



RASD - Requirement Analysis and Specification Document



POLITECNICO
MILANO 1863

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1 Introduction

1.1 Purpose

1.1.1 RASD Purpose

This document represents the Requirement Analysis and Specification Document (RASD). Goals of this document are to completely describe the system in terms of functional and non-functional requirements, analyse the real needs of the customer in order to model the system, show the constraints and the limit of the software and indicate the typical use cases that will occur after the release. This document is addressed to the developers who have to implement the requirements and could be used as a contractual basis.

1.1.2 Application Purpose

CLup - CUSTOMERS LINE UP - is born to help people in a crucial historic period, Covid-19 era, in which the daily life of all us changed drastically. One of these changes, and probably the most important one, is the social distancing to avoid the spread of pandemic.

Indeed, the specific goal of this project is to develop an easy-to-use application that, on the one side, allows store's managers to regulate the influx of people in the building and, on the other side, saves people from having to line up and stand outside of stores for hours on end, which are themselves a source of hazards.

The application would work as a digital counterpart to the common situation where people who are in line for a service retrieve a number that gives their position in the queue. This method of ticketing allows a person to approach the store in time and in a more safe mood, only when his/her number is going to be reached.

In particular, CLup will provide a real-time ticketing service which, on request, give to the customer the number associated to the current store's queue that the customer want to visit. The stores adopting CLup system, can also guarantee the possibility to hand out tickets on the spot; of course this two approaches are integrated in a unique queue, always managed by CLup. CLup will also allows customer to book a visit in advance to the store, specifying in many ways the times and modalities of his/her visit.

The application should be very simple to use, as the range of users include all demographics.

1.2 Scope

1.3 Definitions, Acronyms, Abbreviations

1.3.1 Definitions

1.3.2 Acronyms

1.3.3 Abbreviations

1.4 Revision History

1.5 Reference Documents

- [1] R&DD Assignment AY 2020-2021
- [2] M. Jackson, P. Zave, "Deriving Specifications from Requirements: An Example", Proceedings of ICSE 95, 1995

1.6 Document Structure

2 Overall Description

2.1 Product Perspective

2.2 Product functions

2.3 User characteristics

2.4 Assumptions, dependencies, constraints

3 Specific requirements

4 Fromal analysis using Alloy

5 Effort Spent

6 References