Proposal for Corona Tracking App

Aim:

1.The biggest threat against the disease is that it can remain hidden for 4 days, i.e. without any symptoms.

2.So, during this time a large number of people can get infected. Also, it is always better to not visit the places where infected patients have visited.

3. Many positive cases are unknown because of lack of testing and no knowledge that whether one has come in contact of affected people.

4. To know the number of people at each place in route if ever going out is necessary.

Methodology:

1. App that has input interface to input the data of a person's location at various times of day.

   That is, in the input box, the mobile user will input the time of the day and will choose the place location from google map. So, location in terms of google map data acan be tabulated against time for each mobile user.

   The most important, benefit in this method against live tracking of each mobile through GPS is that user can input historic data too, I.e. past 10 days or so and location services directly accessing through mobile devices is a great privacy threat.

2. Each user data table will be stored locally first and will be given a key with age and gender information only. So, the app will send the USER LOCATION TABLE to the server only using the unique key. So, the app could not be a security threat for location. And this step needs to be though upon again.

   Also, if possible we would try to input the location details of the infected users as much as possible from news and other sources.

3. Now, the server will have the tables with two columns with first column having time and second column with the google map location. Then the table could be converted into routes in map and user could even be prompted if the route constructed is the one he/she took.
4. From the travel route network constructed in step 3, we could use a machine learning model (graph and network analysis based on the fact that the virus takes 12 hours to die, and so the spreading pattern and the places) to warn the people who were in vicinity of infected people and those in threat from them.
5. The warning could be sent to the app user. And the user can also input the travelling plans that, he/she will take and we could predict the safest path.
6. Future scope is open to all for recommendation.

Some possible problems and solutions:

1. The machine learning model will be overloaded with data if the number of users' are many.

   So, solution is to distribute the model to the systems of the developers willing in a geographical hierarchy. So, a small geographic region will be analyzed by a developer system.

   The geographical hierarchal distributed model will work (as per my analysis) because as per advisory of the government mostly people are remaining in their houses mostly. The system will be like the cellular-concept that each local system in an area like a mobile tower in cellular network is responsible for all people in that range, then in hierarchy, it is headed by BSS and all BSS by MSS.

2. Privacy: recommendations are welcome.
3. Time, its only solution is how quickly we respond.

Final words:

1. Tracking is the main problem of corona and this scheme will focus to provide warnings as per travel and presence data, identify potential individuals infected (as indian systems for testing the virus is needing help)
2. Warning: Any delay due to our reluctance, procrastination and ignorance will be fatal as each minute corana infected cases are increasing. Its near us, we have to act.

As many developers can join, should join as the more the merrier. We want local machines at many locations and many developers for separate works.

The faster we respond, much effective will be the solution. As early people start using it, as large data pool we can analyze.

Spread to as many people as possible. To contribute your help:

1. Whatsapp:

https://chat.whatsapp.com/KQoCOX2qHFBEXUMaulJyaG

2. Telegram:

https://t.me/joinchat/KHVQux177rrxNkUnhx84_A

Please join and give ideas and contribution.