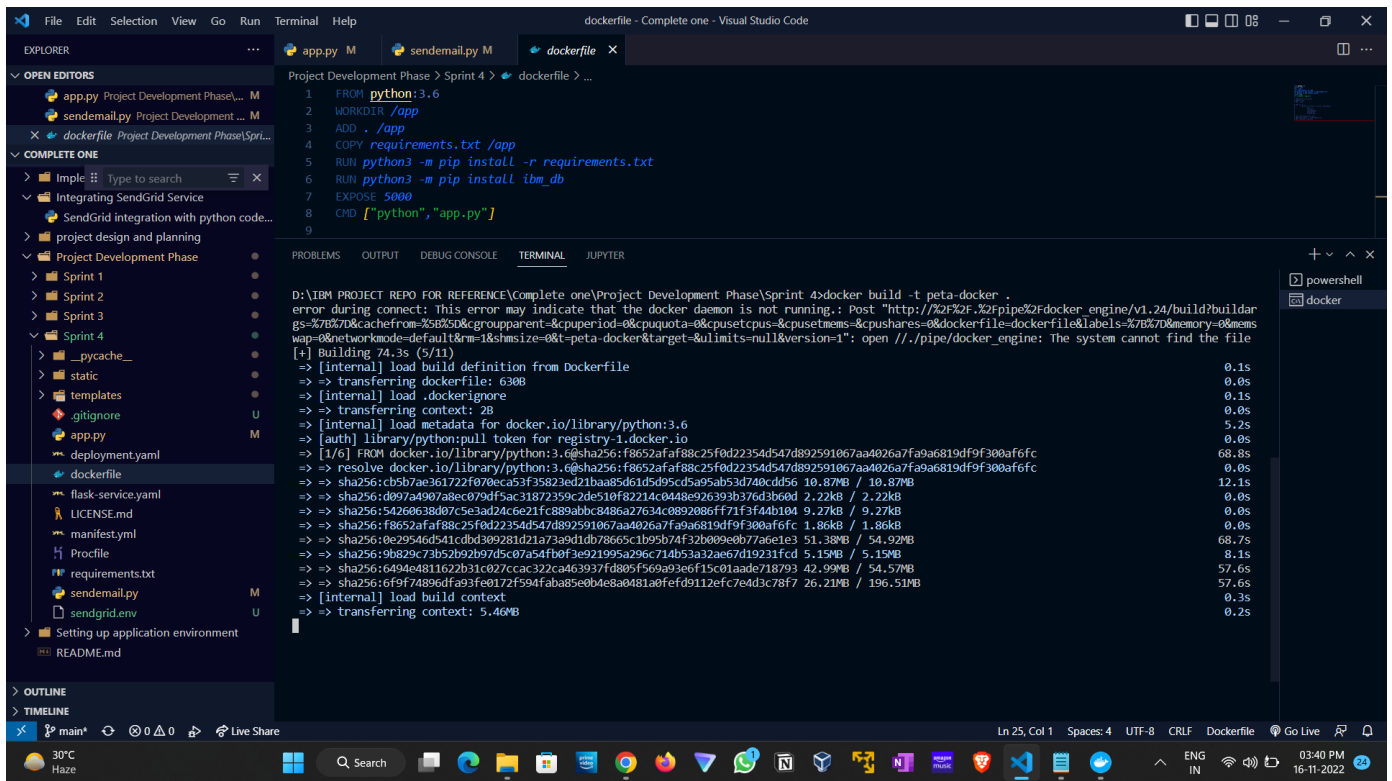


Containerize the app:

1. Building docker image



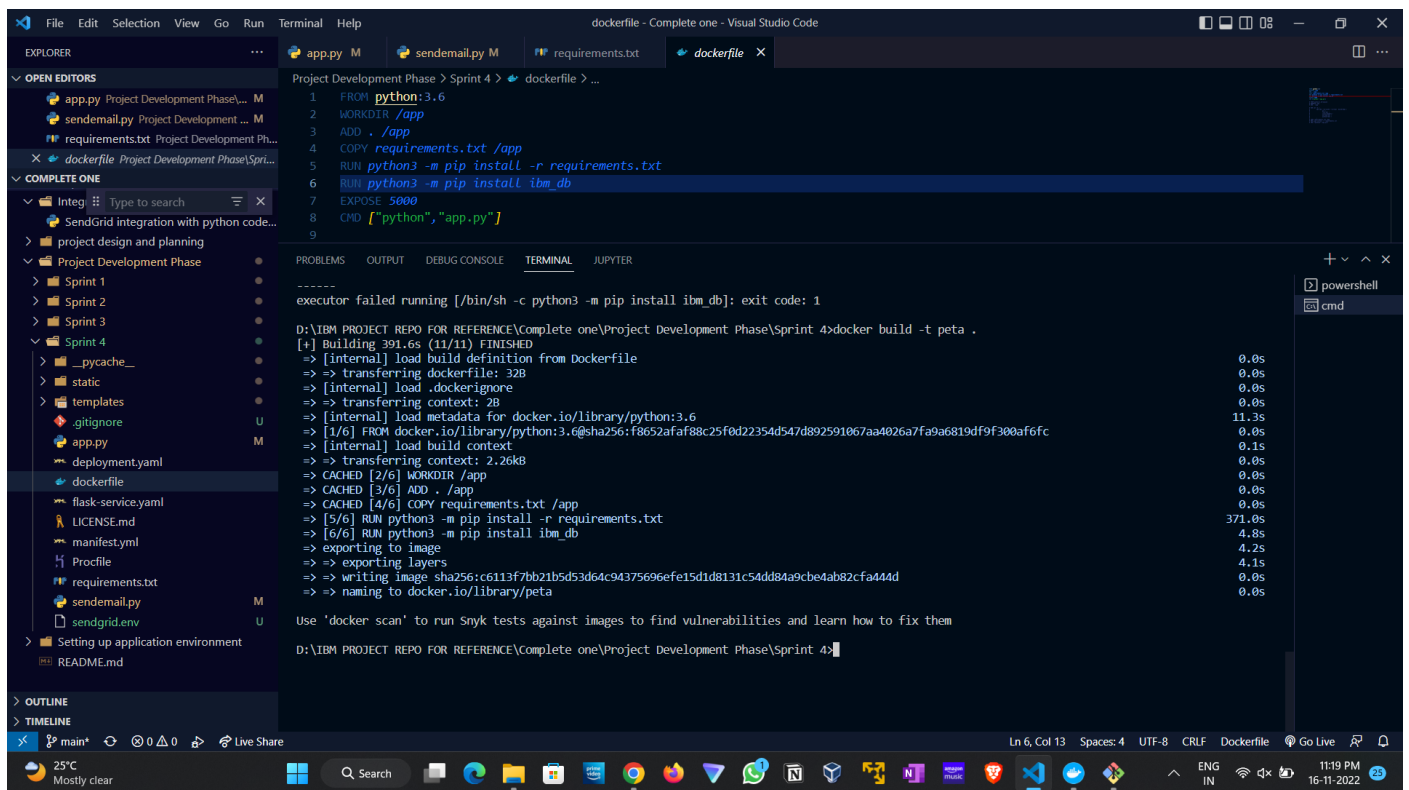
```
FROM python:3.6
WORKDIR /app
ADD . /app
COPY requirements.txt /app
RUN python3 -m pip install -r requirements.txt
RUN python3 -m pip install ibm_db
EXPOSE 5000
CMD ["python", "app.py"]
```

error during connect: This error may indicate that the docker daemon is not running.: Post "http://%2F%2Fpipe%2Fdocker_engine/v1.24/build?buildargs=%7B%7D&cacheFrom=%5B%5D&groupParent=&cpuPeriod=0&cpuQuota=0&cpuSetCpus=&cpuSetMems=&cpuShares=0&dockerfile=dockerfile&labels=%7B%7D&memory=0&mems wap=0&networkMode=default&rm=1&shmSize=0&t=peta-docker&target=&ulimits=null&version=1": open //./pipe/docker_engine: The system cannot find the file

[+] Building 74.3s (5/11)

Step	Image	Size	Virtual Size
FROM	python:3.6	0.1s	0.0s
WORKDIR	/app	0.0s	0.0s
ADD	./app	0.0s	0.0s
COPY	requirements.txt /app	0.0s	0.0s
RUN	python3 -m pip install -r requirements.txt	5.2s	0.0s
RUN	python3 -m pip install ibm_db	68.8s	0.0s
EXPOSE	5000	0.0s	0.0s
CMD	["python", "app.py"]	12.1s	0.0s

2. Docker image successfully built



```
FROM python:3.6
WORKDIR /app
ADD . /app
COPY requirements.txt /app
RUN python3 -m pip install -r requirements.txt
RUN python3 -m pip install ibm_db
EXPOSE 5000
CMD ["python", "app.py"]
```

executor failed running [/bin/sh -c python3 -m pip install ibm_db]: exit code: 1

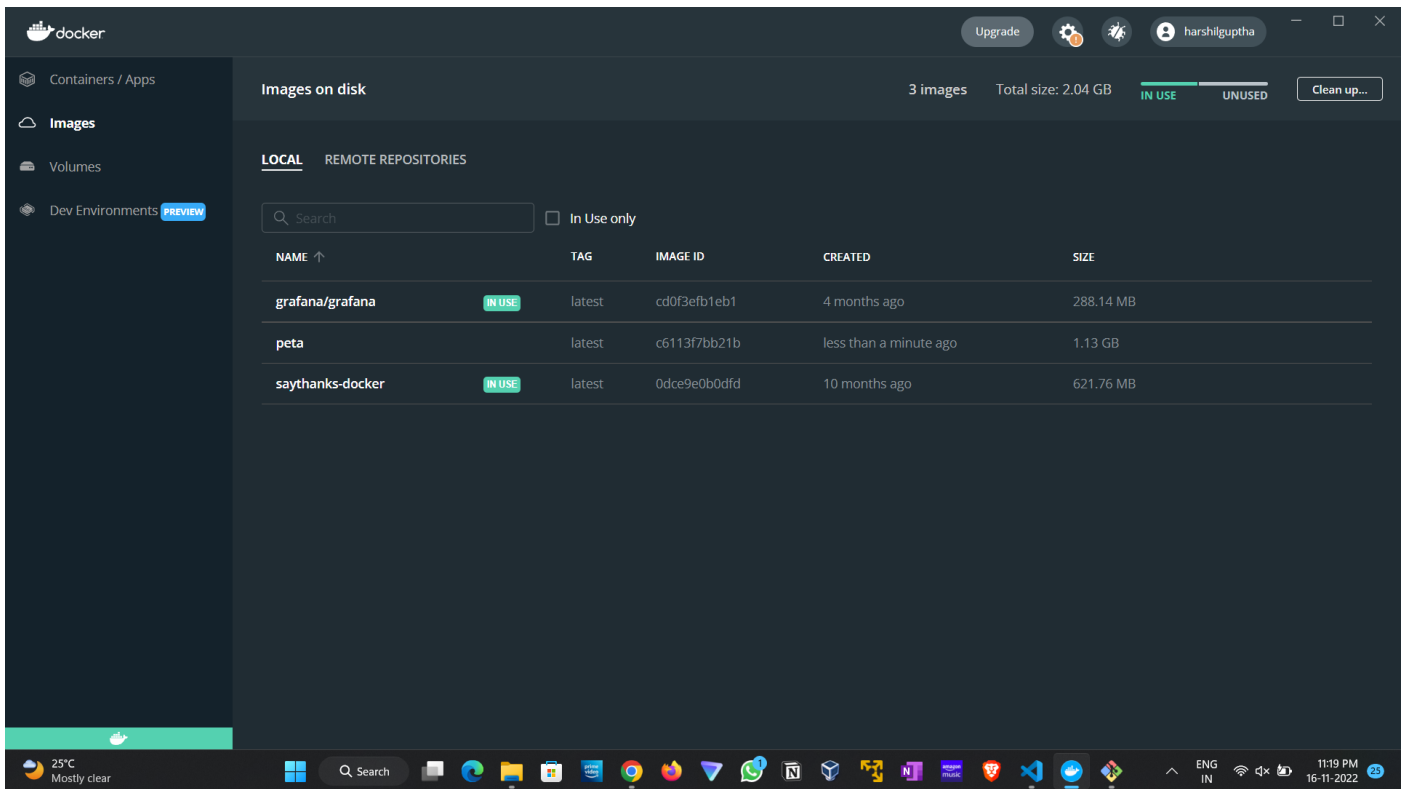
D:\IBM PROJECT REPO FOR REFERENCE\Complete one\Project Development Phase\Sprint 4>docker build -t peta .

[+] Building 391.6s (11/11) FINISHED

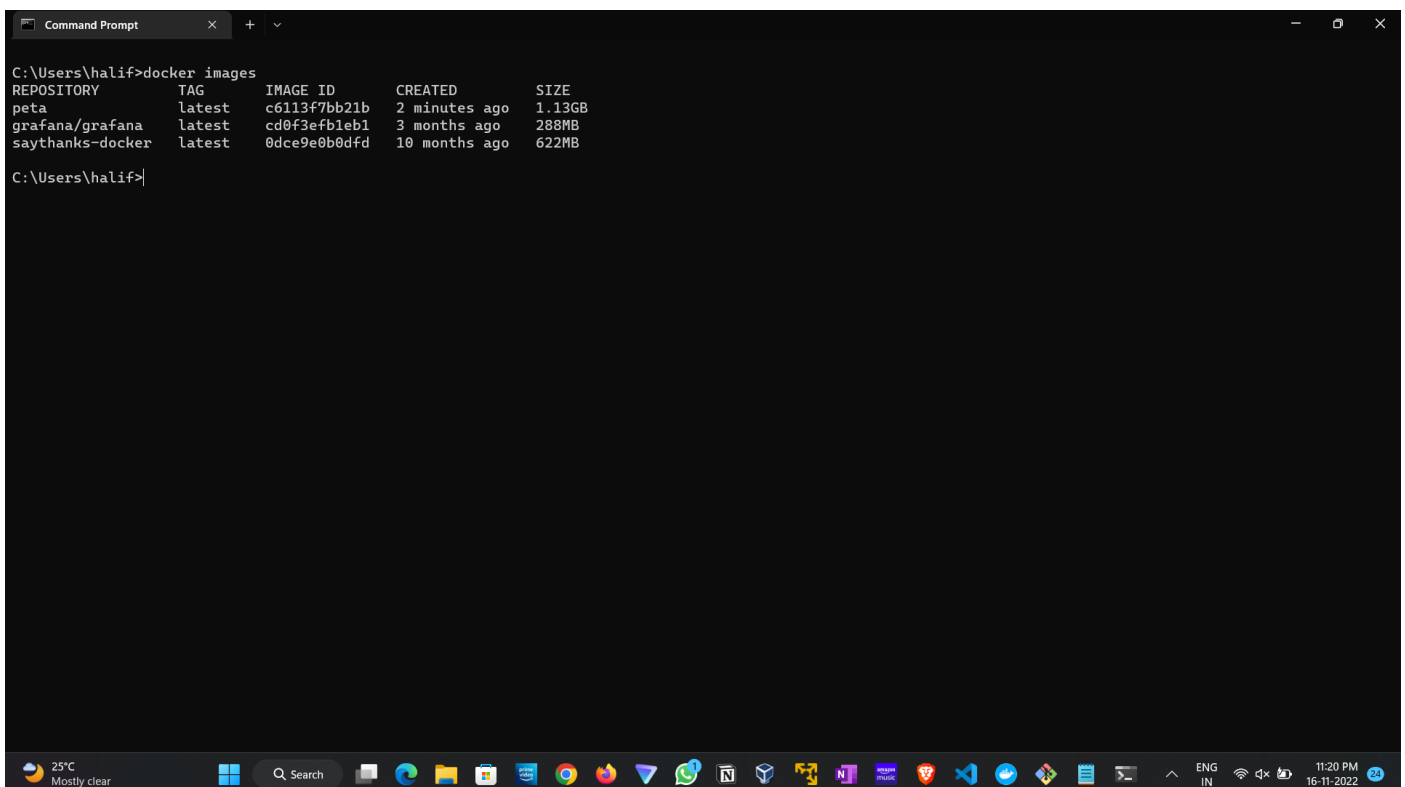
Step	Image	Size	Virtual Size
FROM	python:3.6	0.0s	0.0s
WORKDIR	/app	0.0s	0.0s
ADD	./app	0.0s	0.0s
COPY	requirements.txt /app	0.0s	0.0s
RUN	python3 -m pip install -r requirements.txt	11.3s	0.0s
RUN	python3 -m pip install ibm_db	0.0s	0.0s
EXPOSE	5000	0.0s	0.0s
CMD	["python", "app.py"]	0.0s	0.0s

Use 'docker scan' to run Snyk tests against images to find vulnerabilities and learn how to fix them

3. Docker image showing in Docker GUI



4. Docker images showing in CMD



5. Docker image running

```
Command Prompt - docker r x + v

C:\Users\halif>docker images
REPOSITORY          TAG                 IMAGE ID            CREATED             SIZE
peta                 latest             c6113f7bb21b       2 minutes ago      1.13GB
grafana/grafana     latest             cd0f3efb1eb1       3 months ago       288MB
saythanks-docker    latest             0dce9e0b0dfd       10 months ago      622MB

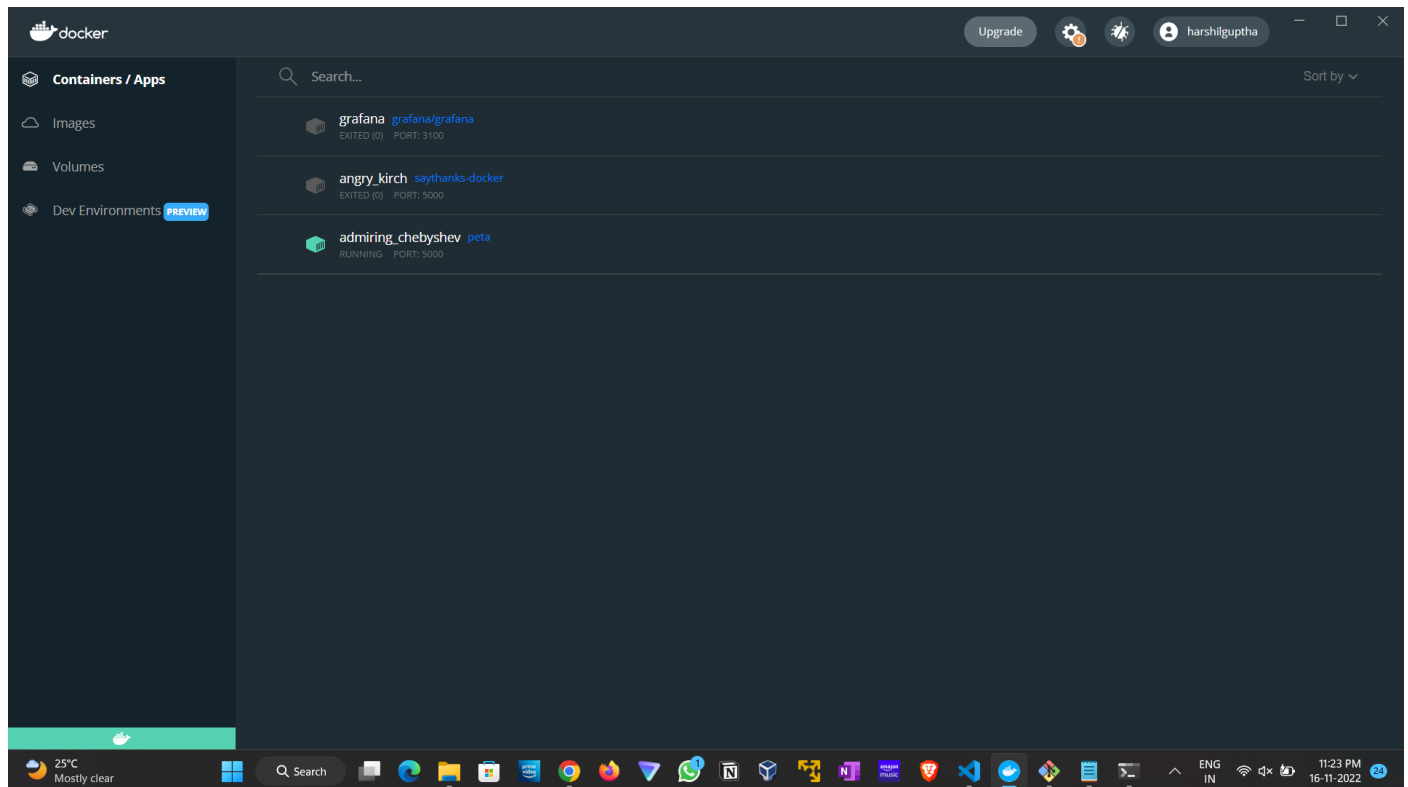
C:\Users\halif>docker run -p 5000:5000 peta
Traceback (most recent call last):
  File "app.py", line 62, in <module>
    ibm_db_conn = ibm_db.connect(conn_str, '', '')
Exception: [IBM][CLI Driver] SQL0438N  Application raised error or warning with diagnostic text: "Exceeded maximum limit of 5 connections. Connection refused".  SQLSTATE=42502  SQLCODE=-438

During handling of the above exception, another exception occurred:

Traceback (most recent call last):
  File "app.py", line 66, in <module>
    print("IBM DB Connection error : " + DB2.conn_errormsg())
AttributeError: type object 'DB2' has no attribute 'conn_errormsg'

C:\Users\halif>docker run -p 5000:5000 peta
Database connected without any error !!
* 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: on
* Running on all addresses.
  WARNING: This is a development server. Do not use it in a production deployment.
* Running on http://172.17.0.2:8080/ (Press CTRL+C to quit)
* Restarting with stat
* Debugger is active!
* Debugger PIN: 116-345-602
```

6. Container when running



7. Running container

```
Command Prompt - docker n. X Windows PowerShell X + v
Windows PowerShell
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Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Users\halif> docker ps
CONTAINER ID   IMAGE     COMMAND                  CREATED        STATUS        PORTS                               NAMES
0e30d975b924   peta     "python app.py"         9 minutes ago Up 9 minutes   0.0.0.0:5000->5000/tcp             admiring_chebyshev
PS C:\Users\halif> |
```

25°C Mostly clear

11:31 PM 16-11-2022