Performance requirements:

We can differentiate our performance requirements in 2 categories:

The first ones are necessary to respect a goal, in our case are relative to the goal to limit the physical line situation in the proximity of the store. In order to achieve that, our application must precisely estimate the right time of arrival time of every single customer with an absolute error less than five minutes. That depends on the on a precise estimation of the position of the customer after lining up and a correct estimation on the duration of the customers time staying. Them also need to be under a certain value of error, for the first one the error must be less than ten meters instead for the estimation of the time of the customer staying must be less than three minutes. Also, these estimations must not require more than twenty seconds to compute in order to be always relevant and shown to the customer.

The second ones are required to guarantee a good level of QoS (Quality of Service). Such as being able to manage at least a hundred simultaneous user connections for each store, re-elaborate periodically the stats for the manager with a period less than one minute.