POLITECNICO DI MILANO



Corso di Laurea Magistrale in Computer Science and Engineering Dipartimento di Elettronica e Informazione

Travlendar+

Requirement Analysis and Specification Document

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Introduction

1.1 Purpose

This document is the Requirement Analysis and Specification Document (RASD) of a mobile application called Travlendar+. The purpose of the document is to show the requirements and specification of the new application, considering various aspects like the stakeholders' needs, domain properties and constrains which the system-to-be is subject to.

1.2 Scope

Travlendar+ is a mobile, calendar-based application that helps the user to manage his appointments and to a greater extent set up the trip to his destination, choosing the best means of transport depending on his needs. Travlendar+ will choose the most suitable way to get the user to his destination between a large pool of options, considering public transportation, personal vehicles, locating cars or bikes of sharing services and walking to the destination. It will take account of weather, traffic, possible passengers if any, the user-set break times and the potential will to minimize the carbon footprint of the trip, always focusing on taking him on time to his scheduled appointments.

Eventually the user will be able to purchase the tickets he will use to reach his destination in-app. The great customizability is one of the main strengths of Travlendar+, being able to fully comply with the user needs.

1.3 Definitions, acronyms, abbreviations

1.3.1 Definitions

1.3.2 Acronyms

RASD: Requirements analysis and specification document; ETA: Estimated time of arrival, it is the time remaining to arrive to destination;

1.4 Revision history

1.5 Reference documents

Documents list:

• Mandatory Project Assignments.pdf

1.6 Document structure

The paper is structured as follows:

- Chapter 1: Explanation of the document purpose and scope
- Chapter 2:
- Chapter 3:
- Chapter 4:
- Chapter 5:
- Chapter 6:

Overall Description

2.1 Product perspective

Travlendar+ will be developed as a mobile application that relies on the use of Google maps and Google calendar APIs.

Its user interface will be composed by two main tabs, one with a calendar, to schedule user's events and the other one with a map to manage the movements of the user.

In the future will have a service of technical assistance via chat.

The application will not provide any API for integration with other systems.

2.2 Product functions

2.3 User characteristics

2.4 Assumptions, dependencies and constraints

Chapter 3 Specific Requirements

Formal Analysis Using Alloy

Chapter 5
Effort Spent

References