Our database application will be useful for hospitals to register patients who have COVID-19 and that will also provide some tools for virus research.

Laboratories, doctors, and the government will be users of our application.

Doctors will add and modify the state of the patients. The application will also allow the doctors to search and sort the patients according to different attributes (name, age, if they are alive or not…)

The application will be able to process all the information of each patients and will generate some statistic results based on the patient's features.

Laboratories will be able to see those results and they will use them to investigate and create better new vaccines that will be sent to the government to supply them. They will also be able to list all the features of the patients so they will see, for example, if a drug is suitable or not for coronavirus, if the age affects or not…

Thanks to the statistics results, the application will determine and recognize what features (age, weight…) affect more to the health of the patients relating it with coronavirus and the vaccine. This way, the application will calculate a formula to give a score to each patient. For example, a patient that suffers cancer will probably get a higher score from the formula compared to a healthy person because the application would realize that all the patients with coronavirus that suffered from a previous cancer have experimented a worse situation (ICU, death, hospitalization…).

Finally, the government will receive a total number of vaccines produced by all the laboratories and will trigger a simulation which will show a list of patients that should be vaccinated first according to the total number of vaccines that the government has received and the score of each patient. For example, if the government has received only 10 vaccines, the simulation will show the list of the 10 patients with the higher score.