Containment zone alerting application

Literature survey on the selected project & information gathering

Paper 1

- Development of An Android Application for Viewing Covid-19 Containment Zones and Monitoring Violators Who are Trespassing into It Using Firebase and Geofencing
- The red zones indicate the infection hotspots, orange zones denote some infection and green zones indicate an area with no infection.
- This paper mainly focuses on development of an Android application which can inform people of the Covid-19 containment zones and prevent trespassing into these zones.

Paper 2

- This Android application updates the locations of the areas in a Google map which are identified to be the containment zones.
- The application also notifies the users if they have entered a containment zone and uploads the user's IMEI number to the online database.
- To achieve all these functionalities, many tools, and **APIs from Google** like Firebase and Geofencing API are used in this application.
- Therefore, this application can be used as a tool for creating further social awareness about the arising need of precautionary measures to be taken by the people of India.

Paper 3

- The Android application shows the location of the containment zones to the users. It also notifies the user when he or she trespasses the boundary of a containment zone or stays in the containment zones
- The first activity consists of a welcome screen which is designed with images and information.
- Next activity is a screen displaying the instructions to operate the application and a disclaimer
- The third activity is a maps activity which shows all the containment zones in a google map.

Paper 4

- In this paper, a number of Cases (COVID-19) have been reported in more than 200 countries. Thousands of health workers have been infected, and outbreaks have occurred in hospitals, aged care facilities, and prisons.
- The WHO has issued guidelines for contact and droplet precautions for healthcare workers caring for suspected COVID-19 patients
- In US, Centers for Disease Control and Prevention (CDC) has initially recommended airborne precautions.
- Evidence suggests that infections cannot neatly be separated into the dichotomy of droplet versus airborne transmission routes. Available studies also show that SARS-CoV-2 can be detected in the air, and remain viable 3 hours after aerosolization.

Paper 5

- M. V. Ramana Rao (Osmania University, India), Thondepu Adi Lakshmi (Vasuki College of Engineering, India), M. Gokul Venkatesh (Siddhartha Medical College, India) and Jothi Kumar R (Department of Computer Science and Engineering, Sharan College of Engineering and Technology, India), DOI: 10.4018
- In this paper, a number of containment zones had been recognized all over the country separated into red, orange, and green zones, individually. People are restricted to move into these containment zones.
- This Paper focuses on informing the public about the containment zone when they are in travel and also sends an alert to the police when a person enters the containment zone without permission using the containment zone alert system.
- This paper suggests a containment zone alert system by means of geo-fencing technology to identify
- the movement of public, deliver info about the danger to the public in travel and also send an alert to the police when there is an entry or exit detected in the containment zone by the use of location-based services (LBS).

Paper 6

- "Tracking the covid-19 zones through geo-fencing technique"

- The purpose of this paper is to propose a methodology to track the Covid zones, to enhance and tighten the security measures. A geo-fence is created for the containment zone.

- The person who enters or exits out of that particular zone will be monitored and alert message will be sent to that person's mobile.

- It reduces operational costs by using an automated system based on wireless infrastructure.

- It also alerts the authorities immediately to catch the violators.

- This paper helps to speed up the process of inspecting the containment zones and monitoring the individuals who violate the rules given by government.