#### POLITECNICO DI MILANO



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

#### Travlendar+

#### Design Document

Reference professor: Prof. Elisabetta Di Nitto

#### Authors:

Alessandro Aimi Matr. 899642 Roberto Bigazzi Matr. 899411 Filippo Collini Matr. 829918

> Version 0.0.1 17/11/2017 Academic Year 2017-2018

#### Contents

1	Introduction	1
	1.A Description of the given problem	1
	1.B Definitions and Acronyms	2
	1.B.1 Definitions	2
	1.B.2 Acronyms	2
	1.C Revision History	2
	1.D References	2
	1.E Document Structure	2
	1.F Used tools	2
<b>2</b>	Architectural Design	3
	2.A Overview	3
	2.B Component View	3
	2.C Deployment View	3
	2.D Runtime View	3
	2.E Component Interfaces	3
	2.F Selected Architectural Styles and Patterns	3
	2.G Other Design Decisions	3
3	Algorithm Design	4
4	User Interface Design	5
	4.A Mockups	5
	4.B UX Diagrams	5
	4.C BCE Diagrams	5
5	Requirements Traceability	6
6	Implementation, Integration and Test Plan	7
7	Effort Spent	8

#### Introduction

Intro.

#### 1.A Description of the given problem

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.B Definitions and Acronyms
- 1.B.1 Definitions
- 1.B.2 Acronyms
- 1.C Revision History
- 1.D References

Documents list:

- Mandatory Project Assignments.pdf
- 1.E Document Structure
- 1.F Used tools

### Architectural Design

- 2.A Overview
- 2.B Component View
- 2.C Deployment View
- 2.D Runtime View
- 2.E Component Interfaces
- 2.F Selected Architectural Styles and Patterns
- 2.G Other Design Decisions

# Chapter 3 Algorithm Design

# User Interface Design

- 4.A Mockups
- 4.B UX Diagrams
- 4.C BCE Diagrams

# Chapter 5 Requirements Traceability

# Implementation, Integration and Test Plan

Chapter 7
Effort Spent