

Project Title: Development of PeopleTracker app to trace the close contacts of individuals who may be in the asymptomatic stage.

The Government of India is putting untiring efforts to contain the spread of Corona virus in the community. One of the major challenge is to identify the persons who came in contact with the COVID-19 patients. Currently, the investigation agencies are manually interrogating the patients. In addition to this, the Government of India has launched the Arogya Setu app which keeps a track of the COVID patients and informs if a person comes in close contact with the patient.

However, since the incubation period of the virus is long, it could be possible that a person in asymptomatic stage has unknowingly infected many before it could be diagnosed. In the present scenario, everybody is in possession of a handheld smart phone device with minimum facilities such as Bluetooth, Internet connection, NFC facility etc. We intend to develop a PeopleTracker app which would identify all the fellow persons who came in contact in the last fourteen days.

There are two major challenges in the development of the application. The first challenge is installation of the developed app in all the smartphones. This can be done by ensuring that every time a user access the Internet, this app would automatically get switched on. The Bluetooth technology will detect all the Android devices in its range and store the mobile number of respective devices in its local database. Periodically, the data would be transferred to a secure server. This data would be stored in the cloud for a period of fourteen days, after which it would automatically get deleted. The second challenge is privacy of the data. The data would be stored on the local Android device in encrypted form. Consequently, it would be sent over to the server over a secure channel. This data would be used only in case a new patient arrives. Moreover, this data would remain confidential and be used for the duration of pandemic by government authorities only.

Expected Outcome: a) An app to identify fellow persons who came in close contact with the individual in the past fourteen days b) A CRUD based database to store the contact details

Expected Timeline: 1.5 months

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