

Mini projet docker :

Création du dockerfile

```
FROM amazoncorretto:17-alpine
LABEL maintainer="netvthib@gmail.com"
WORKDIR /app
COPY target/paymybuddy.jar /app/paymybuddy.jar
EXPOSE 8080
ENTRYPOINT ["java", "-jar", "/app/paymybuddy.jar"]
```

Création de l'image

#docker build -t paymybuddy-backend:v1 .

```
user@Ubuntu:~/eazytraining_mini-projet/bootcamp-project-update/mini-projet-docker$ docker images
REPOSITORY          TAG          IMAGE ID      CREATED       SIZE
mysql               8.0.43      94753e67a0a9  2 days ago   780MB
paymybuddy-backend  v1          941ba5b9eca8  3 days ago   334MB
httpd               2.4-alpine  413clac706f8  2 months ago 64.6MB
```

Création du docker-compose.yml

```
user@Ubuntu:~/eazytraining_mini-projet/bootcamp-project-update/mini-projet-docker$ cat docker-compose.yml
services:
  mysql:
    image: mysql:8.0.43
    restart: always
    environment:
      MYSQL_DATABASE: ${MYSQL_DATABASE}
      MYSQL_ROOT_PASSWORD: ${MYSQL_ROOT_PASSWORD}
    volumes:
      - db_data:/var/lib/mysql
      - ./initdb:/docker-entrypoint-initdb.d:ro
    healthcheck:
      test: ["CMD-SHELL", "mysqladmin ping -h 127.0.0.1 -p${MYSQL_ROOT_PASSWORD} || exit 1"]
      interval: 5s
      timeout: 3s
      retries: 30
      start_period: 20s

  backend:
    image: paymybuddy-backend:v1
    restart: always
    depends_on:
      mysql:
        condition: service_healthy
    ports:
      - "8080:8080"
    environment:
      SPRING_APPLICATION_JSON: >
        {
          "server.port": ${SERVER_PORT},
          "spring.datasource.url": "${SPRING_DATASOURCE_URL}",
          "spring.datasource.username": "${SPRING_DATASOURCE_USERNAME}",
          "spring.datasource.password": "${SPRING_DATASOURCE_PASSWORD}",
          "spring.jpa.database-platform": "org.hibernate.dialect.MySQL8Dialect"
        }

volumes:
  db_data:
```

Création du fichier .env avec les variables

```
user@Ubuntu:~/easytraining_mini-projet/bootcamp-project-update/mini-projet-docker$ cat .env
# --- MySQL ---
MYSQL_DATABASE=db_paymybuddy
MYSQL_ROOT_PASSWORD=password

# --- Spring (backend) ---
SPRING_DATASOURCE_URL=jdbc:mysql://mysql:3306/db_paymybuddy?useSSL=false&allowPublicKeyRetrieval=true&serverTimezone=UTC
SPRING_DATASOURCE_USERNAME=root
SPRING_DATASOURCE_PASSWORD=password
SERVER_PORT=8080
```

Modification du create.sql de initdb avec ajout de IF NOT EXISTS.

Sinon l'application ne se connecte pas à db_paymybuddy car la base de donnée est déjà existante.

```
user@Ubuntu:~/easytraining_mini-projet/bootcamp-project-update/mini-projet-docker/initdb$ cat create.sql
CREATE DATABASE IF NOT EXISTS db_paymybuddy;
USE db_paymybuddy;

CREATE TABLE IF NOT EXISTS `user` (
  user_id INT NOT NULL PRIMARY KEY AUTO_INCREMENT,
  email VARCHAR(100) NOT NULL UNIQUE,
  password VARCHAR(100) NOT NULL,
  firstname VARCHAR(50) NOT NULL,
  lastname VARCHAR(50) NOT NULL,
  balance DECIMAL(10, 2) NOT NULL DEFAULT 0.0
);

CREATE TABLE IF NOT EXISTS `bank account` (
  account_id INT NOT NULL AUTO_INCREMENT,
  fk_user_id INT NOT NULL,
  bank_name VARCHAR(100) DEFAULT NULL,
  iban VARCHAR(34) DEFAULT NULL,
  balance DECIMAL(20,2) NOT NULL DEFAULT 0.0,
  PRIMARY KEY (account_id, fk_user_id),
  FOREIGN KEY (fk_user_id)
    REFERENCES user (user_id)
    ON DELETE NO ACTION ON UPDATE NO ACTION
);

CREATE TABLE IF NOT EXISTS `connection` (
  connection_id INT NOT NULL AUTO_INCREMENT,
  fk_initializer_id INT NOT NULL,
  fk_receiver_id INT NOT NULL,
  starting_date DATETIME NOT NULL,
  FOREIGN KEY (fk_initializer_id)
```

#les 2 containers actifs suite au docker compose up

```
user@Ubuntu:~$ docker ps
CONTAINER ID   IMAGE                                COMMAND                  CREATED
79aa83ec01da   mysql:8.0.43                        "docker-entrypoint.s..." 6 minutes ago
274a7b91a97f   paymybuddy-backend:v1              "java -jar /app/paym..." 7 minutes ago
```

PORTS	NAMES
3306/tcp, 33060/tcp	mini-projet-docker-mysql-1
0.0.0.0:8080->8080/tcp, [::]:8080->8080/tcp	mini-projet-docker-backend-1

Pay My Buddy

Email

Password

☐ Remember me

Log in

New here? [Create an account](#)

Good to see you again, vincent!



Most recent connection

No connections. [Add a connection](#)



Most recent transaction

No transactions. [Add transaction](#)



Current balance

0 €

[Update balance](#)

Private registry sur docker play eazytraining

Installation du registre privé

```
$ docker network create eazy
63bcd816f7500a47a6f1f2a6c3392638e21479f1ed0cf1d39959dc8aa1bb8ac7
[node1] (local) root@10.0.48.4 ~
$ docker run -d \
  -p 5000:5000 \
  --net eazy \
  --name registry-eazy \
  registry:2.8.1
Unable to find image 'registry:2.8.1' locally
2.8.1: Pulling from library/registry
8a49fdb3b6a5: Pull complete
58116d8bf569: Pull complete
55f7fac5d815: Pull complete
fe88d67f473c: Pull complete
32a19664cea7: Pull complete
Digest: sha256:dbaa3e69f563fc146f3337eb9de422f74f6765bf0203c891ddfbfd74a6f9b56eb
Status: Downloaded newer image for registry:2.8.1
009741a7b7b774a36a0886fee188681e395cd14cde814548f907e9836695c20a
[node1] (local) root@10.0.48.4 ~
$ docker run -d \
  -p 8090:80 \
  --net eazy \
  -e NGINX_PROXY_PASS_URL=http://registry-eazy:5000 \
  -e DELETE_IMAGES=true \
  -e REGISTRY_TITLE=eazytraining \
  --name frontend-eazy \
  joxit/docker-registry-ui:2
d7364b8d389d6f798f8466907ab9e6b937ade3ac91dea87f5552b6357d8aa7e7
[node1] (local) root@10.0.48.4 ~
```

The screenshot shows the Docker Labs Eazytraining web interface. On the left, there's a sidebar with a timer at 00:34:46, a 'CLOSE SESSION' button, and a list of instances. The main area displays details for a container named 'd3d71hu5_d3d723u57ed000eubmkg' with IP 10.0.48.4. It includes an 'OPEN PORT' button, memory and CPU usage bars, an SSH command, and 'DELETE' and 'EDITOR' buttons. A terminal window at the bottom shows the following commands and output:

```
docker.io/library/nginx:latest
[node1] (local) root@10.0.48.4 ~
$ docker tag nginx:latest localhost:5000/nginx:latest
[node1] (local) root@10.0.48.4 ~
$ docker push localhost:5000/nginx:latest
The push refers to repository [localhost:5000/nginx]
3ce214e9ebc5: Pushed
7d95a4a72e11: Pushed
72fa904a482c: Pushed
50da593f6222: Pushed
8e7d6b511078: Pushed
e855abf10cde: Pushed
36f5f951f60a: Pushed
latest: digest: sha256:ebe6b7ee1206828d80eabed09809e94222d09fba59c7cda15da41962e06b088e size: 1778
[node1] (local) root@10.0.48.4 ~
$
[node1] (local) root@10.0.48.4 ~
$ docker ps
CONTAINER ID   IMAGE                                COMMAND                  CREATED        STATUS        PORTS
d7364b8d389d   joxit/docker-registry-ui:2         "/docker-entrypoint..." 24 minutes ago Up 24 minutes 0.0.0.0:8090->80/tcp
009741a7b7b7   registry:2.8.1                    "/entrypoint.sh /etc..." 24 minutes ago Up 24 minutes 0.0.0.0:5000->5000/tcp
[node1] (local) root@10.0.48.4 ~
$
```

Sur ma vm distante tag et push de l'image de paymybuddy-backend:v1

```
user@Ubuntu:~/easytraining_mini-projet/bootcamp-project-update/mini-projet-docker$ docker images
```

REPOSITORY	TAG	IMAGE ID	CREATED	SIZE
mysql	8.0.43	94753e67a0a9	5 days ago	780MB
paymybuddy-backend	v1	941ba5b9eca8	5 days ago	334MB
httpd	2.4-alpine	413clac706f8	2 months ago	64.6MB

```
#docker tag paymybuddy-backend:v1 ip10-0-48-4-d3d71hu57ed000eubmk0-5000.direct.docker.labs.eazytraining.fr/paymubbuddy:remote
```

```
#docker push ip10-0-48-4-d3d71hu57ed000eubmk0-5000.direct.docker.labs.eazytraining.fr/paymubbuddy:remote
```

```
user@Ubuntu:~/easytraining_mini-projet/bootcamp-project-update/mini-projet-docker$ docker tag paymybuddy-backend:v1 ip10-0-48-4-d3d71hu57ed000eubmk0-5000.direct.docker.labs.eazytraining.fr/paymubbuddy:remote
user@Ubuntu:~/easytraining_mini-projet/bootcamp-project-update/mini-projet-docker$ docker push ip10-0-48-4-d3d71hu57ed000eubmk0-5000.direct.docker.labs.eazytraining.fr/paymubbuddy:remote
The push refers to repository [ip10-0-48-4-d3d71hu57ed000eubmk0-5000.direct.docker.labs.eazytraining.fr/paymubbuddy]
c248e67bf8e4: Pushed
cd26d4d16370: Pushed
4cb72071e0f1: Pushed
418dccb7d86a: Pushed
remote: digest: sha256:30476947f13bd1630638a77edcbe72b780a0601a6552258a314e996e8c6dd5cf size: 1159
user@Ubuntu:~/easytraining_mini-projet/bootcamp-project-update/mini-projet-docker$
```

ip10-0-48-4-d3d71hu57ed000eubmk0-8090.direct.docker.labs.eazytraining.fr

Docker Registry UI Search in page

Repositories of eazytraining
2 images in 2 repositories

- nginx
- paymubbuddy

Docker Registry UI Search in page

← Tags of paymubbuddy
Sourced from eazytraining/paymubbuddy
1 tags

↑ Creation date	↑ Size	↑ Tag	Arch	History	
5 days ago	181 MB	remote	amd64		

Pour l'image de mysql :8.0.43

```
#docker tag mysql:8.0.43 ip10-0-48-4-d3d71hu57ed000eubmk0-5000.direct.docker.labs.eazytraining.fr/mysql:remote
```

```
# docker push ip10-0-48-4-d3d71hu57ed000eubmk0-5000.direct.docker.labs.eazytraining.fr/mysql:remote
```

```
Run 'docker push --help' for more information.
user@Ubuntu:~/eazytraining mini-projet/bootcamp-project-update/mini-projet-docker$ docker push ip10-0-48-4-d3d71hu57ed000eubmk0-5000.direct.docker.labs.eazytraining.fr/mysql:remote
The push refers to repository [ip10-0-48-4-d3d71hu57ed000eubmk0-5000.direct.docker.labs.eazytraining.fr/mysql]
6083c8e7e889: Pushed
174b5ea2a2ab: Pushed
11a685750cb6: Pushed
138a6c38ceff: Pushed
3226a8b99e50: Pushed
c40e77e8b684: Pushed
d524ff56f2f0: Pushed
6b5f8992a2d9: Pushed
6a7bbec82ab: Pushed
16deddf9bb3d: Pushed
b3b622ae8bac: Pushed
remote: digest: sha256:0ee07d4e405171090e58753092ead96a20dd907f012c0d36bc7768a24e5ed400 size: 2619
user@Ubuntu:~/eazytraining mini-projet/bootcamp-project-update/mini-projet-docker$
```

ip10-0-48-4-d3d71hu57ed000eubmk0-8090.direct.docker.labs.eazytraining.fr

Docker Registry UI

Repositories of eazytraining
3 images in 3 repositories

- mysql
- nginx
- paymubbuddy

ip10-0-48-4-d3d71hu57ed000eubmk0-8090.direct.docker.labs.eazytraining.fr/#/taglist/mysql

Docker Registry UI

Tags of mysql
Sourced from eazytraining/mysql
1 tags

Creation date	Size	Tag	Arch	History	
5 days ago	225 MB	remote	amd64		