The Team:

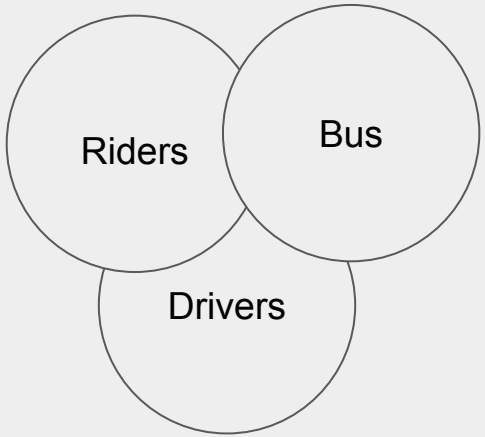
Mateo Carvajal - Application designer

Kayleah Griffen - Data analyst

Main Goal:
Ensure public transportation stays safe and reliable for those who need to use it through the COVID-19 outbreak

Our propositions to keep system safe and reliable:

Advanced Contact Tracing



Block Schedule

Elderly
Immune
Compromised

Deep
Clean

Health
Care
workers

General

Cleaning & Space Policy

- No people in first 2 rows
- Individual separation
- Board from back
-

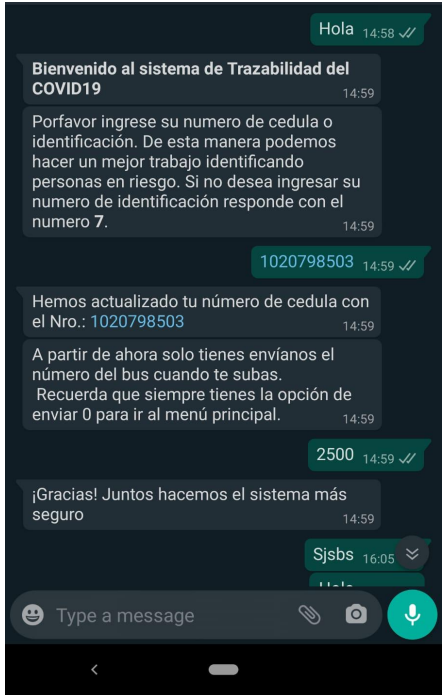
Advanced Contact Tracing:

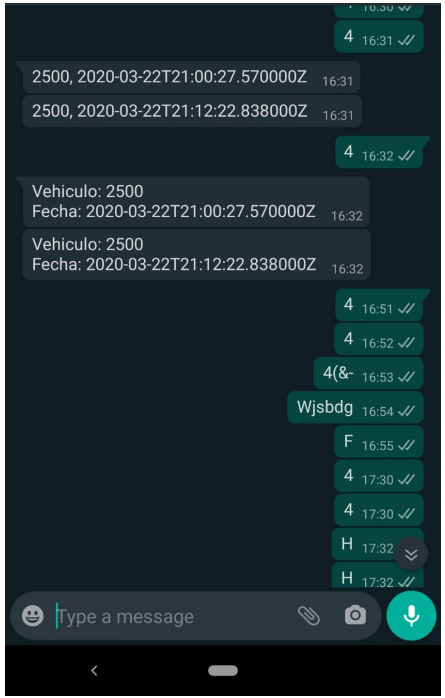
- **Problem -** Currently, when someone is diagnosed with COVID-19 the healthcare system has to retroactively contact trace to determine who was in contact with the diagnosed person and warn people who may have been in contact with COVID-19 to
- **Solution** We propose that riders text +1 (415) 523-8886. They will register and then whenever they board a bus they will text in the bus number when they get on. This information is input into a database. If a rider later tests positive for COVID-19, then the health authorities can use the database to see what other riders were possibly exposed to COVID-19 and recommend that they self-quarantine.
- **Text “Join whom-wore” to +1 (415) 523-8886 to try the application!**

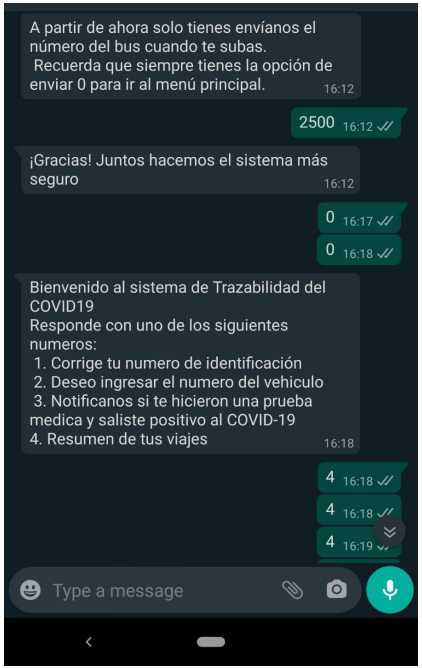
Application database on: https://f812a51d.ngrok.io/api/

Advanced Contact Tracing:

- **Screenshots of the application**







Advanced Contact Tracing:

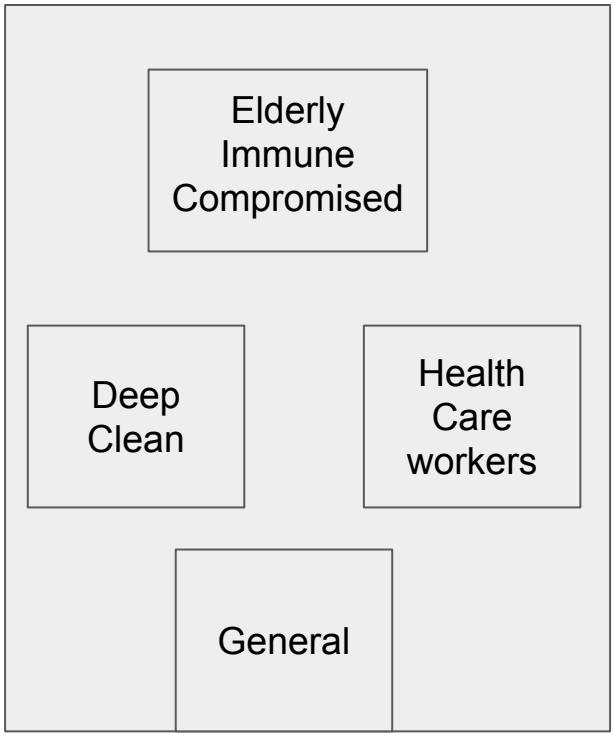
- **Further ideas:** There could also be a phone number/ database for the bus driver. The driver would text in when they start their shift, end their shift, when they clean the bus, and if they ever had to turn people away from boarding.
- This data is helpful because once the bus is cleaned it is assumed that even if someone was carrying COVID-19 that was on the bus before it was cleaned, after it is cleaned it is assumed the COVID-19 is gone. This means that the riders that board the bus after a cleaning would not need to go into self-quarantine.
- This data would also be useful to reorganize bus routes based on demand

Based on data on public bus usage from the encuestas-de-movilidad we estimate a **90% percent reduction in public bus travel** during the COVID-19 outbreak

Decreased bus usage will enable the adoption of a **Block Schedule** and a **Separation Policy**

Data from: https://www.simur.gov.co/portal-simur/datos-del-sector/encuestas-de-movilidad/ Viajes and Personas dataset

Block Schedule



We recommend keeping the current schedule but every 4 rides alternate between

1. Elderly/ Immunocompromised
2. Health care workers
3. General
4. Deep clean

The idea being to separate out at-risk demographics from the others and also give another slot for deep cleaning

Separation Policy

Based on decreased use during the outbreak, the following policies could be adopted

- No people in first 2 rows
- Individual separation
- Board from back