Write-up

1. Explain each of the instructions that you have typed in Lab 7 part A by one to two sentences.

A.1.2

'docker run -d -it python' : Create a container from the image which name python in detached mode in docker.

A.3.1

'docker rename <my\_container\_name> <my\_new container\_name>' : Replace a old container name by the new one.

A.4.1

'docker cp YOUR\_FILE YOUR\_CONTAINER\_NAME:/' : Command 'cp' means copy and paste. this command use to copy files from local machine to container image.

A.5.1

'docker exec -it <image\_name> bash' : ?

'pip install pip update' and 'pip install -r requirements.txt' : this command make you install relevant package.

'exit' mean stop and leave the container.

A.6.1

'docker commit -a 'AUTHOR' -m 'EXPLANATIONS' <YOUR CONTAINER ID> <YOUR\_IMAGE NAME:TAG>' : like a git commit, it send a mark with the container image.

A.7.1

'docker run --name YOUR\_EXP\_NAME -d <IMAGE\_CREATED\_BY\_YOU:TAG> python your\_PYTHON\_SCRIPT' :

A.7.2

'docker run --name YOUR\_EXP\_NAME' -d

--env ACCESS\_TOKEN=YOUR\_TOKENS

--env MODEL\_NAME=YOUR\_MODEL\_NAME

<IMAGE\_CREATED\_BY\_YOU:TAG>

python your PYTHON\_SCRIPT

Above command mean construct for each element's environment and run your python files

A.8.1

'docker stop <CONTAINER\_NAME>'

'docker rm -f <CONTAINER\_NAME>'

The first command mean stop the docker service, the second command mean remove a docker's image.

2. Paste the content of the Dockerfile that you have in Lab 7 part B.

FROM python:3.8

WORKDIR /APP

COPY . /APP

RUN pip install update

RUN pip install -r requirements.txt

ENV TLG\_ACCESS\_TOKEN=7090085173:AAEWYRaqleogIyZySqSgfUl\_CL0O3rUgjHg

ENV BASICURL=https://chatgpt.hkbu.edu.hk/general/rest

ENV MODELNAME=gpt-35-turbo

ENV APIVERSION=2024-02-15-preview

ENV GPT\_ACCESS=c813af90-2980-4c99-9bf5-8cf8e0eaa493

CMD python app.py

3. Explain the differences between your part1.yaml and part2.yaml that you have done in this lab.

'Pat1.yaml' just build an image to connect/test the docker service. 'Part2.yaml' are added os.environ[xxx](i.e. environment ) to the docker image.

4. What are the differences between the commands docker ps and docker-compose ps ?

'docker ps' command is a gobal view and the part of docker CLI, They are running in dock host, 'docker-compose ps' is defining and running multi-container docker application, the file should be '.yml' which is locate in local directory.

''

5. When you take down the redis service you have created in part 3, say using

docker-compose down , would that also destroys the data? Why or why not?

The data will be destroy, Due to some code in Part3.yaml

- redis

redis:

image: redis

volumes :

- ./redis.conf:/Users/ponglin/COMP7940-Lab7-8/redis.conf

command: ["/Users/ponglin/COMP7940-Lab7-8/redis.conf"]

The file 'redis.conf' is storage in local machine, when we use 'docker-compose' command, All files will package into one container, and run in docker(i.e. Local machine). One obvious feature for docker is, all files or data will be clean when the docker container was shut down (e.g. docker-compose down), including the redis data.