Antonine University - Final Year Project

E - DISPENSARY

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Université
Antonine

OUTLINE
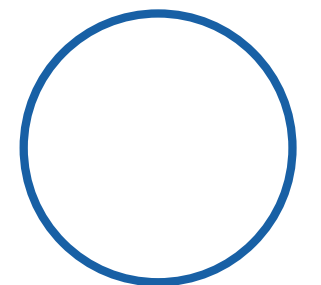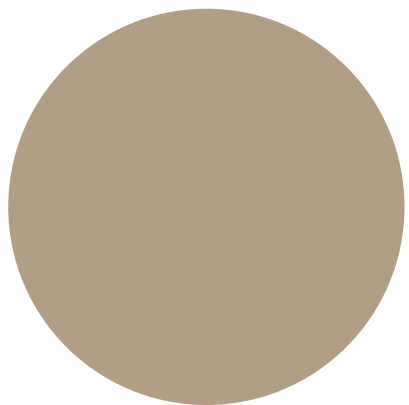
PROBLEM STAEMTENT

- E-Health in Lebanon lacks a user friendly portal to manage data online.
- Small medical centers still operate exclusively on pen and paper.
- Building a digital infrastructure will streamline operations

MJO BEIRUT

- MJO is a non-profit that povides different services including a social medical center for health services.
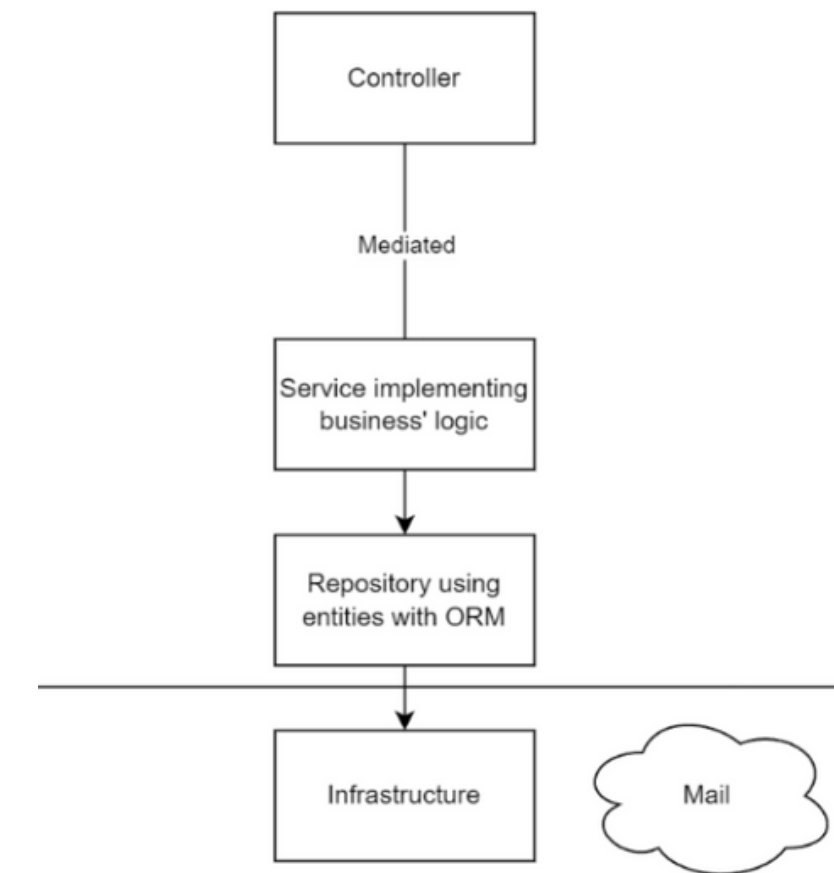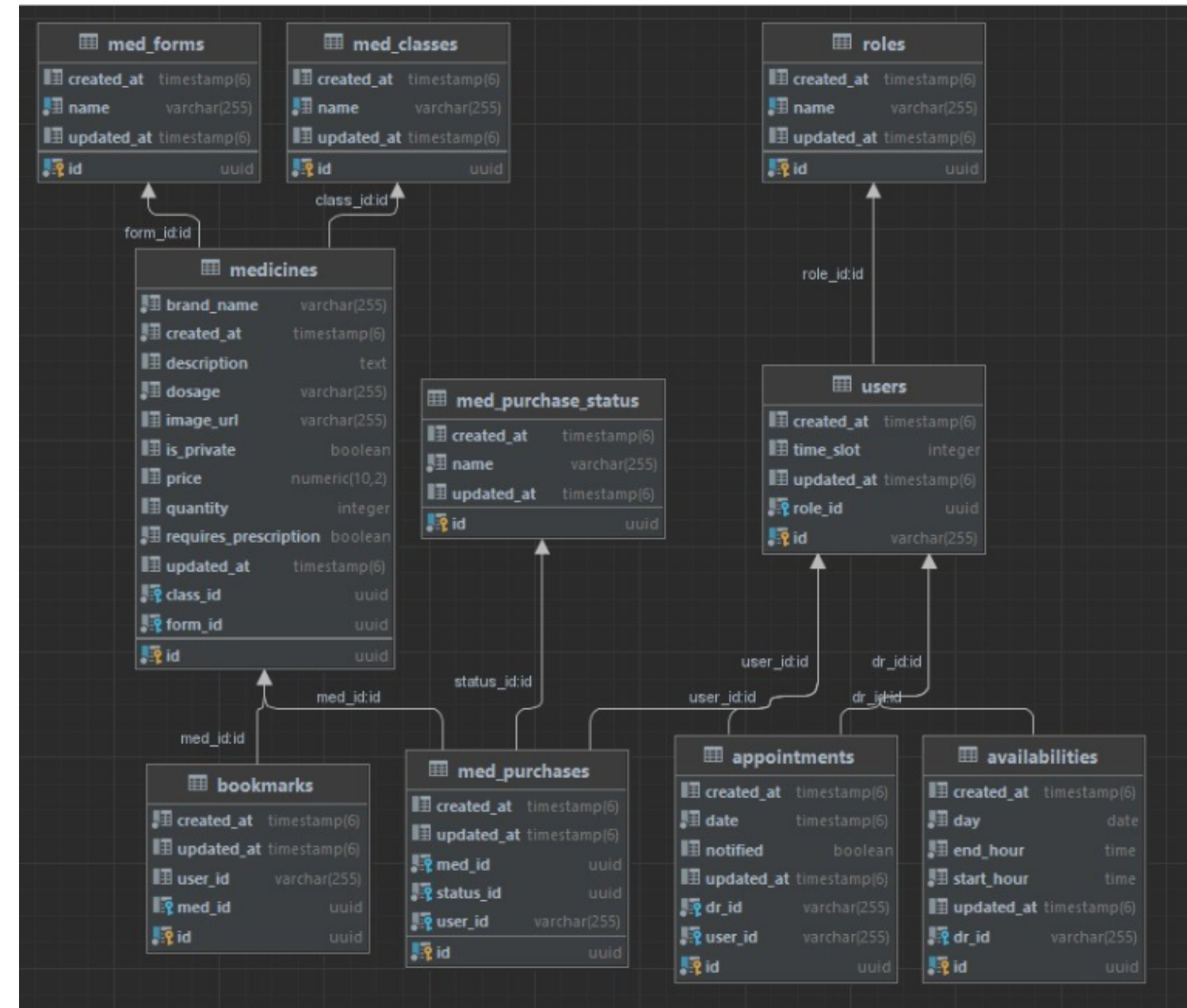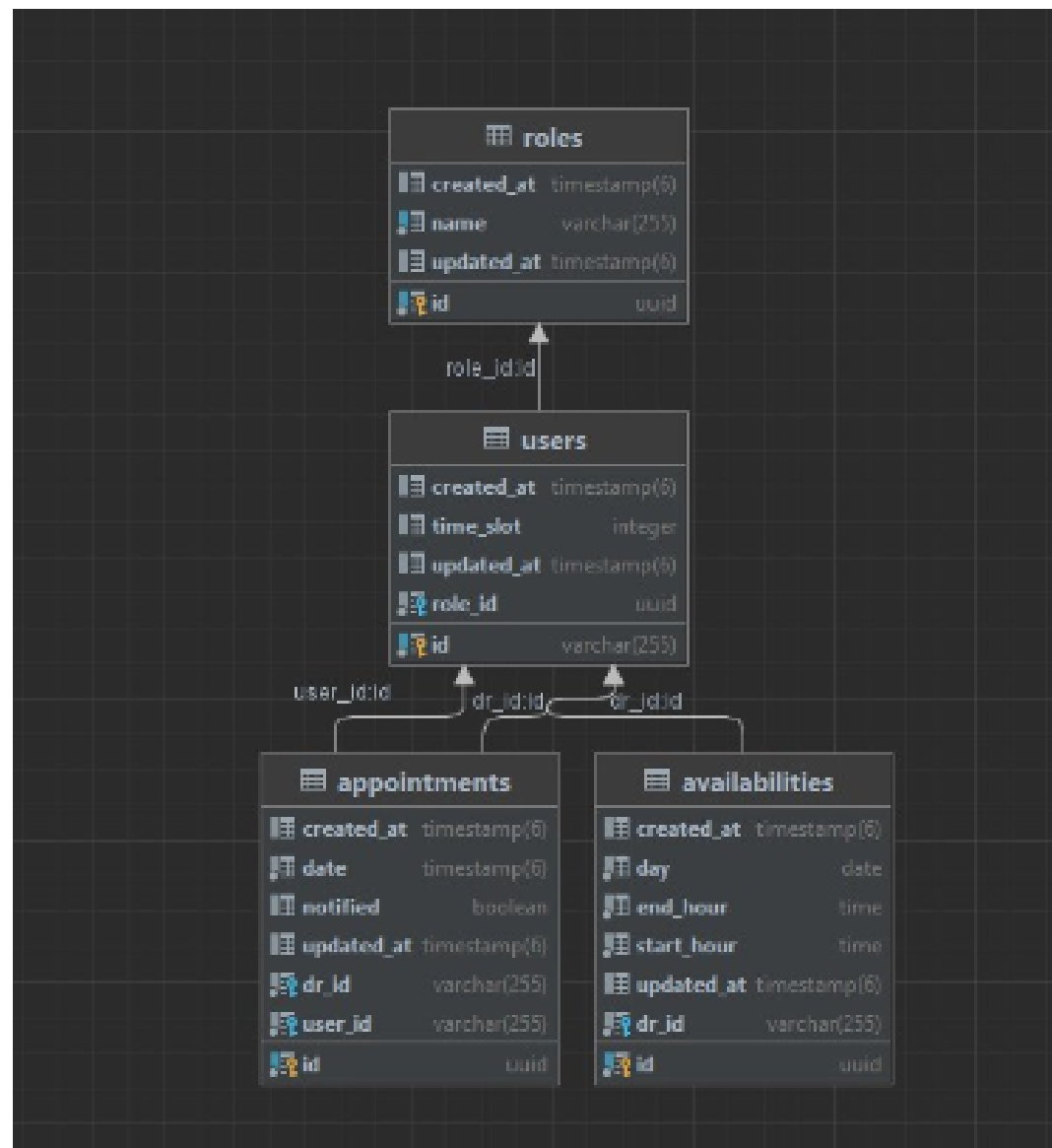- The goal is to have a deployable project that will be integrated into their different sites

PROJECT ANAYSIS
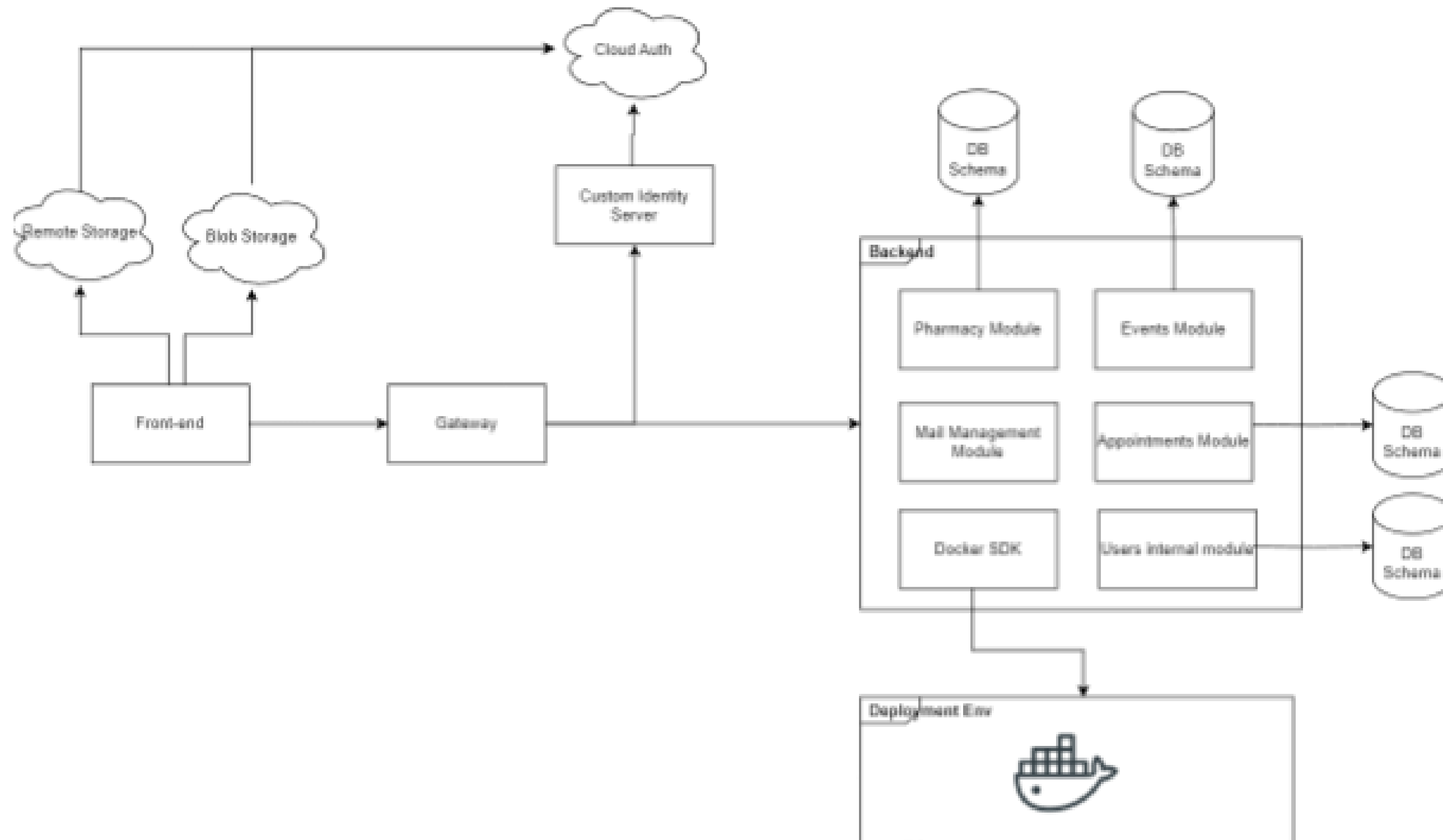
CODE STRUCTURE

- As scalability is the main goal, the code was structured in multiple tiers

DATABASE, POSTGRESQL

USING FIREBASE

Authentication

Users   Sign-in method   Templates   Usage   Settings   🐝 Extensions NEW

🔍 Search by email address, phone number, or user UID   Add user   ⟳   ⋮

Identifier	Providers	Created	Signed In	User UID
john@patient.com	✉	Sep 25, 2023	Sep 25, 2023	tMa5YwCFgoXdQe8LGYXG1mxLm...
holmes@doctor.com	✉	Sep 24, 2023	Sep 25, 2023	GBjSSbZL7Rhq4CzFGoxDtXbGceF3

E-Dispensary ▾   ? 💬 🔔 Ⓐ

Cloud Firestore

Data   Rules   Indexes   Usage | 🐝 Extensions NEW

Panel view   Query builder

🏠 > patients   ☁ More in Google Cloud ▾

🔗 e-dispensary-f803d	📋 patients ⏚ ⋮
＋ Start collection	＋ Add document
patients ＞	3YWLfx072mZTIfY3wNjKt2cvyC23

Storage

Files   Rules   Usage | 🐝 Extensions NEW

🔗   gs://e-dispensary-f803d.appspot.com   ⬆ Upload file   📁⁺   ⋮

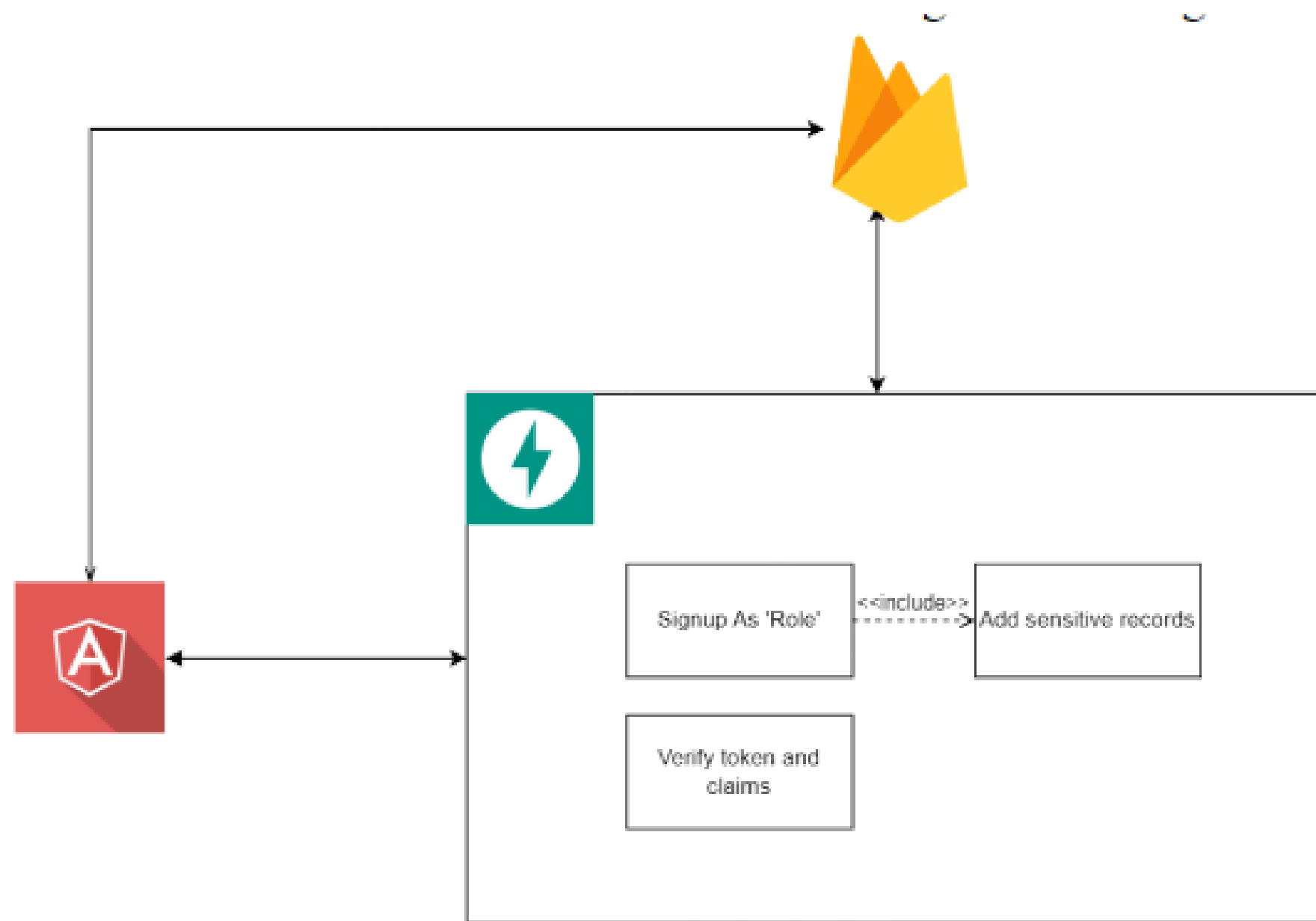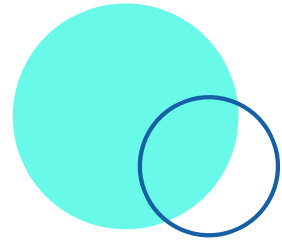| ☐	Name	Size	Type	Last modified
☐	📁 event-images/	—	Folder	—

NGINX
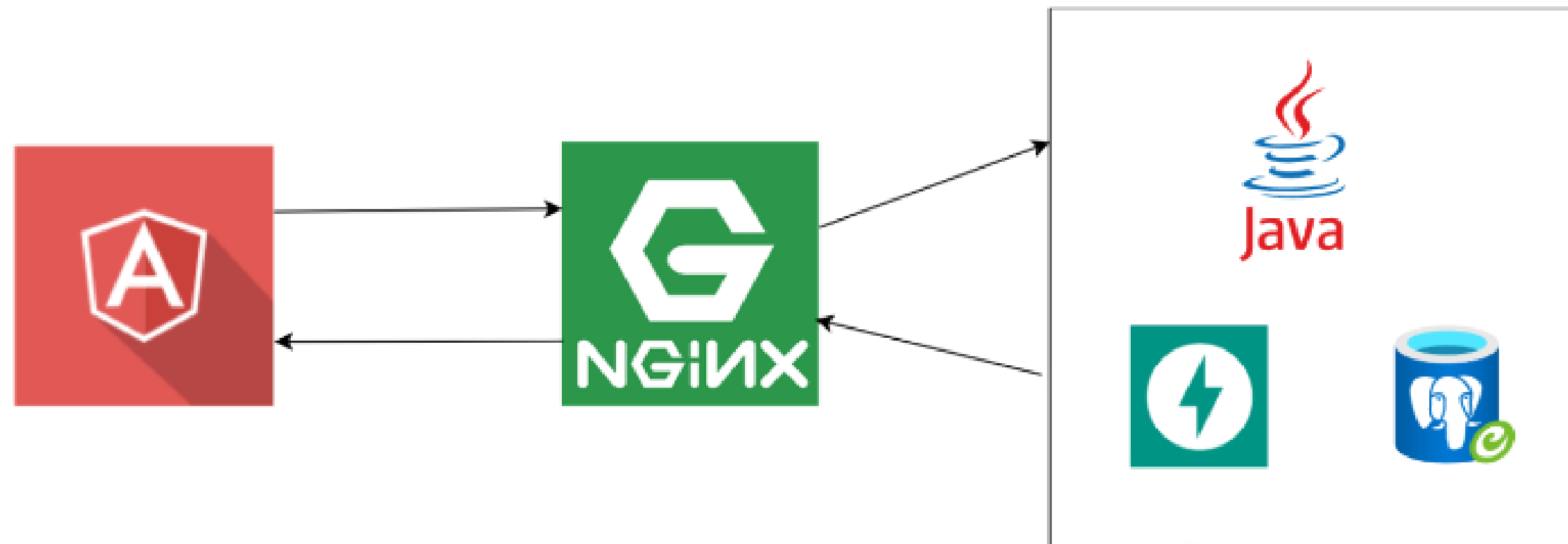
Used as gateway and proxy

CUSTOMIZED FIREBASE AUTH

DOCKER SDK

```
volumes:
  - /var/run/docker.sock:/var/run/docker.sock
```
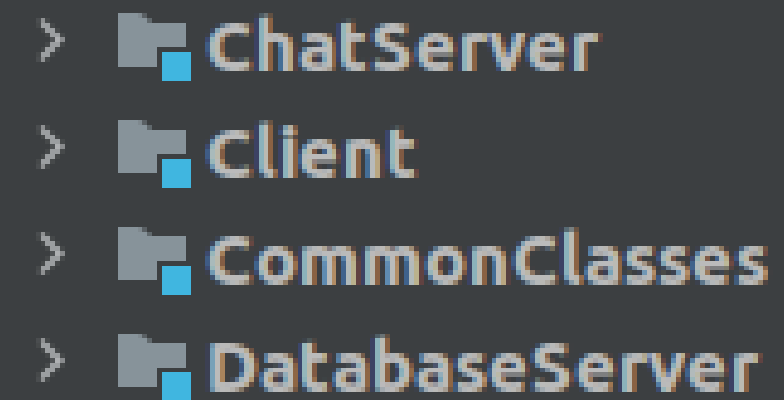
Connects through docker socket to start
and stop running containers

CURRENT IMPLEMENTATION

Main modules

There are three main modules and a helper class library.

> 📁 ChatServer
> 📁 Client
> 📁 CommonClasses
> 📁 DatabaseServer

CHALLENGES

Date handling in Java

We had to learn Spring boot. The appointment module focused on date management which had its own challenges due to the language.

UI integration

The UI had many different dynamic sections to be tracked

Future work

○ *Data analysis*

To help admins make decisions

○ *Multi-Language support*

With translation option and
management of translation files

THANK YOU