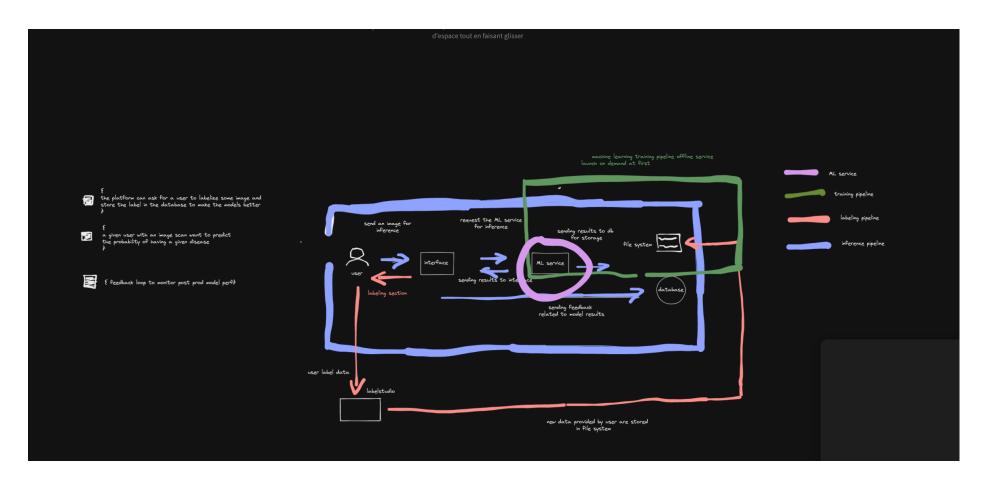
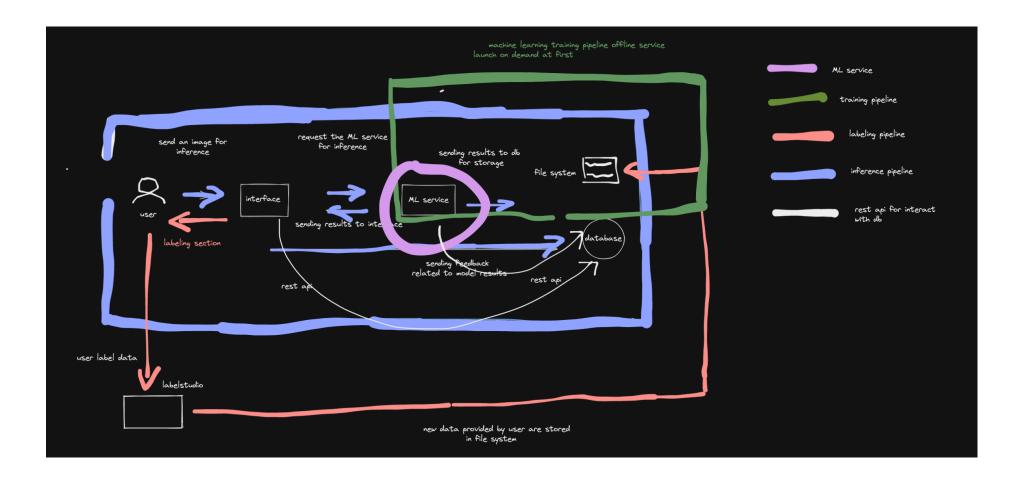
# Quarkflow

Product

Architecture





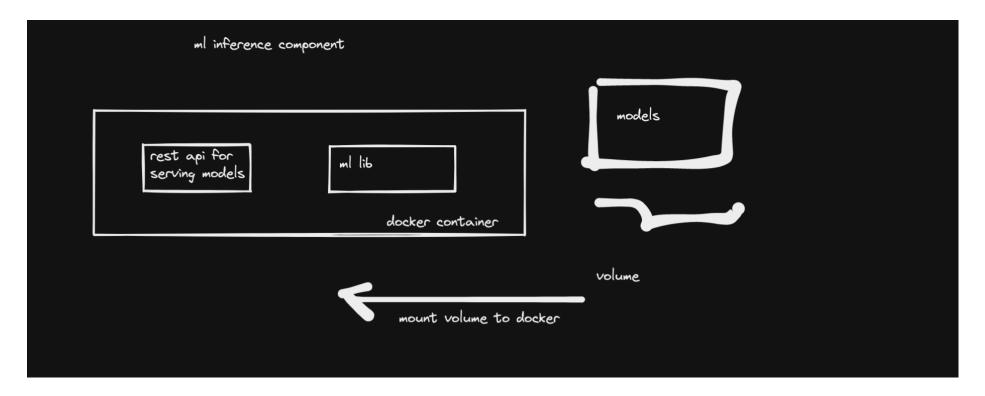
# **Components**

## I - ML service (docker)

This is the inference pipeline designed for the predictions.

Quarkflow 1

- container instance for the inference (global or specialized will be discussed)
- lib material (python module) for the prediction
- flask app as web service



#### II - File system (storage account)

A storage account for images and models

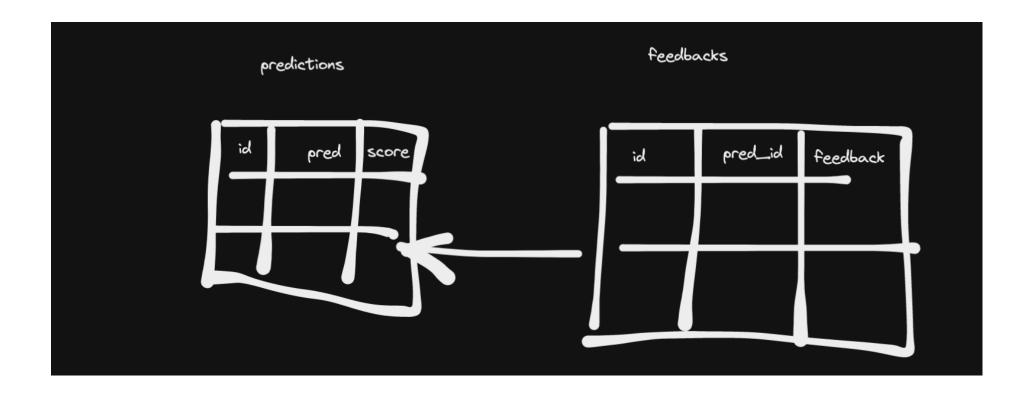
- store datasets
- store models pkl
- labels from labelstudio



#### **III - Database (postgres)**

A Postgres sql database to store the results of predictions

- store the predictions
- store the feedback from users
- •



## IV - Label Studio (docker)

A service for labeling the data and help model improving the performance

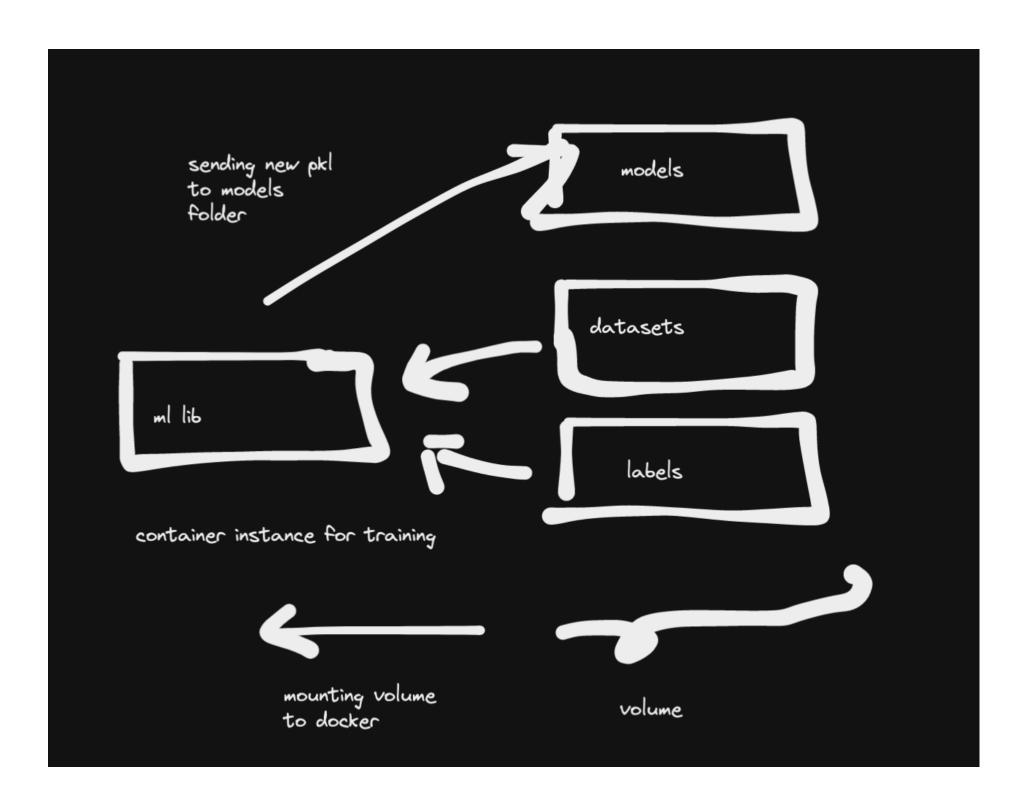
#### V - Interface

A front end for the plateforme

## VI - Training pipeline (docker)

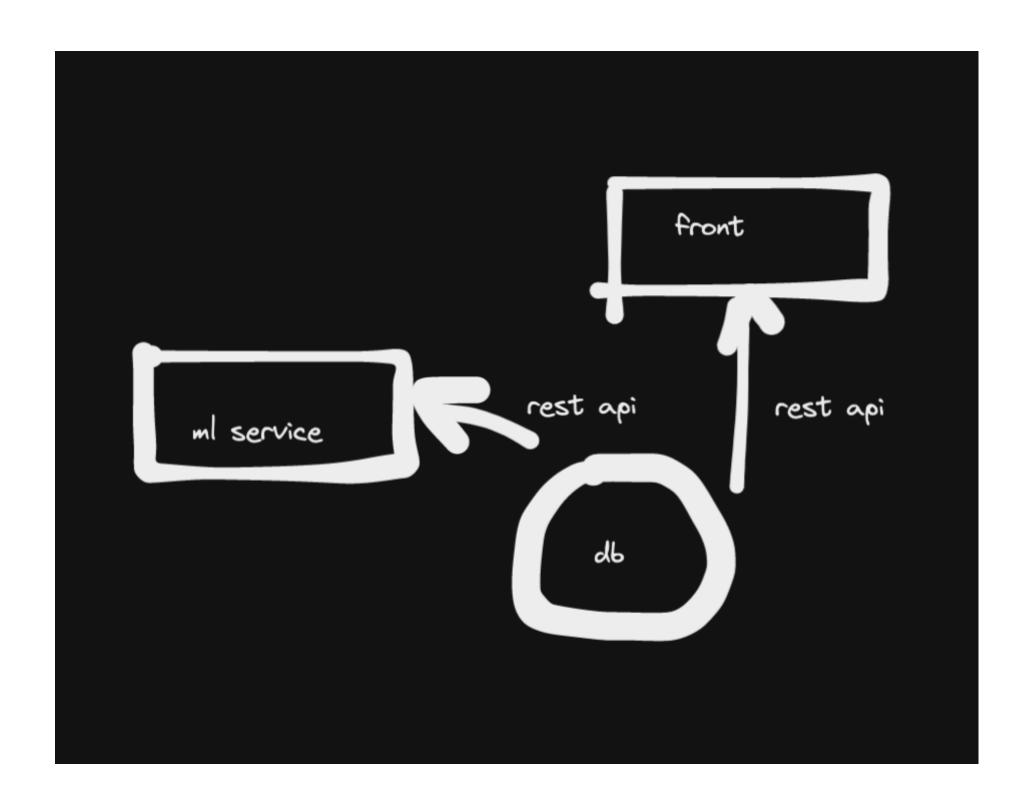
Train the models with a given schedule (not automatic at the start)

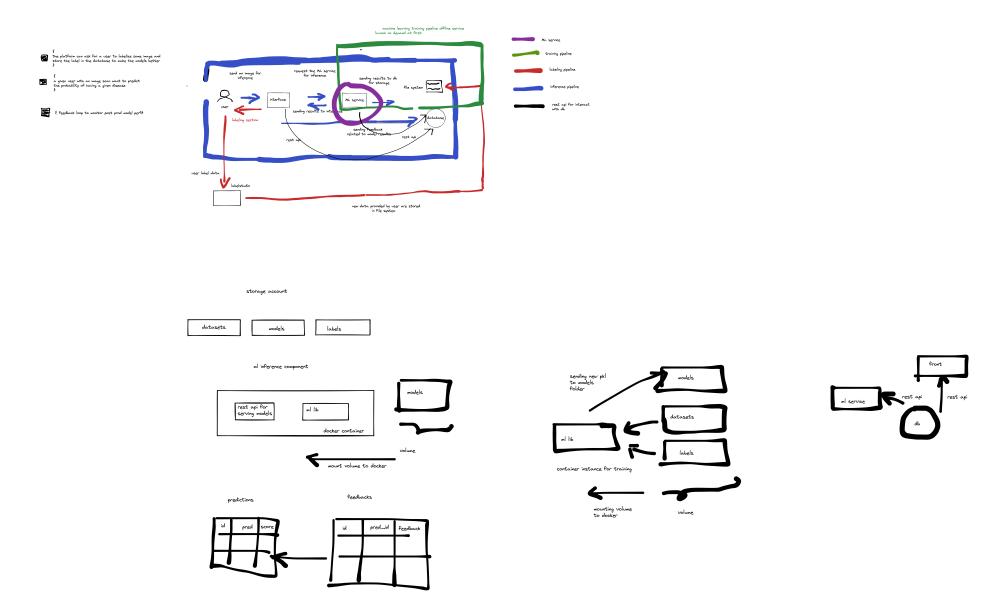
- container instance for training models
- lib material for the training



#### VII - REST API

- interact with the database
- interact with the front
- interact with the model





# technical stack

- python
- git
- postgres
- docker
- gcp
- django
- rest api
- pytorch