

# Contact tracing

## Technique:

Bluetooth

## How it is works:

- 1-downlad the application
- 2-each device generate tracing key and share it with the nearby devices.
- 3-Whenever an infected condition is recorded, it is recorded and shared with the devices it has mixed.

## Algorithm:

- 1.downlad the application.
2. Nearby devices are recognized by Bluetooth.
- 3.each device generate unique tracing key, daily tracing key each day hash (TK+day), ex: S25.
4. Provides a number for each 10-minute window in a 24-hour window as defined by day number. This value will be in the [0,143] interval, the number interval= Seconds since of day number/60x10, (TKdaily+time), ex: S25-w0 "w0=12:00am".
- 5.The devices that contact with each other they shared the key and store it automatically.
- 6.the key is shared and stored every 10 minutes.
- 7.when a person is diagnosed with the virus, is created diagnosed key and send the diagnosed key to the server.
8. notification the devices by the diagnosed key.
- 9.each device receive the notification of diagnosed key, will compare it with the keys they have it in the app.