

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

**Functional Requirements:**

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Login/Sing up	Through app using forms to input details
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Interfacing	Connecting all involved databases , scripts and device
FR-4	Setting Geo fence	Creating the geo fence in the map
FR-5	Database	Create and maintain a database containing user(child's) locations
FR-6	Tracking location	Update current location in cloud and store location history. Current location is viewable from the dashboard.
FR-7	User Location Check	Check for out of boundary location against established geo-fence by fetching live location from cloud database.
FR-8	User Notification	Notification to registered mobile number Notification via app

**Non-functional Requirements:**

Following are the non-functional requirements of the proposed solution

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	The device and its applications are user-friendly. The device is portable and easy to use.
NFR-2	<b>Security</b>	Providing permission for some information can only be decided by the user. Location data can only be viewed by the user.
NFR-3	<b>Reliability</b>	Current location and history of previous ones too can be viewed so it provides enables guardians to continuously monitor child
NFR-4	<b>Performance</b>	Works well as long as there is internet connectivity to use the app
NFR-5	<b>Availability</b>	Can last as long as backup power supply is available.
NFR-6	<b>Scalability</b>	Very scalable as more sensors can be added easily according to need.