# Social Routing

#### PROJECT AND SEMINAR

#### Instituto Superior de Engenharia de Lisboa

Authors:

Baltasar Brito

email: baltasar.brito@gmail.com

Supervisor:

phone: 915953552

Pedro Félix

Bernardo Costa email: pedrofelix@cc.isel.ipl.pt

email: bjmcosta<br/>97@gmail.com

phone: 913897555

April 25, 2019

# Contents

1	Report Structure	3
2	System Structure	3
3	Technologies	4
4	Client Application	5
5	Database Management System	6
6	Server	7
7	Social Routing API	8
8	Updated Timeline, Risks	8

# 1 Report Structure

Each section of the report contains information about a component of the project's structure. Each subsection represents a goal, established in the initial timeline, and contains information about it's completion and implementation. A link to the project's full documentation will also be included with every subsection.

## 2 System Structure

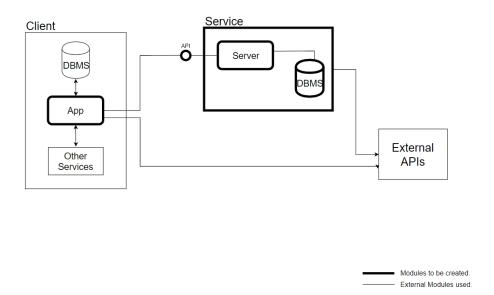


Figure 1: System structure.

### 3 Technologies

The technologies of the project are as follows:

- Client Application : Kotlin language, Gradle Build System. Using the frameworks: Todo
- $\bullet\,$  Server : Kotlin language, Gradle Build System. Uses the framework JDBI, Spring, Todo
- Database Management System: PostgreSQL, uses SQL as language.

More details can be found here.

# 4 Client Application

### 5 Database Management System

#### **Route Saving**

Route saving is implemented in a for now incomplete version. Due to the nature of the project more features might be added, and as such a route characterization might change over time. Documentation link: TODO

#### Add Remaining Necessary Objects

All the database objects are created and fully functional. Documentation link:  $\operatorname{TODO}$ 

#### 6 Server

#### Communication with the Database Management System

The server communicates with the Database Management System through the jdbi API, which is built on top of the jdbc driver. The communication is complete and is retrieving and inserting database objects correctly. Documentation link.

#### Infrastructure Design and Implementation

The server is designed following a repository pattern. All requests made to the API follow a pipeline:

- Controller: receives requests, exposed trough an API.
- Service: used by the controller to retrieve detailed information.
- Repository: Used by the services to retrieve or save information that exists only in the database.

Both the design and implementation are complete. Documentation link.

#### Add All Functionalities Except Search

All basic functionalities are complete. A minimalistic version of a search is implemented to allow focus on other areas. Documentation link: TODO

### 7 Social Routing API

#### **Endpoint for Route Creation**

The endpoint for route creation is complete. Documentation link.

#### Notes

The API was initially to be of focus later but is now close to complete, lacking only a more complex search functionality. Documentation for the full API can be found here.

### 8 Updated Timeline, Risks