**IBM PROJECT-PNT2022TMID22791**

**Team Leader**

**S.GOKULAVARSHINI**

**Team Members**

**G.AASIKA (910619106039)**

**A.ABINAYA (910619106038)**

**S.JAGHAN(910619106056)**

**Bachelor of Engineering**

**In**

**Electronics and Communication Engineering**

**LITERATURE SURVEY**

**Name of the Paper:**

Development of An Android Application for Viewing Covid19 Containment zones and Monitoring Violators Who are Trespassing into It Using Firebase and Geofencing.

**Author:**

* + - Ranajoy Mallik- Jadavpur University
    - Amlan Protim Hazarika-Jadavpur University
    - Sudarshana Ghosh Dastidar- Jadavpur University
    - Dilip Sing- Jadavpur University
    - Rajib Bandyopadhyay- Jadavpur University

**Published online:**

1 July 2020

**Topic:**

Containment Zone Alerting Application

**Theme:**

Our theme of the project is to provide information about containment zones in a particular region by alerting people, by continuously monitoring an individual's location. Key benefits of the application are monitoring people's activity and alerting them of their safety movements.

**Overall inference:**

The country has created containment zones throughout the cities wherever Covid-19 cases have been reported, to prevent further spread of the virus. These containment zones have been kept isolated from the outside public to ensure no contamination occurs outside. Though these containment zones are guarded by policemen, still there remains a chance that people might unknowingly step into them. In this situation where people can move in the location of the containment zones can help them bypass and avoid these zones and thereby reduce the chance of community transmission to the city, these containment zones pose a risk of infection to these city dwellers.

Therefore, informing people about the location of the containment zones can help them bypass and avoid these zones and thereby reduce the chance of community transmission. So, our aim is to develop an application that tracks the user's location and provides a notification alert if the user has entered a containment zone. The application provides daily Covid-19 case statistics to the users to keep them updated.

Most of the states of our country have their own apps with specific features and functionality to help their citizens to stop COVID-19 spread, get medical assistance during a crisis, create awareness, and understand safety precautions.

The study shows that there are a limited number of apps that show the COVID-19 containment zones in the country or state and out of these none has the functionality of notifying and alerting the user when they have entered a containment zone.

The application shows the location of the containment zones to the users. It also notifies the user when he or she trespasses the geofence of a containment zone or stays in the containment zones.

**Name of the paper:**

Mobile Health Apps That Help With COVID-19 Management: Scoping Review

**Author:**

Tracie Risling and Gunther Eysenbach

**Published** **Online:**

Aug 2020

**Topic:**

COVID-19 Management Application

**Theme:**

Our theme is to scope the evidence base on apps that were

developed in response to COVID-19.

**Overall inference:**

Mobile health (mHealth) apps have played an important role in mitigating the coronavirus disease (COVID-19) response. However, there is no resource that provides a holistic picture of the available mHealth apps that have been developed to combat this pandemic.

This review identifies that the majority of COVID-19 apps were for contact tracing and symptom monitoring. However, these apps are effective only if taken up by the community. The sharing of good practices across different countries can enable governments to learn from each other and develop effective strategies to combat and manage this pandemic.

**Name of the paper:**

COVID19-Tracker: A shiny app to produce to produce

comprehensive data visualization for SARS-CoV-2 epidemic in Spain.

**Author:**

* Aurelio Tobias-Institute of Environmental Assessment and Water Research I IDAEA • Geosciences
* Cristian Tebe-Bellvitge Biomedical Research Institute
* Joan Valls
* Pau Satorra

**Published Online:**

April 2020

**Topic:**

Containment Zone Alerting Application

**Theme:**

Our theme of the project is to provide information about

containment zones in a particular region by alerting people, by

continuously monitoring an individual's location. Key benefits of the application are monitoring people's activity and alerting them of their safety movements.

**Overall inference:**

Data visualization is an important tool for exploring and

communicating findings in medical research, and specially in

epidemiological surveillance.

The COVID19-Tracker app systematically produces daily updated data visualization and analysis of SARS-CoV2 epidemic in Spain.

It collects automatically daily data on COVID-19 diagnosed cases, intensive care unit admissions, and mortality, from February 24th, 2020 onwards. Two applications have already been developed,

1) To analyse data trends and estimating short-term projections and

2) To assess the effect of the lockdown on the trend of incident data.

The plan is to improve the app by uploading shortly new applications for data visualization and analysis, which may help for a better understanding of the SARS-CoV-2 epidemic data in Spain.

Data visualization is an important tool for exploring and

communicating findings in medical research, and specially in

epidemiological surveillance. It can help researchers and policy makers to identify and understand trends that could be overlooked if the data were reviewed in tabular form. We have developed a Shiny app allows users to evaluate daily time-series data from a statistical standpoint. The COVID19-Tracker app systematically produces daily updated data visualization and analysis of SARS-CoV-2 epidemic data in Spain. It is easy to use and fills a role in the tool space for visualization, analysis and

exploration of epidemiological data during this particular scenario.