

System design | Interaction design | UI design Group project Winners at D'Source Corona Challenge, IIT Bombay Designing a system to manage crowd at public places in the times of COVID-19

Covid-19 has impacted millions around the globe directly and indirectly. The only preferrable and proven option during these times have been the lockdowns. But it cannot be a permanent solution for people need to go out and sustain. There is thus a need to mitigate the risk that is out there. People have to be and in the unfamiliar futures will have to be managed at the common public spots.

The Crowd Ludo aims at managing possible crowd at public spaces to avoid spread of the virus and allow humans to take a step forward against the uncalled happening.

Research

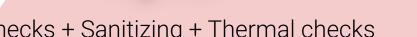
Concentrated public spaces

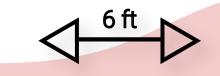


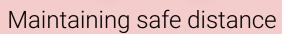
Solution spaces:

Common requirements in each sector that we understood.











Limiting random movements



Reducing number of people at one place



Reducing time spent at one place



Reducing length of queues



Government App

Use of a common digital medium can act as a guide to the operating procedures for each nominated sectors. A centralised Government application can play the perfect role here.

flights/trains/buses per day The waiting area would be divided into areas with different shapes. Not more than 5 people allowed in any particular shaped area.

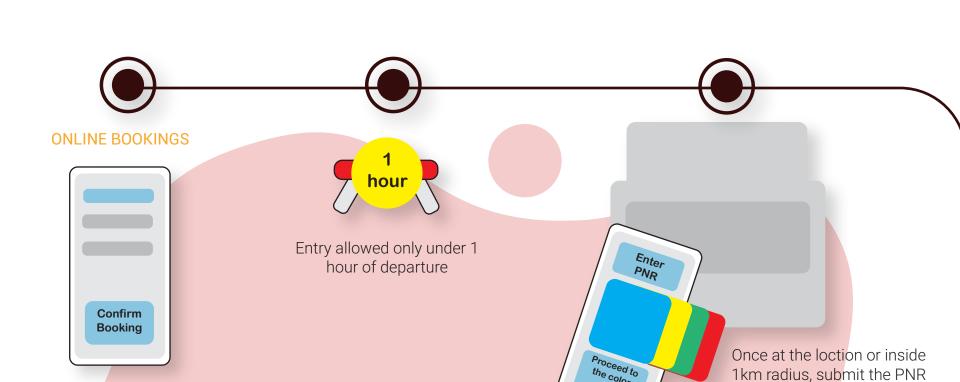
Standard Operating Procedure for travel sectors

Luggage check and Check-in Counters

Proceed to the luggage checks and check in counters (different for different

gates/platforms)

Includes flights, trains and buses



DEPARTURES

Entry possible through multiple gates

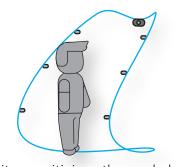
Gates/ Platforms

Each Gate/Platform would be

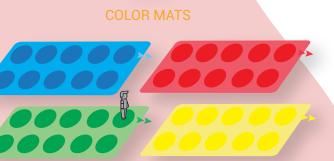
assigned a different color (The same

that shows up after entering the PNR

details on the application).



Security+sanitizing+thermal check



details on the government

application to receive the color mat (and gates/platforms) to

proceed to.

Proceed to the color mat at the entrance and take the spots according to the availability

Move ahead according to the order and by maintaining a distance of 3 tiles.

Capacity of the mat - 10 (Can be altered)

Towards the Gates/Platforms

Limited frequencies of



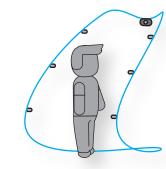
The movements in between all the points should take place on the specified color paths only with maintaining a distance of minimum 3 tiles.

> This includes movements to washrooms, food outlets etc.



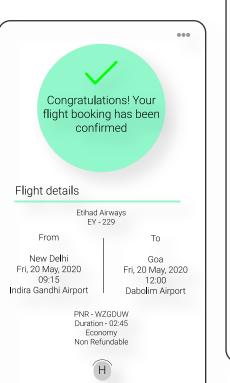
At arrivals, the movement should continue along the same colored paths.

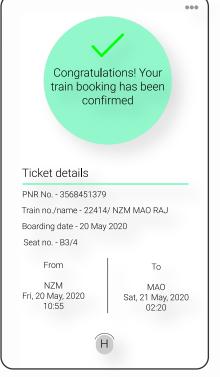
Luggage collection would be also according to the order at the color mat provided near the luggage collection belts.



Exit along with security checks, sanitizing and thermal checks.

Interface for the centralised Government app



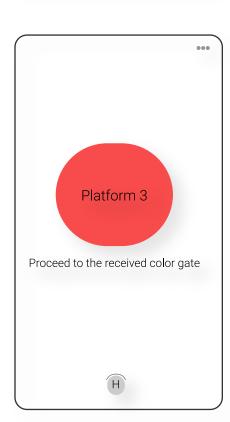


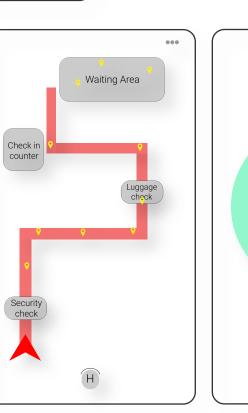
Gate 3

Proceed to the received color gate

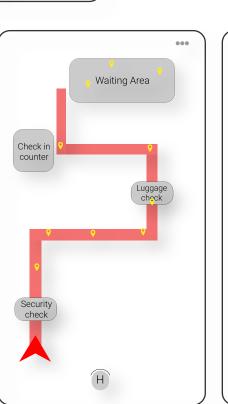


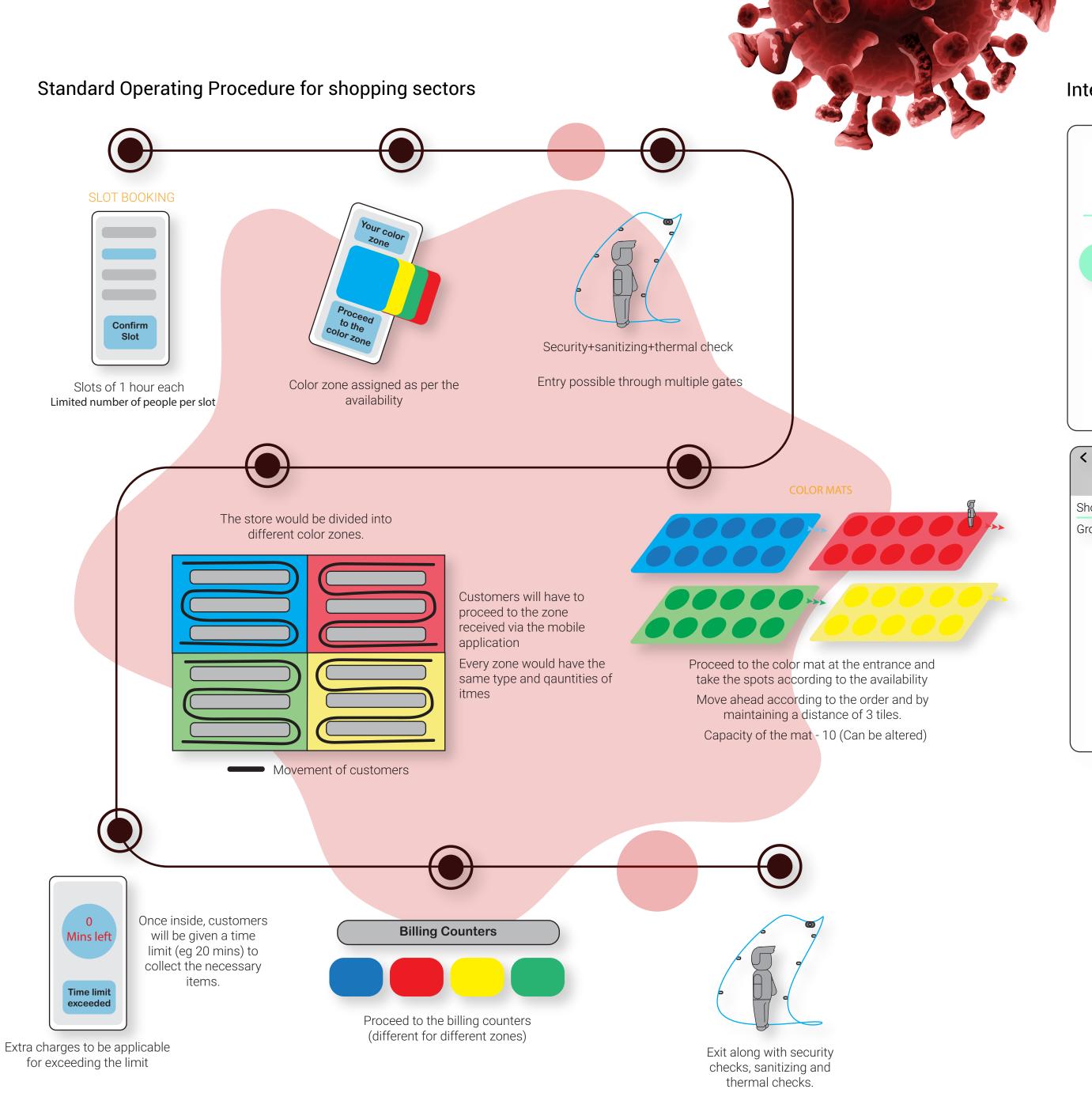
You are inside the 1 km radius



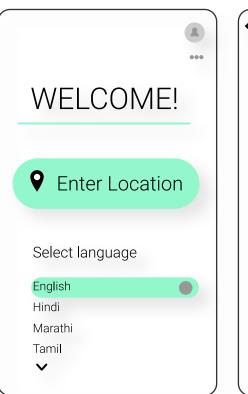


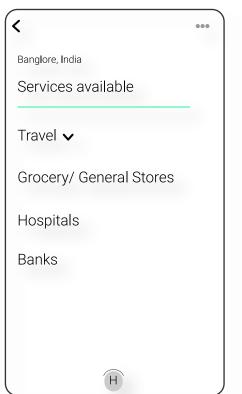


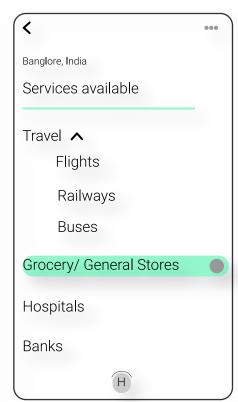


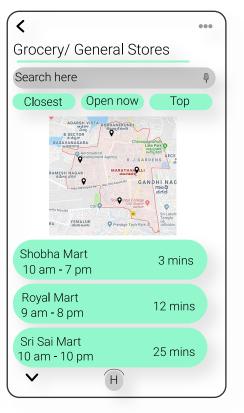


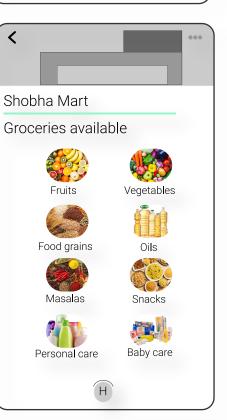
Interface for the Government app

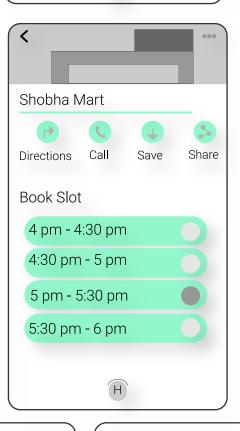






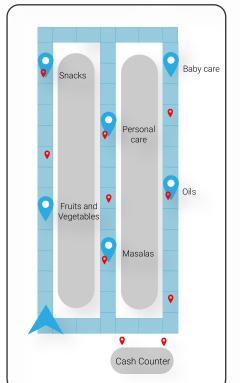


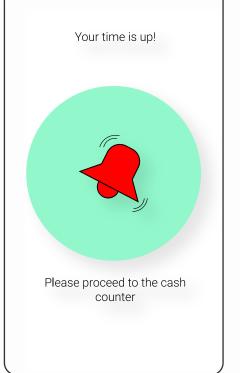




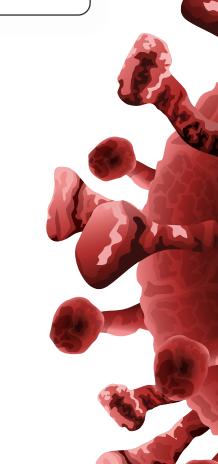




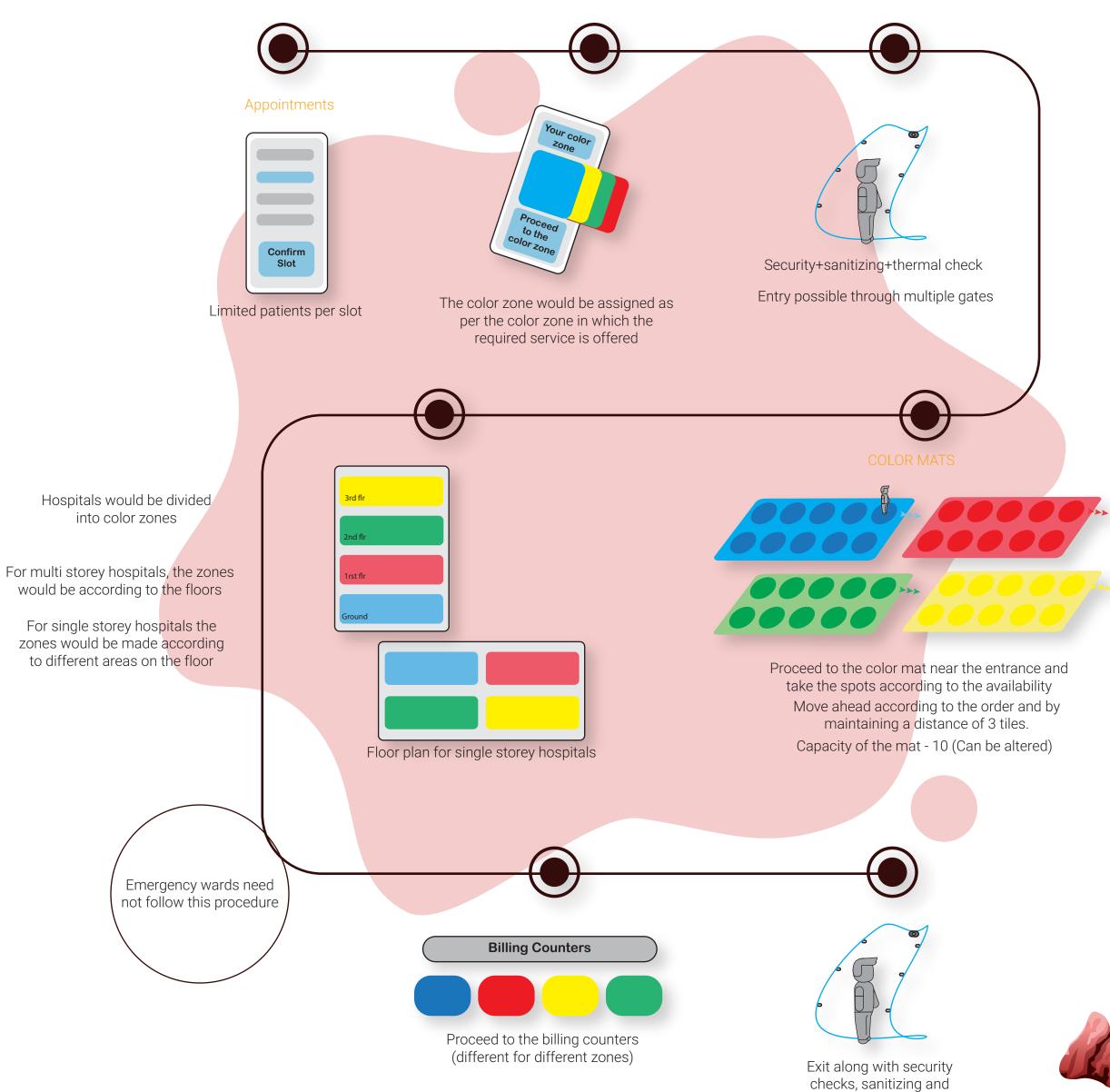








Standard Operating Procedure for hospitals sectors



thermal checks.

Interface for the Government app

