Baby Steps App

1. Introduction

BabySteps is an app (or mobile website) for mums and dads who are expecting their first baby, or who have just had a baby, to help them find pregnancy and parenting related classes in their area. Classes could be antenatal, breastfeeding, pre-natal yoga, baby massage, etc.

Benefits for the end-users

For the future parents or new parents, the app allows them to see within a glance what classes are available, and will get weekly suggestions of classes based on their circumstances.

Benefits for companies

Companies who provide classes will have a way to easily reach out to their target market to help them sell the classes. They will also be able to tailor their offerings to best cater for demand, with the help of data insights.

Features

- Homepage with upcoming classes and recommended classes

- Search page to search for and explore classes, including via map

- A calendar page to view the results per day

- A class details page with all the class information, address, map, and booking options

- Favourite classes, for classes that have been liked

- Upcoming bookings section, to see classes booked, and to cancel if required

- Login area

- Settings page for user preferences and app parameters

- Rewards, to encourage users to buy classes

2. Design & Implementation

2.1. The REST API Specification

The two main collections in the database will be the users and the classes. The API endpoints will provide access to these as follows:

Collection /classes

- GET: return list of all classes
- POST: add a new class
- DELETE: delete all classes

Resource /classes/<classId>

- GET: return the class with id ‘classId’
- PUT: update class
- DELETE: delete class

Collection /users

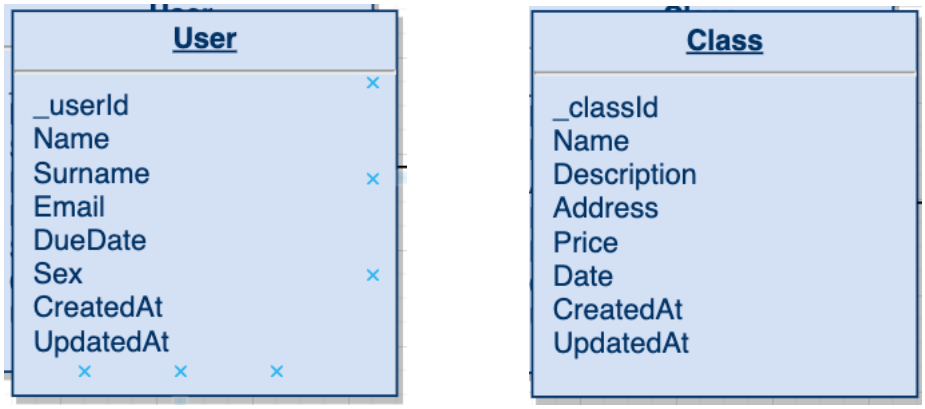
- GET: return all users
- POST: add a user
- DELETE: delete all users

Resource /users/<userId>

- GET: return user with id ‘userId’
- PUT: update user
- DELETE: delete user

2.2. Database Schemas, Design and Structure

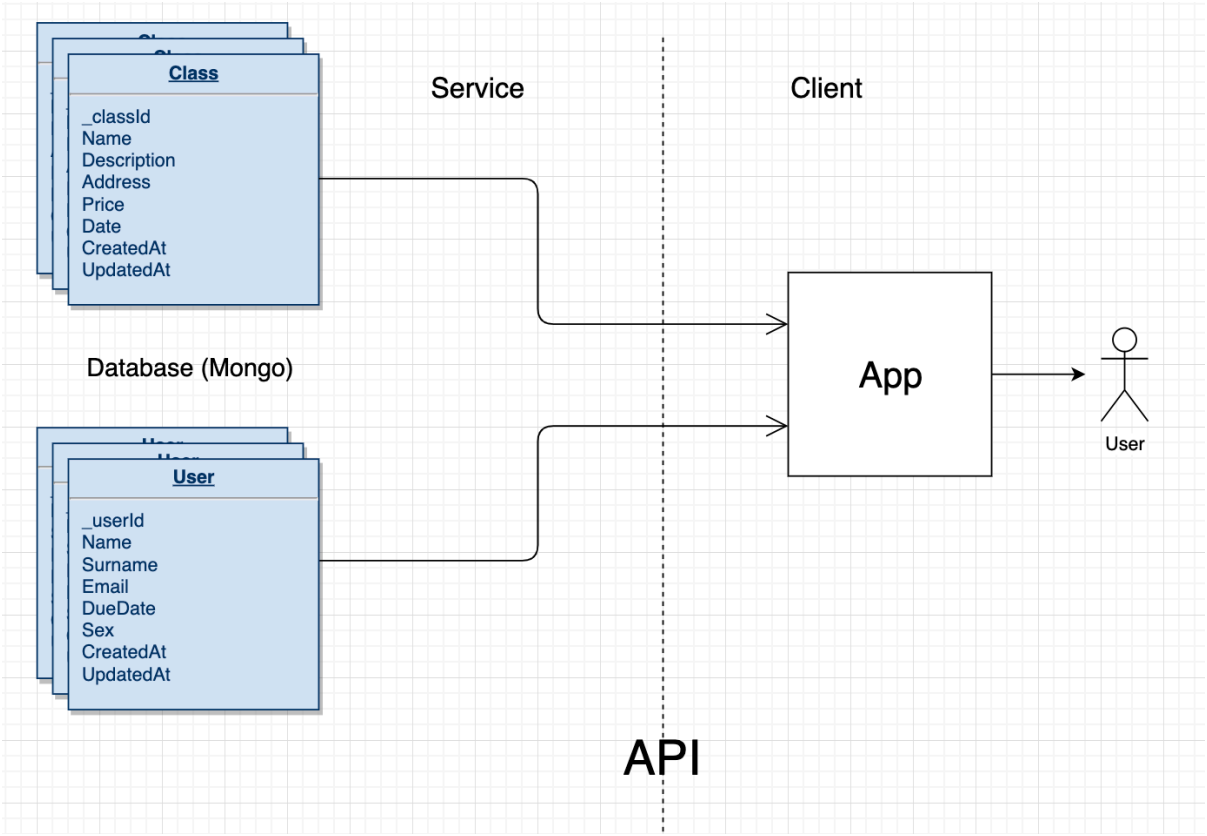
The two main collections to store in the database are the classes and users. The schemas are shown below:



3. Conclusions

The diagram below illustrates the app architecture and the API role in communicating with the database. [1]

The project aims to show how a well-designed database and a good API can help simplify the communication between the backend and the frontend.



4. References

[1] https://draw.io