Selfhost NotebookLM

1. Setup docker

```
# Add Docker's official GPG key:
sudo apt-get update
sudo apt-get install -y ca-certificates curl
sudo install -m 0755 -d /etc/apt/keyrings
sudo curl -fsSL https://download.docker.com/linux/ubuntu/gpg -o /etc/apt/keyrings/docker.asc
sudo chmod a+r /etc/apt/keyrings/docker.asc

# Add the repository to Apt sources:
echo \
  "deb [arch=$(dpkg --print-architecture) signed-by=/etc/apt/keyrings/docker.asc] https://download.docker.com/linux/ubuntu \
  $(. /etc/os-release && echo "${UBUNTU_CODENAME:-$VERSION_CODENAME}") stable" | \
  sudo tee /etc/apt/sources.list.d/docker.list > /dev/null
sudo apt-get update
```

```
sudo apt-get install -y docker-ce docker-ce-cli containerd.io docker-buildx-plugin docker-compose-plugin
```

```
sudo docker run hello-world
```

2. Start OpenNotebook

```
hostname -I
```

```
mkdir open-notebook && cd open-notebook

docker run \
  --name open-notebook \
  -p 8502:8502 -p 5055:5055 \
```

```
-v ./notebook_data:/app/data \
-v ./surreal_data:/mydata \
-e OPENAI_API_KEY=API_KEY_HERE \
-e API_URL=http://IP_HERE:5055 \
-e SURREAL_URL="ws://localhost:8000/rpc" \
-e SURREAL_USER="root" \
-e SURREAL_PASSWORD="root" \
-e SURREAL_NAMESPACE="open_notebook" \
-e SURREAL_DATABASE="production" \
lfnovo/open_notebook:v1-latest-single
```

3. Add -d if run in Production

4. Test

- Select model

  - https://platform.openai.com/docs/pricing

  - gpt-4.1-nano

  - text-embedding-3-small

- Add source: https://www.shb.com.vn/category/ve-chung-toi/gioi-thieu-chung/

5. Host VLLM

```
pip install vllm
```

```
vllm serve   Qwen/Qwen2.5-1.5B-Instruct  --api-key yourkey   --port 8000
--gpu-memory-utilization 0.6
```

```
vllm serve   BAAI/bge-small-en-v1.5  --api-key yourkey   --port 8001
```

```
docker stop open-notebook && docker rm open-notebook
```

```
docker run \
  --name open-notebook \
  -p 8502:8502 -p 5055:5055 \
```

```
 -v ./notebook_data:/app/data \
 -v ./surreal_data:/mydata \
 -e OPENAI_COMPATIBLE_API_KEY=yourkey \
 -e OPENAI_COMPATIBLE_BASE_URL_LLM=http://103.78.3.50:8000/v1 \
 -e OPENAI_COMPATIBLE_BASE_URL_EMBEDDING=http://103.78.3.50:800
1/v1 \
 -e API_URL=http://103.78.3.50:5055 \
 -e SURREAL_URL="ws://localhost:8000/rpc" \
 -e SURREAL_USER="root" \
 -e SURREAL_PASSWORD="root" \
 -e SURREAL_NAMESPACE="open_notebook" \
 -e SURREAL_DATABASE="production" \
 lfnovo/open_notebook:v1-latest-single
```

http://103.78.3.96:8502/