

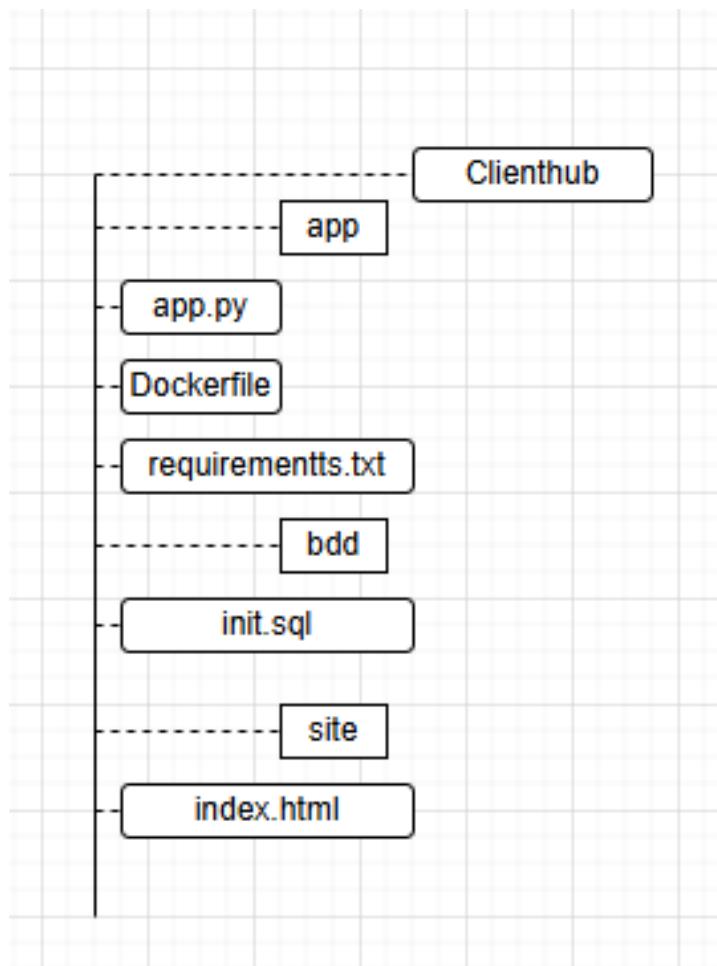
# DOCUMENTATION

Docker file :

```
Ouvrir ▾  ⌂
• Dockerfile
~/clienthub/app

FROM python:3.9-slim
WORKDIR /app
COPY requirements.txt .
RUN pip install --no-cache-dir -r requirements.txt
COPY . .
EXPOSE 5000
CMD ["python", "app.py"]
```

Structure :



```

version: '3.8'

services:
  db:
    image: mysql:8.0
    container_name: clienthub-db
    restart: always
    environment:
      MYSQL_ROOT_PASSWORD: rootpassword
      MYSQL_DATABASE: clienthub_db
      MYSQL_USER: user
      MYSQL_PASSWORD: password
    volumes:
      - mysql_data:/var/lib/mysql
      - ./bdd/init.sql:/docker-entrypoint-initdb.d/init.sql
  networks:
    - clienthub-net
  healthcheck:
    test: ["CMD", "mysqladmin", "ping", "-h", "localhost"]
    timeout: 20s
    retries: 10

api:
  build: ./app
  container_name: clienthub-api
  restart: always
  ports:
    - "5000:5000"
  environment:
    DB_HOST: db
    DB_NAME: clienthub_db
    DB_USER: user
    DB_PASSWORD: password
  depends_on:
    db:
      condition: service_healthy
  networks:
    - clienthub-net

web:
  image: nginx:latest
  container_name: clienthub-web
  restart: always
  ports:
    - "8080:80"
  volumes:
    - ./site:/usr/share/nginx/html
  networks:
    - clienthub-net

volumes:
  mysql_data:

networks:
  clienthub-net:
    driver: bridge

```

Docker compose.yml

## Page Servie via Nginx:



## ClientHub

page statique Nginx.

[La page API](#)

## Page API:

A screenshot of a web browser window showing a JSON API response. The address bar shows "http://localhost:5000/clients". The content is a JSON array with two elements:

```
[{"id": 1, "name": "Jean Dupont", "email": "jean@test.com"}, {"id": 2, "name": "Louis Docker", "email": "louis@test.com"}]
```

## Les conteneur en fonctionnement (docker ps):

```
louis@louis-docker:~/clienthub$ docker ps
CONTAINER ID        IMAGE               COMMAND             CREATED            STATUS              PORTS
1215f993ea1e        clienthub-api      "python app.py"      54 minutes ago   Up 53 minutes
b8e5ac7036db        nginx:latest       "/docker-entrypoint..." 54 minutes ago   Up 54 minutes
6e8fd6a64980        mysql:8.0          "docker-entrypoint.s..." 54 minutes ago   Up 54 minutes
(healthy)           3306/tcp, 33060/tcp
louis@louis-docker:~/clienthub$
```

## QUESTION:

En quelques lignes, justifiez :

- le choix des ports exposés,
- 2)l'utilisation du réseau Docker,
- 3)la nécessité des volumes.

1)Le port 8080 évite les conflits avec le système hôte.

3306 car mysql utilise ça par défaut

80 pour nginx

2)Cela permet aux conteneurs de communiquer entre eux tout en isolant l'application du reste de la machine.

3)Cela permet de ne pas perdre les données de la base quand on redémarre un conteneur

Mon lien git hub :

<https://github.com/kidloulou/docker>