 MB/s eta 0:00:00
Collecting Jinja2>=3.1.2
  Downloading Jinja2-3.1.6-py3-none-any.whl (134 kB)
    134.9/134.9 kB 11.4 MB/s eta 0:00:00
Collecting itsdangerous==2.2
  Downloading itsdangerous-2.2.0-py3-none-any.whl (16 kB)
Collecting click==8.1.3
  Downloading click-8.1.8-py3-none-any.whl (98 kB)
    98.2/98.2 kB 14.4 MB/s eta 0:00:00
Collecting importlib-metadata==3.6
  Downloading importlib_metadata-8.6.1-py3-none-any.whl (26 kB)
Collecting Werkzeug>=3.1
  Downloading werkzeug-3.1.3-py3-none-any.whl (224 kB)
    224.5/224.5 kB 19.1 MB/s eta 0:00:00
Collecting blinker==1.9
  Downloading blinker-1.9.0-py3-none-any.whl (8.5 kB)
Collecting zipp>=3.20
  Downloading zipp-3.21.0-py3-none-any.whl (9.6 kB)
Collecting MarkupSafe>=2.0
  Downloading MarkupSafe-3.0.2-cp39-cp39-manylinux_2_17_x86_64_manylinux2014_x86_64.whl (20 kB)
```

running the container

```
--> Removed intermediate container e314c36d13d0
--> 4513f2bd1041
Successfully built 4513f2bd1041
Successfully tagged flask-helloworld:latest
master@master~$ cd ../devops-commontrack-mocktest/question4
master@master~$ docker run -d --name flask-container flask-helloworld
22603c270a3870063aaf0e202c9d1b2ae5b306dd0f9d41af89aaf8dd996d9e9
```

container id

```
master@master~$ cd ../devops-commontrack-mocktest/question4
master@master~$ docker ps -q --filter "name=flask-container"
f22603c270a3
```

Working directory inside the container

```
master@mastervm: ~/devops-commontrack-mocktest/question$ docker exec flask-container pwd
/app
```

read write layer directory on the host

```
master@mastervm: ~/devops-commontrack-mocktest/question$ CID=$(docker inspect --format '{{.Id}}' flask-container)
master@mastervm: ~/devops-commontrack-mocktest/question$ docker inspect flask-container --format '{{.GraphDriver.Data.MergedDir}}'
/var/lib/docker/overlay2/72a4fb643c82b6fe4c9e624d1dfa12c3da1582a87bc3f94739d1492b86a467cb/merged
```