COVID PATIENT TRACKER

The main intention of the project is to develop a device like a watch where we integrate GPS sensor to track the location of the person, pulse and temperature sensors to monitor his health conditions. These all need to be integrated in a device where Covid affected patient must wear this device to his hand 24/7 and it should be waterproof.

We have created a geofence, so that we can keep an eye on the movements of the patient. First this particular person is set with a particular location and geofence is created around him with some radius. If this person goes out this boundary then it sends an alert to local authorities and police to contact him and take necessary actions. As we cannot predict that a patient always carries a mobile, we cannot totally depend on mobile application. Hence, we have come up with an idea of this device.

As there are no components now to develop a device in place of, we have developed a mobile app using MIT App Inventor keeping pulse and temperature sliders in it and sending those values to Cloudant DB.

We have set some threshold points in it.

* If the pulse is between 10 to 30 then it sends and alert to local authorities that particular person has some emergency situation
* If the person removes this device from his hand then pulse drops to zero and sends and alert to local authorities and local police to track him.
* Here we have kept two buttons that means if the device is off then it sends alert to local police to contact him immediately.

CLOUDANT DB

Local authorities and Local Police to take actions

NODE-RED receives data from device and based on values detects the geofence and sends alert to local authorities to take action

Device reads data

PULSE

Temperature values

Location details to the NODE-RED