## **CONTAINMENT ZONE ALTERING**

## **ABSTRACT:**

The novel Corona virus (covid-19) n break out was declared as a global pandemic by the world health organization on 11<sup>th</sup> March 2020. Covid-19 spread has its origin from the wet markets of Wuhan city of China. Different strain of Vaccine has been developed by different countries.

In India two vaccines have been approved by the government of India. One is Covid shield by the Oxford University and other is coaxin by pharmaceutical company Bharat biotech. To supervises and monitor the vaccination administrator, the government of India has developed a mobile application called Cowin.

It will play an essential role in managing the entire vaccination process and help to record vaccine data. The cons and pros of this application are yet to be identified.

We are developing a similar app that notifies and alerts users about COVID Containment zone with the help of user's location data and Containment zone identification using collected data from CoWin App.

## LITERATURE SURVEY:

**T. Kalyani, S. Monika, B. Neresh, Mahendra Vucha [1]** – "Accident Detection and Alert System" (December-2018). To protect the vehicle and tracking so many advanced technologies are available in a day. The Existing system also provides the location of the accident using at mega 328 Microcontroller and RF transmitter and receiver. The information is sent to the saved mobile number.

Pallavi T, Dhotre [2] – "Disaster Monitoring & Alarming System for

Mountains Foothills" (12 December 2015). Communication systems are needed for delivering warming message to be potentially affected locations to alert local and regional governmental agencies. The message needs to be ethical, reproducible and easy to be understood by authorities.

M. Ramana Rao, T. Adilakshmi, M. Venkatesh J.R,[3]- "Mobile Geo-Fencing Triggers for Alerting Entries into COVID-19" (june-2021). A disaster information system using the geo fencing technology to detect the movement of users and provide information of the risk for the location of the user was detected with high accuracy when entering the fence, but the accuracy was low when existing the fence.

Jonathan, Munson, Vineet K. Gupta [4] – "Location based notification as a general-purpose service". Current Architecture deployed by wireless carriers to service location-aware application cannot handle the load of positioning requests implied by a general-purpose location-based notification services, and the need for such a service is motivated.

**T.** Nakagawa, Wataru Yamada, H. Morikawa [5] - "Variable interval partitioning method for Smartphone-based power saving geofencing". A method for position detection whose activation frequency is determined by speed towards the target spot is proposed, which is robust against positioning error and fluctuation of the terminal's movement by leveraging the access angle to the target spot.

Stephan Clark, D. Watling [6]- "Sensitivity analysis of the probit-based stochastic user equilibrium model." An efficient computational method for performing a sensitivity analysis of probit-based stochastic user Equilibrium for general networks, which uses information on SUE path flows but is not specific to any particular equilibrium.

Kharabela Rout, Sonalimayee sahu[7] - "Exploring factors influencing the user's intention to use Aarogya Setu contact Tracing Mobile Health Application during COVID Pandemic (October

**2020).**" Perceived usefulness of Aarogya Setu m-health app will have a significant impact on intention to use Aarogya Setu m-health app, which helps to understand the intention to use Aarogya Setu app during pandemic. We proposed four factors influence the intention to use Aarogya Setu m-health app and conceptually defined

each factor for Aarogya Setu m-health app context. This study will provide a theoretical understanding for contact tracing and m-health apps for future studies.

R. Vijayanand, Prabhu Jayagopal, R. Jothikumar [8] - "Role in prevention of covid 19 and health care work forces behavioral intention in India-an empirical examination". The role of preventing covid 19 is addressed and many propelled cloud-based administrations and offices to serve a greater number of patients effectively and the remote medicinal services framework provides a lot of significations in such a crucial time of lockdown.

Ranajoy Mallik, Amlan protim Hazarika 9] - "Development of an android application for viewing covid-19 containment zones and monitoring violators who are trespassing into it using firebases and Geofencing". The android application source the location of the containment zone 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.

Fie-ying kuo and Tzai-Hung Wen [10] - "Regionalization for infection control: An algorithm for delinating containment zones considering the regularity of human mobility". The zoning patterns proposed in our algorithm could also allow for more life functions in a zone and more evenly distributed life resources across zones than those of zones generated by other methods. It implements control measure against an epidemic.

Akira Suyama, Ushio Inoue [11] - "Using geofencing for a disaster information system". It proposes a disaster information system using the geofencing technology to detect the movement of user and provide information of the risk of them. To detect the user's movement, the client creates a virtual fence called geofence at the dangerous are based on the risk information stored in server and monitors the user's entry and exist of the fence.

Ranajoy Mallik, Amlan Protim Hazarika and Rajib Bandyopadhyay [12] - "Development of an Android Application for viewing Covid-19 Containment zone and Monitoring Violators Who are Trespassing into it using Firebase and Geofencing". The application provides an efficient way of showing the identified covid-19 containment zones to the users in a Google map. It sends separate notification alerts to the user on entering. The application can be further used for many purposes like maritime and forest safety to prevent users from entering restricted areas.

M.V. Ramana Rao, Thondepu Adilakshmi, M. Gokul Venkatesh, Jothikumar R and Shadan [13] - "Mobile Geo-fencing Triggers for Alerting

Entries into Covid-19 Containment Zone using IoT". It is focuses on informing the public about the containment zone when they are in travel and also sends an alert to the police when enters the containment zone without permission using the containment zone alert system.

Shubham Yelne, Vishal Kapade [14] - "Human Protection with the Disaster Management Using an Android Application". This application was designed to help me which is useful for saving so many human being lives. This application is helping the android users who are in climatic situation like this by sending some information about the location of that person who is in trouble via message their love once, fire station, police station and ambulance.

Bharath P, Saravana M, Aravindan K [15] - "Smart Vehicle accident prediction using alert system". Using this technique, the vehicle tracking system can be built. Vehicle tracking system combine the use of automatic vehicle location of individual vehicle with software that collect this feet's data for a comprehensive picture of vehicle location modern tracking system tracking system commonly used GPS or GLONASS technology. Vehicle information viewed on electronic maps via internet with specialized software.

Sagar Gore, Nitesh Sonawane, Sayali Pawar, Mrunal Nerkar [16] - "An Android based mobile framework for student alert notification". An alert notification as service. They have been work in the field with either concentrate online website run using the browser. They have been application which focus on android apps. But this system focused on both android user and non-android user. This became a timeconsuming process to open and check notification. In the survey E-notice board but they have drawback again and again to see noticed it has no alarm system. So, we design this system to overcome the problem in e-notice board. Our System first gives notification to Student's phones.

Pavan Pawar, Juberoddin Sayyad, Sagar Bhilare, Dheeraj Choudhari [17] - "Emergency Alert System". This systematic literature review was conducted by researching databases of google scholar, web of science, IEEE explore Digital library using the search term emergency application to identify relevant literature. The emergency caller android app is needed case medical emergency the user can make emergency call to nearer hospital. The user of application needs to conflict application for the first time the user short medical survey. In case of emergency system will find out the nearest hospital based on current location of the user and call will be inciated also the medical details about the patients will be sent to the hospital.

Can MIHCI, Nesrin OZDENER DONMERZ [18] - "User notification system in using social networks". The survey has been used to find out about the mobile phones, mobile internet and social networks usage habits of students. Comprised of items of ordinary measurements and open ended well as for determined which group will receive which interview to be network oriented process used for discovering reason behind student interaction with the practice's programs and the lack thereof. To provide for reliability of coding measures, but content has been coded by two results to yield a good product.

**A.A.** Nawalkheda, V.S. Sarag, R.D. Shinde, G.D. Taralkar[19]- "An Android based instant notification system". Now all leading organization, excepting a few, currently lack an electronic notice board system. Through some have taken the all the cost of mixing one's social life with professional. Keeping this in a mind, educated institutes will find this software extremely useful. There are dedicated file

hosting sites and clouds used by some institution, but there is a definite need for a dedicated notice board application. We are using internet as a medium for communication. Our system will be easy to use and manage also. This will lead to make every person well informed about the notices.

Harsheta Pandita, Naveen kumar gondhi [20] - "Survey of sentiment analysis-based Ecommerce in Alert system." Electronic commerce lately has been an easy place for individuals to purchase and consume. People have become keener to display the different products. The emerging social platforms have also played a crucial role in contributing the alerting system.

Neelavathy pari s, Geetha A, [21] - "Monitoring Social Distancing by Smart Phone App in the Effect of Covid19." Social distancing measures are necessary for many infectious diseases that spreads through and micro droplets. COVID-19 is to follow strict social distancing it is easy crowed region and people often not maintain sufficient distance with Neighbours. The application can also be calculated the distance received the signal strength. The application 85% accuracy on predicting the social distancing and alert the user using beep sound or alert message.