In the end

This document describes development of the Spring Boot REST API application "introtelecom" with Maven dependencies and Swagger UI. The simplified demo application is intended to demonstrate and explain the basics of mobile services (basic management).

PostgreSQL is used for the database.

<u>Spring</u> features are used for application startup, security, data exchange, validation and controller access.

Swagger UI is used to receive user requests and display REST responses in JSON format.

Application handles:

- Login (login control with the support of Spring Security framework and Bcrypt password encoding feature with the JWT token granted to the valid User)
- User URL access (access control with the support of Spring Security framework)
- Exception Handling (when an exception is thrown due to invalid data)
- Automatic generation (of package frames and monthly bills)
- Object mapping (between different object models e.g. entities and DTOs)
- Input data form validation and custom validation (support of Spring Boot Validation)
- Repository search
- Generation of response as a JSON output data

The REST API APPLICATION "introtelecom" can be categorized as a <u>real-time</u> <u>dependent</u> application. It means that package frames, add-on frames, SRD records and monthly bills are dependent on the current month.

Package frames and monthly bills are generated automatically at the beginning of the month. Because of that, services for CurrentInfo and MonthlyBillFacts are not available from midnight to 12 o'clock on the 1st day of the month.

Add-on frames and SDR records are generated, with the help of ADMIN role User, during the current month.

Source code and more details on:

https://github.com/petroneris/introtelecom

To start the "introtelecom" app

After the project (server) startup, open a browser and enter the following URL:

http://localhost:8080/swagger-ui/index.html