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

Date	3 October 2022
Team ID	PNT2022TMID31287
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 app using mobile number.
FR-2	User Confirmation	Confirmation via OTP.
FR-3	User Login	Login using Mobile number and password.
FR-4	Track The Location	Tracking their location using GPS system.
FR-5	Show Containment Zones	Name and details of zones are given. Infected people count and categories of containment zones are shown. Shows the level of containment zone by Geo-fencing.
FR-6	Notification Alert	By sending an SMS to the phone number if user enters the containment zone.
FR-7	Monitoring and Updating of Containment Zones	Trace the trespassers by using Google Map API and update the containment zones from trust-worthy resources.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	• The application should provide a good UI/UX design with seamless navigation across sections of the app. • It can be used by a wide variety of users as it is very simple to learn and not complex to proceed . • Easy to use, User-friendly and Responsive.
NFR-2	**Security**	• The passwords must be hashed and only the hashed values should be stored in the database. • Privacy and security of the user must be maintained.
NFR-3	**Reliability**	• Users can trust this application and travel safely. • Data corruption should not exist.
NFR-4	**Performance**	The accurate result can be achieved due to real-time location sharing, Geo-fencing and GPS.
NFR-5	**Availability**	App works properly if the network bandwidth of the user is of good range.
NFR-6	**Scalability**	The system's performance should not be affected by a change in the number of users and the number of containment zones.