Software Engineeering 2

Requirement Analysis and Specification Document

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Contents

1 Introduction

1.1 Purpose

Our team will project a suggested realization of the **Travlendar**$^+$.More specifically the **Travlendar**$^+$ will be an combined web and phone-application. The application are going to work as a combined calendar and travel-companion. If a user makes an appointment in the calendar, they will also be able to specify the exact position of said appointment. The application will then calculate the optimal route to the desired meeting point to ensure that the user get to the appointment in due time. The application also features a significant amount of trip-customization, such as: transport type, carbon-footprint and travel constraints(maybe a max walk distance 1km).
This specific document should be considered as a description of the high-level functionality of the application.

1.2 Scope and Problem Description

In today's society many appointments are at various locations across the city or region where we live. This projects goal is to create a combined calendar and travel-companion. The application must be able to:

I Automatically compute travel time between appointments and notify the user in such a way that the he/she arrives in due time.

II Support the user in their travel, by combining ways of transport and assessing live traffic-updates.

Specific problems:

1. Any registered user may set up a appointment, this can include: time and date of appointment, place, notes, thresh-hold for notification(i.e 5 min before), travel constraints and attendants. For the user to get a suggested travel-route, they have to specify time, date and place.
2. A user may invite other users to any given appointment if and only if they are on each other contact-lists. When invited, the user must acknowledge the invite and verify travel constraints to participate.
3. When an appointment is made, the application guaranties a optimal travelling-route in respect of the users constraints. The application will verify if the appointment and intermediate appointments is reachable from the current location with respect to time.
4. If one or several appointments are unreachable, the user will be notified by a warning.

5. If a location is unreachable with current user constraints, the application will ask the user if it should give an suggested traveling route ignoring the current user-constraints. If granted access the application will ignore all constraints, except private transportation.
6. In addition to basic functionality, the application will be designed such that additional functionality and features may be added after release.

1.3 Definitions and Abbreviations

Definitions:

Appointment - A scheduled meeting with one or more persons.

User - Any person that uses the application.

Actor - Any user or program interacting with the application.

unreachable - The user cant reach the appointment in time.

Abbreviations:

API - Application Programming Interface, a set of subroutines, protocols, and tools for building application software.

ETA - Estimated Time to Arrival.

App - Software application for any mobile device or web-browser.

2 Overall Description

2.1 Product Perspective

3 Specific Requirements

3.1 External Interface Requirements

4 Alloy

4.1 Alloy-model

4.2 Summary

5 Work Log

Date:	Name:	Hours:	Total:
14.10.2017	Tobias Rasmussen	3	3
15.10.2017	Tobias Rasmussen	5	8

Table 1: Table showing worklog

6 Summary

Hopefully this has been a useful short guide. Please also check out the tex source code. For more inspiration check out [1]. Also, since LaTeXis so extensively used, StackExchange and Google generally has the answers you are looking for.

References

[1] Wikibooks latex. https://en.wikibooks.org/wiki/LaTeX. Accessed: 2016-08-30.