

Détail Etapes

- Fork local
- Fork local → cloner → GitHub
- test api.py sur python

```
sudo apt-get install python-pip
```

- faire les docker file

Docker file api-backend

```
FROM python:3
WORKDIR /usr/src/app
COPY ./api.py .
RUN pip install requests flask
#pip:3 ?
EXPOSE 8001
CMD [ "python", "./api.py" ]
```

```
#Commande docker pour créer l'image
docker image build -t api-backend:v0.1 .
#docker image build -p 8001:8001 api-backend:v0.1 .
```

Docker file api-frontend

```
FROM python:3
WORKDIR /usr/src/app
COPY ./api.py .
RUN pip install requests flask
EXPOSE 8000
CMD [ "python", "./api.py" ]
```

```
#Commande docker pour créer l'image
docker image build -t api-frontend:v0.1 .
```

```
admin@LIN2-deb-docker1:~$ docker image ls
```

REPOSITORY	TAG	IMAGE ID	CREATED	SIZE
api-front	v0.1	d183b15d9c68	19 seconds ago	932MB
api-backend	v0.1	9cc92ee6debb	2 minutes ago	932MB
python	3	9cbe331577ed	4 days ago	932MB

```
#Run in container back
docker container run -p 8001:8001 api-backend:v0.1
```

```
#Run in container front
docker container run -p 8000:8000 api-frontend:v0.1
```

```
#Check : docker container ls -ado
```

```
admin@LIN2-deb-docker1:~$ docker container ls -a
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
0adb307d3353	api-frontend:v0.1	"python ./api.py"	20 seconds ago	Up 4 seconds	0.0.0.0:8000->8000/tcp, :::8000->8000/tcp	heuristic_meitner
6e0e72b0f863	api-backend:v0.1	"python ./api.py"	4 minutes ago	Up 3 minutes	0.0.0.0:8001->8001/tcp, :::8001->8001/tcp	nervous_mendel

```
admin@LIN2-deb-docker1:~$
```

- faire le dockercompose

Arborescence

```
./dockerfile
backend frontend
```

```
./dockerfile/backend
api.py Dockerfile
./dockerfile/frontend
api.py Dockerfile
```

```

version: '3'
services:
  front:
    build:
      context: ./dockerfile/frontend/
      dockerfile: Dockerfile
    container_name: frontend
    restart: unless-stopped
    environment:
      - API_BACKEND_URL=172.27.160.1
      - API_BACKEND_PORT=8001
    ports:
      - 8000:8000
  back:
    build:
      context: ./dockerfile/backend/
      dockerfile: Dockerfile
    container_name: backend
    restart: unless-stopped
    ports:
      - 8001:8001
    depends_on:
      - "front"

```

- pousser les images sur le docker hub (tag)

```

#Launch compose file
docker-compose up -d

#Docker Hub, repository kind of
https://hub.docker.com
login : auggus
PSW : CPNVPa$$w0rd2022

Docker HUB :
docker tag hello:v0.2 auggus/hello:v0.2

```

- commit local → github

```

Commit to docker hub

docker tag admin_back:latest auggus/tp-docker-backend:v0.1
docker tag admin_front:latest auggus/tp-docker-frontend:v0.1

docker push auggus/tp-docker-backend:v0.1
docker push auggus/tp-docker-frontend:v0.1

```

Pour lancer le front il faut lui fournir les 2 variables d'environnement, IP et Port du back

Request et Flask dépendances, a ajouter dans le docker file