Project of Software Engineering 2

**RASD**

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# **1. Introduction**

Travelling has never been so easy. Not only traditional vehicles improved, but new phenomena like car and bike sharing, or Uber appeared. Mobility itself is changing.

People started using new services to move, and when they need to visit a new place often rely completely on Google Maps. The same users need a better manage of their schedules.

Therefore this project wants to help users to schedule their meetings accounting the travel time between each appointment giving the possibility to customize each appointment and each travel path.

## ***1.1. Purpose***

This project wants to:

* Allow people to build a calendar where they can add meetings;
* Show the distance from one meeting to the next;
* Show all the travel solution possible to arrive at the next meeting;
* Give the possibility to schedule particular meetings, like lunch, or private ones;
* Allow people to filter the travel solution to select the one they prefer.

## ***1.2. Scope***

The application, in order to achieve all the aforementioned goals has to interact both with users and other external services (like weather forecasting, ticket prices, etc.) which will help the app in giving a complete and reliable service.

## ***1.3. Definitions, Acronyms, Abbreviations***

* *Vehicles****.*** All the means of transport (bike, bus, car...) that the user can use to reach the point of interest.
* *Appointment***.** An arrangement to meet someone at a particular time and place, it comprends working appointments, dates, all the events planned by the user.
* *Schedules.* A plan for carrying out a lists of intended events and times.
* *Travel**path.* Is the roadway chosen by the system based on the point the user has to go.
* *Accident.* All the event that can happen to delay the user, during the travel path.
* *User**filters.* The user’s preferences on the travel path, like elements to avoid, or elements to take.

## ***1.4. Revision history***

## ***1.5. Reference Documents***

## ***1.6. Document Structure***

# **2. Overall Description**

## ***2.1. Product perspective***

## ***2.2. Product functions***

## ***2.3. User Characteristics***

## ***2.4. Assumptions, dependencies and constraints***

# **3. Specific Requirements**

## ***3.1. External Interface Requirements***

### ***3.1.1. User Interfaces***

### ***3.1.2. Hardware Interfaces***

### ***3.1.3. Software Interfaces***

### ***3.1.4. Communication Interfaces***

## ***3.2. Functional Requirements***

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### ***3.4.3. Any other constraint***

## ***3.5. Software System Attributes***

### ***3.5.1. Reliability***

### ***3.5.2. Availability***

### ***3.5.3. Security***

### ***3.5.4. Maintainability***

### ***3.5.5. Portability***

# **4. Formal Analysis using alloy**

# **5. Effort Spent**

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# **6. References**