TRIP PLANNER



**"Web development using Spring Framework v5"**

12.02.2020

Lyuboslav Mitov, 62070

Short project description (Business needs and system features)

The group trip planner will help with organizing group holidays easier. You will be able to create a trip and add your friends to that trip so they can contribute to the schedule and track your group expenses more easily. The system will be developed using Spring 5 Application Development Framework. The backend will be implemented as a REST/JSON API using JSON data serialization. The main user roles are:

•Unregistered user

•Registered user (trip owner / trip participant)

•Administrator (extends Registered User) – can manage (create, edit user data and delete) all Registered Users, as well as Trips.

**1.** **Main Use Cases / Scenarios**

* 1. Register

Unregistered User can register in the system by providing a valid e-mail address, first and last name, and choosing password.

Unregistered User, Administrator

* 1. Change User Data

Registered User can view and edit her personal User Data Administrator can view and edit User Data of all Users.

Registered User, Administrator

* 1. Manage Users

Administrator can browse and filter users based on different criteria: first and last name, email.

Administrator can choose a User to manage, and can manage the chosen User - edit (using Change User Data UC) or delete.

Administrator can create a new user using Register UC.

Administrator

* 1. Manage Trips

Administrator or Trip owner can browse and filter Trips based on different criteria: name of Trip etc.

Administrator or Registered user can create a new Trip, and invite other registered users to join the trip as Trip Participants;.

Administrator can choose a Trip to manage, and can add or remove Participants to the Trip, or delete it if necessary.

Administrator, Trip owner

* 1. Contribute to schedule

Trip owner and trip participant can see the trip schedule and contribute to it.

Trip owner, Trip participant

* 1. Manage expenses

Trip owner and Trip participants can see and add/edit expenses to a certain trip

Trip owner, Trip participant

1. **API Resources**

* Users

GET User Data for all users, and POST new User Data (Id is auto-filled by GTP and modified entity is returned as result from POST request). Available only for Administrators.

/api/users

* User

GET, PUT, DELETE User Data for User with specified userId, according to restrictions described in UCs.

/api/users/{userId}

* Login

POST User Credentials (e-mail address and password) and receive a valid Security Token to use in subsequent API requests.

/api/login

* Logout

POST a logout request for ending the active session with OKTS, and invalidating the issued Security Token.

/api/logout

* Trips

GET Trips , and POST new Trip (Id is auto-filled by GTP and modified entity is returned as result from POST request), according to User's Role and identity security restrictions.

/api/trips

* Trip

GET, PUT, DELETE Trip for Trip with specified tripId.

/api/trips/{tripId}

* Expenses

GET Expenses (according to User's Role and identity) ) for Trip with specified tripId, and POST new Expense (Id is auto-filled by GTP and modified entity is returned as result from POST request).

/api/trips/{tripId}/expenses

* Expense

GET, PUT, DELETE Expense Result (according to User's Role and identity) for Trip with specified tripId and expense with specified expenseId.

/api/trips/{tripId}/expenses/{expenseId}/

* Schedule

GET,PUT,DELETE Trip schedule for Trip with specified tripId.

/api/trips/{tripId}/schedule

1. **Main views**

* Login – Used by the user to login to his account
* Profile – Where user can see information about his account
* Trips - Where the user can see the Trips that he has created
* Other Trips – Here the user can see all of his trips ( the trips created by him, and where he is listed as participant)