ALL IN ONE
ASEAN GEOSPATIAL
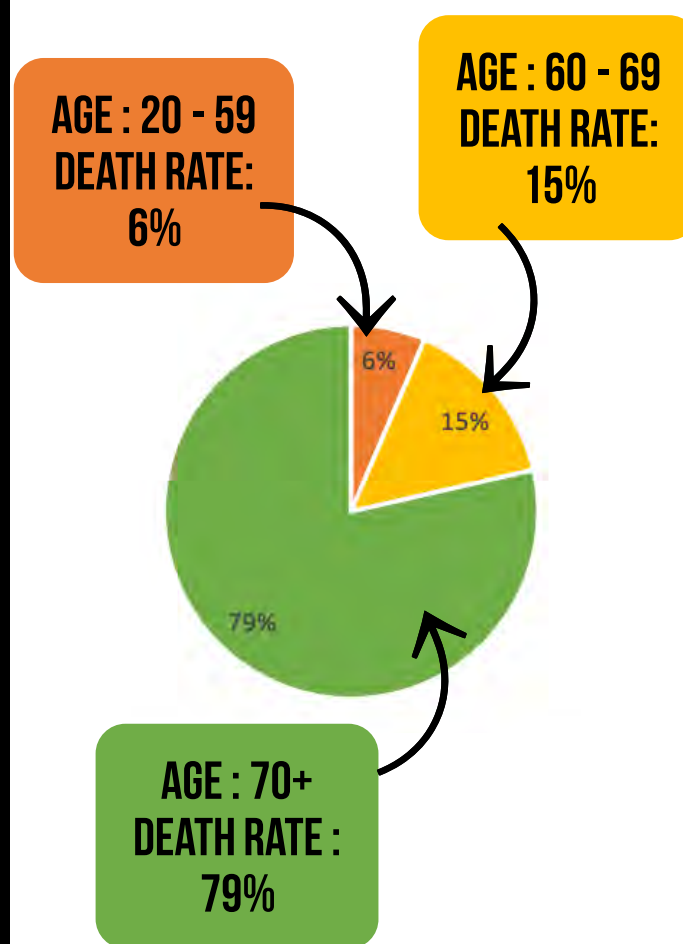### Year 2 DAE

INTRODUCTION

With Singapore going through an ageing population, we are looking for ways to keep the elderly safe in this pandemic. Most relevant health information is scattered throughout websites, where elderly face difficulty accessing them. We have devised a smart phone app that contains the necessary information to keep elderly safe. Necessary information containing Covid-19 hotspots shown on a map, directory, and capacities of the nearest health facilities.
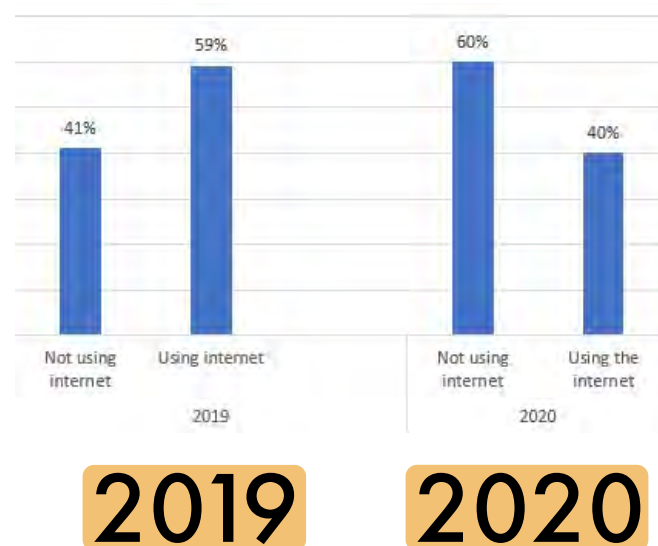
PURPOSE

- Crowd level of clinics, hospitals, polyclinics.
  • Information of various health facilities
  • Crowd level of the facilities
  • Booking of appointments
- Maps for directory
  • Used to help elderlies when they are lost.
  • Directions to the nearest MRT or bus stops
  • Provided in multiple language and dialects
- Covid map
  • Daily covid information
  • Covid hotspots
  • Location of covid testing and vaccination centres.
- Others
  • Family members can monitor the user (elderly)
  • Help button so that family members

DATA

Susceptibility to death due to Covid-19 by age.

AGE : 20 - 59
DEATH RATE:
6%

AGE : 60 - 69
DEATH RATE:
15%

6%
15%
79%

AGE : 70+
DEATH RATE :
79%

Internet usage of elderly ages 75+, in 2019 and 2020.

41% 59% 60% 40%
Not using internet   Using internet   Not using internet   Using the internet
2019   2020

2019   2020

Trends identified:
-
Elderly people aged 60+ are more susceptible to death due to Covid-19, as compared to other age groups.
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The usage of internet has risen in the elderly age group.

APPLICATION

We are able to make use of the Covid-19 geospatial data given by MOH. This geospatial data displays the Covid-19 hotspots of each district.

We are integrating Ministry of Health (MOH) public data, the publicly available transport timing API from Land Transport Authority (LTA), and the popular times API from google into an app that is simple to use.

We can collect more data of the current capacity of the health facilities and transport routes and services with the use of geospatial satellites. These geospatial satellites cooperate with beacons so that the signals from the satellite are not blocked. We will corroborate the data we collect with the publicly available government data to ensure accuracy.

CONCLUSION

With the data that we have found, we can see that the elderly are the demographic that we need to look out for during this time of the Pandemic. They are the demographic that is most susceptible to death and critical conditions due to Covid-19.

With more elderly people getting used to technology and the internet, our idea of having an app that provides the necessary information for them will be meaningful.

By using Geospatial satellites and the beacons that reduce the amount of signals that are blocked. We are able to combine the data we collect with the available public data in order to have the most accurate timings and map directories as possible. We can provide all the necessary information that is required for the elderly people to protect themselves against Covid-19