

RASD

**Requirements Analysis and Specification Document**

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# Introduction

## Purpose

Our *Requirements analysis and specification document (RASD)* contains the description of the scenarios, the use cases that describe them, and the models describing requirements and specification for the problem under consideration: CLup – Customers Line-up.

This document has the purpose to guide the developer in the realization of the software which offers concrete help during the Covid-19 emergency.

## Scope

CLup – Customers Line-up is an easy-to-use application that, on the one side, allows store 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.

The necessity of an app like Clup arises in order to avoid having crowds inside the grocery shopping, which typically results in long lines forming outside, which are themselves a source of hazards during the healthcare emergency.

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.

It offers to the clients three ways to visit the supermarket:

* **Mode 1:** it would allow customers to “line up” (i.e., retrieve a number) from their home, and then wait until their number is called (or is close to being called) to approach the store. In addition, the application could be used to generate QR codes that would be scanned upon entering the store, thus allowing store managers to monitor entrances.
* **Mode 2:** in addition to managing lines in real-time, the application could also allow customers to “book” a visit to the supermarket. A customer might indicate also the approximate expected duration of the visit. Alternatively, for long-term customers, this time could be inferred by the system based on an analysis of the previous visits.
* **Mode 3:** fallback options should be available for people who do not have access to the required technology; for example, stores should also have the possibility to hand out “tickets” on the spot, thus acting as proxies for the customers.

The CLup also includes features that allow you to suggest alternative slots (on one day, or different days) to visit the store, or to recommend different stores in the same chain if the preferred one is not available, or to notify the available slots in one day/time range.