## Project Design Phase-II Solution Requirements (Functional & Non-functional)

Date	17 October 2022
Team ID	PNT2022TMID11463
Project Name	Containment Zone Alerting Application
Maximum Marks	4 Marks

## **Functional Requirements:**

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through Mobile Number
		Registration through Gmail
FR-2	User Confirmation	Confirmation via Email
		Confirmation via OTP
FR-3	Permission	The user needs to provide location access,in order to
		trace his/her location.
FR-4	Containment zones are shown	Containment zones are marked and trespassers were
		indicated by geofencing.
FR-5	Tracking the location	Trace the trespassers by using Google map API
FR-6	Alert message via notification	By tracking their location,a message will be send if they
		enter the containment zone.

## **Non-functional Requirements:**

Following are the non-functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	People who travel can use this application to track the containment zone and pass through a safe route.
NFR-2	Security	Using blockchain technology for location and data encryption to protect user's data from getting into wrong hands.
NFR-3	Reliability	Fake news will be avoided and proper guidance is given in the application.  The user can trust the result and navigate safely.
NFR-4	Performance	The geofencing is updated daily and shows the day-to-day updates of containment zones.
NFR-5	Availability	The application uses the network to load the google maps to retrieve containment zones. It is available for a good range of network bandwidth.
NFR-6	Scalability	This application can be accessed from anyplace and monitoring users movements in pandemic zones and alerts before they are affected.