

# Feature List

## 1. User management:

- User creation.
- User accounts management.
- Clients rating functionality.

## 2. Travels and tickets management:

- Travel creation.
- Tickets requests and approval or rejection.
- Selling tickets and creating a form.

## 3. Reports and statistics:

- Client, tickets, travels.

## 4. Notifications:

- Newly created ticket request.
- Periodical notifications for sold tickets per travel.
- Rejected travel.
- Incoming travel with unsold tickets.

# Application Structure

## 1. MVC pattern.

## 2. Layered architecture, layers:

- model - entities.
- repository - responsible for all database requests.
- service - executes all the business logic.
- controller - UI interactions are handled by controllers.
- view - GUI representation of the model.

## 3. Technologies:

- Gradle
- Java 14, JavaFX
- JPA, Hibernate
- Postgresql
- Log4j
- JUnit
- Mockito

# Planned Sprints

## **Sprint 1:** 28.09.2020-05.10.2020:

- Use case diagrams.
- Familiarizing with the technologies.

## **Sprint 2:** 05.10.2020-12.10.2020:

- Modeling the database.
- Model the entities and their associations.
- ER diagram (Chen model).

## **Sprint 3:** 12.10.2020-19.10.2020:

- Implement system login (authentication, authorization).
- Implement user creation.
- Implement user account management.

## **Sprint 4:** 19.10.2020-26.10.2020:

- Implement client rating functionality.
- Implement reports and statistics with clients.

## **Sprint 5:** 26.10.2020-02.11.2020:

- Implement travel creation.
- Implement reports and statistics with travels.

## **Sprint 6:** 02.11.2020-09.11.2020:

- Implement ticket requests.
- Implement ticket approval or rejection.
- Implement reports and statistics with tickets.

## **Sprint 7:** 09.11.2020-16.11.2020:

- Implement selling of tickets and form creation.
- Implement notifications.

## **Sprint 8:** 16.11.2020-23.11.2020:

- Implement notifications.
- Writing integration & functional tests.

**Sprint 9:** 23.11.2020-30.11.2020:

- Writing tests.
- Refactoring.

**Sprint 10:** 30.11.2020-07.12.2020:

- Documentation.
- Preparation for project defence.