napao ?

BE SAFE. DON'T WAIT.

The problem

People have to go to a local grocery store in order to buy the basic goods for them and their families. But due to covid-19 regulations, every grocery store can have a specific amount of customers within the store at each time. This causes huge lines of people waiting outside the store, bunching up together and increasing the risk of covid-19 infections, while losing a respectful amount of time waiting for their order.

The solution

Napao is a crowd management platform. It works in the back-office of grocery stores, counting the current customers within the store and informing the public about the store's availability to serve another customer. Users can search for the grocery store they plan to visit or check every single store in their neighborhood and see the crowd levels of each store in real-time, helping them decide the safest one.

Benefits:

For the public:

1. People can search for the grocery store they plan to go and real-time inform them about crowd levels.

2. Help them decide for the safest options, presenting them the stores with the fewest possible customers.

3. Provides them a set of options, like connect them to the store, receive notifications whenever the store empties, get informed about COVID-19 and how to protect themselves and their families.

1. Stores can real-time track the number of customers within the store and get graphs about the customer in-reach within the day.

2. With the help of real-time prediction models, like ARIMA, the stores can get valuable data and calculations about the customer behavior and statistics, such as predicting the in-reach for the day, the time the customer spends in store, etc.

3. Provides stores a set of tools , like create announcements to the public, connect with possible customers, and many others.

Technical details:

Napao is a simple web-platform created with the help of web-development technologies.

Napao will work in the back-end of grocery stores, giving the option to the business to count the current number of customers within the store by the administration page (currently with buttons, in future a sensor can be deployed to automate the process). This counter will update the database for each store, so that the public can search for each store's current crowd levels. The limit of people within each store is calculated by the country's regulation system, that is parameterized by store's size.

Grocery stores will be able to sign up and login to the platform, in order to have access to the admin page and the set of tools and benefits that napao offers for it.

The public will be able from the homepage to search for stores, either specific ones or to their local neighborhood, city, etc. The result page of each store will contain the crowd-levels, store's address and position on map and the set of the options described (add notifications, connect with the store, etc).

Tools used:

- React for the creation of the platform
- Mapbox for the usage of maps and visualization of stores
- Material-UI for the general UI/UX of the platform

Solution impact's to the crisis

- Napao helps tackle the spread of coronavirus by limiting the chance of people crowding up in lines and time spent off quarantine.

- Connects the customer to the store directly, empowering local communities and preserving real communication.

- Helps regulate customers flow and better management to the store, by giving insights of their behavior.

- It's the little things that frustrate us. And waiting in a line for half an hour in order to get a piece of paper is one of them. Let's just make our day a little bit better.

The value of your napao after the crisis

Better days come, and covid-19 is a past
Can napao still offer anything else ?

The answer is yes. Crowd-management in stores is still a problem.
Vulnerable groups will still prefer to avoid crowded places, people will still

get frustrated when waiting for a piece of paper in lines and stores need a system to predict customer behavior to better balance the workload and be proactive.

The necessities in order to continue the project

Napao started two weeks ago, and the whole project implementation took around 7 days by one person. Me. This means that only the MVP of the project was created in order to showcase the problem and how napao solves it.

The next steps consist of providing a backend for the platform, improve the UX of it (responsiveness, mobile-friendly, security, other) and of course deploying for the public to use.

Next steps and the scale up:

Napao's first priority would be to deploy a sensor to automate the process of counting the customers within the store.

Then the implementation of ARIMA predictions models, in order to provide a load of statistics and calculations for customer behavior, given the data collected by the sensor.

Last, but not least, the scale includes the expansion of napao to any kind of store and business and wanna tackle the same problem and get access to this set of services provided.

Preview Project

Find napao on:

➜Github

➜Devpost

➜Youtube

Reach me

My name is Vangelis Garaganis and I am from Greece. I created napao with passion and with the motive to help the world tackle a problem that affects all of us. You can find about me on:

➜ Personal Website & Portfolio

➜LinkedIn