

“Gocery” Project Report

The current Corona Virus Pandemic has led to a global lockdown. With 11,70,159 confirmed case, governments all across the world have urged for national lockdowns. In such situations, it is extremely important to maintain social distancing while conducting daily tasks. In times of lockdown and home quarantine, one of the situations when people are most prone to the virus is when they go out for groceries, hence, making it exceptionally essential to follow this when people go out to stores to purchase groceries. If a large number of people come out to move to nearby grocery/vegetable/fruits stores, it would increase the potential of spreading disease due to a large number of people clustering at one location for prolonged periods(eg: cash registers at shops).

Controlling the number of people entering stores at different times of the day has the potential of reducing the number of people in a grocery store at a time, implying that the amount of time they spend at the cash registers reduce, thereby reinforcing the philosophy of social distancing.

This is where Gocery steps in!

We attempted to control the number of people permitted at a shop at a time. By getting shops to sign up for this service(which we expect shall be made mandatory in difficult times like these), we intend to provide the ability for people to book a time slot when they would want to come to the store to purchase goods. We also provide the store the freedom to decide how long they would like customers to spend time at the store. In order to prevent people from visiting the store over and over again, we have imposed a block as well whereby a person cannot re-register and book a time slot within 3 days of the previous booking.

The attempt is to make sure people spend as less time as possible outdoors and stay at home during these difficult times. We attempt to facilitate the purchase of essential items while providing minimum contact with others around so that it helps alleviate the problems people are facing as a result of these lockdowns.

Gocery works broadly with 2 units. One unit is at the Shop end whereby a shop can choose to register by providing their address, number of cash registers, open and close times etc. The shop then is provided with a unique key.

Gocery being a web based app based on heavily resilient APIs is also scalable to a large extent which implies that the app can not only be used just in Poland but can also end up being used all across the world.

Registered shops could go through additional verification with the Police and other health officials.

Once authorized, the shop would appear as an option on the other unit which is at the Customer(Consumer) end. The customer would have to enter the pin code where they live. The Google Maps API is used to generate the nearest registered stores within 1.5 km of the selected pin code. One of them can be selected and on selection, the consumer can choose the time slot

he/she wants to visit in. Once selected, the consumer would have to enter his/her email and a unique id is mailed. This unique id has to be presented to the shopkeeper at the time of entering the store. The shopkeeper shall check in the consumer allocating the decided time to get the essentials, bill the items and leave.

If imposed/ made mandatory, we believe this has the ability to heavily reduce the potential for people to end up spending more time than required at the stores, and at the same time provide the opportunity for people to go ahead and purchase essentials without violating the social distancing protocol to a large extent. This also helps guarantee that the potential for people gathering in large numbers at grocery stores etc is heavily reduced which shall be extremely useful especially in the times of attempting to flatten the exponential curve of confirmed cases of COVID-19 all across the world.

This web app has been developed strictly during the allotted time(< 40 hours) for coding. Hence there are a few features we would like to include, as future developments for this app.

Firstly, per the new Polish government rules, the time slot from 10 AM - 12 PM has been allotted for citizens of more than 60 years of age. We would like to provide this feature in the app whereby only senior citizens have the option of reserving a time slot b/w 10 AM - 12 PM while the others do not have that option.

Secondly, we would like to add the option of viewing the inventory of the store(or providing the phone numbers), which will be provided by the store to enable people to make informed decisions based on their needs.