

**Project Design Phase-I**  
**Proposed Solution Template**

Date	19 September 2022
Team ID	PNT2022TMID00392
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)	Schools and parents are concerned about their children's transportation to and from school and other locations. As a result, ensuring the safety and monitoring of schoolchildren is incredibly difficult.		
2.	Idea / Solution description	A child monitoring system assists parents in constantly monitoring their child's location. They can simply leave their children at school or in parks and set up a geofence around the location. Notifications will be generated if the child crosses the geofence by continuously monitoring the child's location. Notifications will be sent to the child's parents or caregivers based on their location. The database will incorporate all of the location data.		
3.	Novelty / Uniqueness	Since the IBM Watson IoT Platform is a managed cloud-hosted solution offering device connectivity, control, visualisation, and overall device visibility and management, using it in conjunction with node red and TinkerCAD simulation gives our solution an added edge. It offers a user interface (UI) where users may add and manage devices, manage access to IoT services, and utilise Node-RED to connect data flows between nodes in order to build functionality.		
4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none"><li>Reasonably priced</li><li>Simple to perceive</li><li>Ensure security</li><li>Timeliness</li></ul>		
5.	Business Model (Revenue Model)	<table><tr><td><u>KEY RESOURCES</u><ul style="list-style-type: none"><li>IBM Watson IoT Platform</li><li>NODE – RED</li><li>Tinker-CAD Simulation</li></ul></td><td><u>CUSTOMER SEGMENTATION</u><ul style="list-style-type: none"><li>Parents</li><li>Care Takers</li><li>Teachers</li></ul></td></tr></table>	<u>KEY RESOURCES</u> <ul style="list-style-type: none"><li>IBM Watson IoT Platform</li><li>NODE – RED</li><li>Tinker-CAD Simulation</li></ul>	<u>CUSTOMER SEGMENTATION</u> <ul style="list-style-type: none"><li>Parents</li><li>Care Takers</li><li>Teachers</li></ul>
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		<u>CUSTOMER RELATIONSHIPS</u> <ul style="list-style-type: none"> <li>• User friendly</li> <li>• Specialised care</li> <li>• Efficient communication</li> </ul>	<u>MARKETING</u> <ul style="list-style-type: none"> <li>• Awareness Programme</li> <li>• Workshops</li> <li>• Social Media</li> </ul>
6.	Scalability of the Solution	By adopting a networked information cloud through IoT, the major goal is to offer children with better and more effective security so that professionals and parents may use this information. The finished product will have more features and be well-equipped. The ability of the necessary system design to address the specified problem area may be enhanced by the composition of more varied purpose equipment's.	