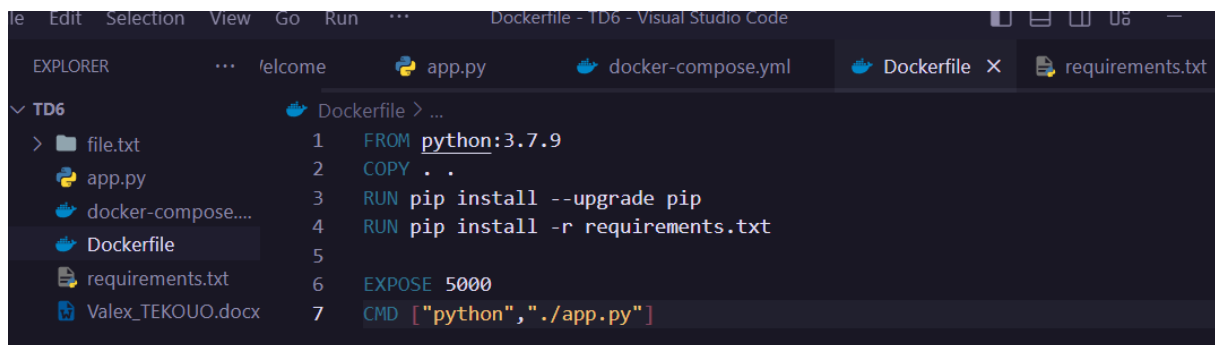


---

## TD 6 - Volumes, bind mounts & tmpfs mounts

---

### PART1



The screenshot shows the Visual Studio Code interface with a Dockerfile open. The Explorer on the left shows a project named 'TD6' containing files: 'file.txt', 'app.py', 'docker-compose....', 'Dockerfile', 'requirements.txt', and 'Valex\_TEKOUO.docx'. The Dockerfile editor shows the following content:

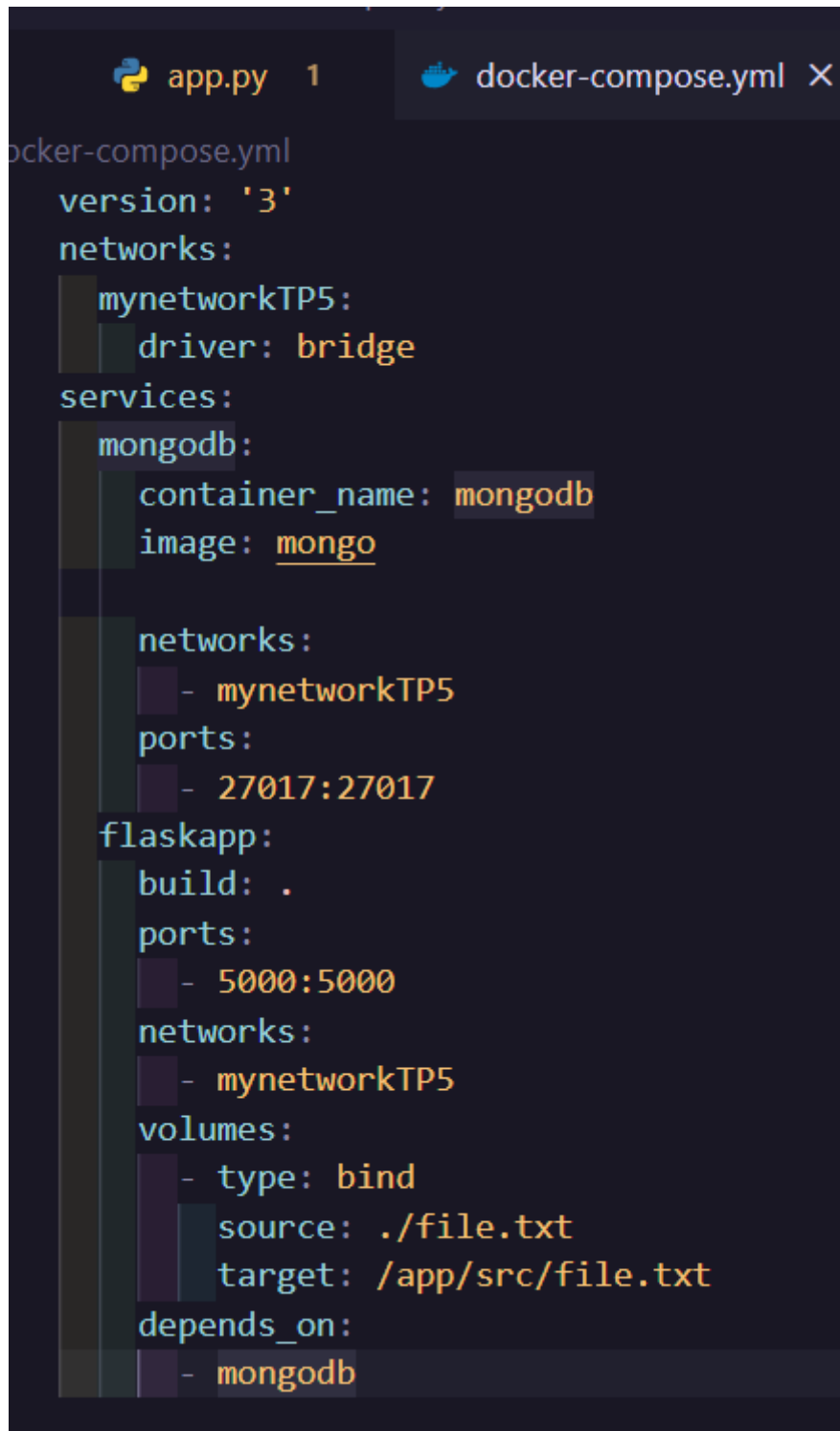
```
1 FROM python:3.7.9
2 COPY . .
3 RUN pip install --upgrade pip
4 RUN pip install -r requirements.txt
5
6 EXPOSE 5000
7 CMD ["python", "./app.py"]
```

For this first part of the TP6 we will use Docker-compose for the app(That we used on the last TP).

In the following image you can see the specification for the docker-compose file (docker-compose.yml)

### PART2

Here is the Docker-compose.yml



```
version: '3'
networks:
  mynetworkTP5:
    driver: bridge
services:
  mongodb:
    container_name: mongodb
    image: mongo
    networks:
      - mynetworkTP5
    ports:
      - 27017:27017
  flaskapp:
    build: .
    ports:
      - 5000:5000
    networks:
      - mynetworkTP5
    volumes:
      - type: bind
        source: ./file.txt
        target: /app/src/file.txt
    depends_on:
      - mongodb
```

- First we will specify the version which is 3,
- We specified the network(mynetworkTP5) which is a bridge type,
- After we specified the services mongoDB(our database), flaskapp(the type of application)
- mongoDB uses the network created(mynetworkTP5), the type of the image (mongo) and the port(27017) to map the connection.
- The flaskapp is use from the origin ('.'), it uses the same network(mynetworkTP5) as mongoDB.

- When we use `depends_on("mongoDB")` is to say that if the db container is not started the container app can't be start.
- We also use `port(5000:5000)` for mapping connection)

```
Valex@PC-VALEX:/mnt/c/Users/tekou/OneDrive - De Vinci/Desktop/Files/2A_ESILV_CCC/S8/Cloud Computing/TDs/TD6$ docker compose up
[+] Running 2/2
# Container mongodb      Running
# Container td6-flaskapp-1 Recreated
```