

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

Date	04 November 2022
Team ID	PNT2022TMID14431
Project Name	Containment Zone 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	<b>Usability</b>	People who travel can use this application to track the containment zone and pass through a safe route.
NFR-2	<b>Security</b>	Using blockchain technology for location and data encryption to protect user's data from getting into wrong hands.
NFR-3	<b>Reliability</b>	Fake news will be avoided and proper guidance is given in the application. The user can trust the result and navigate safely.
NFR-4	<b>Performance</b>	The geofencing is updated daily and shows the day- to-day updates of containment zones.
NFR-5	<b>Availability</b>	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	<b>Scalability</b>	This application can be accessed from anyplace and monitoring users movements in pandemic zones and alerts before they are affected.