

Project Design Phase-II

Solution Requirements (Functional & Non-functional)

Date	18 October 2022
Team ID	PNT2022TMID43421
Project Name	IoT Based Safety Gadget for Child Safety Monitoring and Notification
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 website Registration through app
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	User login	Setting up User Id and password
FR-4	App permission	Grant the permission for the app to access location, contact etc
FR-5	Interface with the Device	Connecting the device with the registered app with the device ID.
FR-6	Setting Geo-location	Get the map, Create the geofence, Store the geofence in db
FR-7	Database	Location history is stored in the cloud. Can be accessed from the dashboard.
FR-8	Tracking location	Tracking the location through app. Tracking the location through website.
FR-9	Receive emergency notification from the child	Listen to child emergency notification API If notification initiated , notify the user

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Attractive and effective UI that gives complete enjoyable and user friendly experience.
NFR-2	Security	Providing permission for some information can only be decided by the user. Location data can only be viewed by the user.
NFR-3	Reliability	The APIs should be readily available to satisfy the users' needs.

NFR-4	Performance	<p>The performance of the device decreases in a network less area.</p> <p>No interference between users. Location tracking will be accurate.</p>
NFR-5	Availability	<p>The APIs should be readily available to satisfy the users' needs.</p>
NFR-6	Scalability	<p>A single device can be monitored by two users.</p>