

Project Design Phase-I
Proposed Solution Template

Date	23 September 2022
Team ID	PNT2022TMID2092
Project Name	Project – IoT Based Safety Gadget For Child Safety Monitoring & Notification
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	<p>Nowadays Children's safety is being a major issue and parents are very much concerned about their safety.</p> <p>Safety concerns with misplaced location of the child. In cases of child being misplaced the main concern is where is the child.</p> <p>Which type of place/location the child is being with.</p> <p>Hence we have to collect the location and update parents regarding the real Location of the child.</p> <p>We are in need to curate a safety gadget that involves real time location monitoring of children and informs parent about their Location.</p>
2.	Idea / Solution description	<p>We intend to create a safety device for children with real time monitoring of location.</p> <p>A Tracker device is bought by the parent side.</p> <p>Then the device details and current location or out of geofence location is sent to parents device registered.</p> <p>We first Collect Location of the child.</p> <p>Then we will have to create a geofence location of the children.</p> <p>The location is being updated at the parent side regularly.</p> <p>In case if the child moves away from the geofence location or trafficked by strangers.</p> <p>There comes the notification sent when the child moves away from the geofence location.</p> <p>The notification of is sent to parents mobile or care taker's Mobile number.</p>
3.	Novelty / Uniqueness	<p>We tend to send real time location of children by updating their location.</p> <p>If their children tend to cross the geofence we send a notification to their parent.</p>

		<p>We could achieve safety tracker by curating a safety gadget for example a Bluetooth airtracker Device.</p> <p>If parents keep this tracker in their child's Bag we could get the real time location of them. It is a small device which wouldn't be visible much.</p> <p>Therefore Parents could know the child's location and if they tend to lost among the crowd they could easily find.</p> <p>If incase strangers traffic the child, the parent could know about the place and they could inform police thus the child could be brought back safely.</p>
4.	Social Impact / Customer Satisfaction	<p>Parents would be satisfied by knowing their children's location and worried less about their safety.</p> <p>If in case the child gets lost or trafficked by strangers the parents could know their location.</p> <p>After knowing their location parents would be less tense free so that they could search their child without loitering here and there.</p> <p>They could immediately visit the police station thus informing the location of the child.</p> <p>And then they could go and catch hold of the child trafficker.</p> <p>Thus child is brought back safe and we could catch the culprit.</p>
5.	Business Model (Revenue Model)	<p>A Safety gadget by sending notification to their parents or caretakers.</p> <p>A IoT enabled device which needs to be kept in the children bag.</p> <p>We have to first promote the device among parents.</p> <p>Then we have to tell them about the uses.</p> <p>Then collect and configure parents' mobile number with the IoT device.</p>
6.	Scalability of the Solution	<p>A location tracker gadget that helps in location tracking.</p> <p>Real time location must be updated regularly.</p> <p>If the child tends to cross the geofence i.e the area other than the permitted limit of a child , Parents should receive a notification that the child is out of the geofence.</p> <p>Thus notification must be sent accurately.</p>