

B. Product functions

The most important aspects of the system to be are the regulation and management of the entrances in stores as seen in the above scenarios. These are applied through the means of time slotted (in fractions of an hour) tickets. Every ticket or booked visit will allow users to enter in the store only in the time slot written on the ticket, plus a brief time variation as not to be extremely strict and as to take into account for a small human error. The system will use time slots as not to have many entrances at the same time and create a queue for the entrance. Afterwards the system will consider the user as being inside a store until the scan in exit is carried out or until a time equal to the system's estimated average duration of a grocery shop trip passes.

The system-to-be should inform its users of what stores are available to go to and allow them to take a ticket and line up without needing to be in presence in front of the store. The system will allow its registered virtual users to input the products they are willing to buy. The system will take into account the average time it takes for its registered users to shop and will use that time to infer how long a trip will last based on what products the user plans on buying.

The system should also be a guidance of help to the store managers by providing information about the number of people who have entered said stores.