Project Design Phase-I
Proposed Solution Template

Date	12 October 2022
Team ID	PNT2022TMID29125
Project Name	IoT Based Safety Gadget for Child Safety Monitoring & Notification
Maximum Marks	2 Marks

Proposed Solution Template:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	The increased number of recorded crimes against children nowadays raises serious concerns about kid safety and tracking. In order to assist parents in finding and keeping an eye on their children, a smart Internet of Things (IoT) device for child safety and tracking has been developed
2.	Idea / Solution description	To address this problem, it would be an excellent idea to create a smart wearable Internet of Things device. Sensor based device for monitoring the environment of a child along with an instrument for tracking the child. The gadget will make use of GPS and a python script to publish the location details to the IBM IoT platform. GPS gives the information about the latitude and longitude of the victims location when they are crossing geofence.
3.	Novelty / Uniqueness	While all currently available systems employ GPS and a mobile app to track and get notifications about the child's location, this method uses in relation to IBM's Watson IOT Platform Cloud services that are trustworthy and effective to upkeep the child's location database. By creating geofence parents get notifications through the user's web application using the Node Red, friendly and secure Service.
4.	Social Impact / Customer Satisfaction	Parent's priority is the protection and security of their children. This model's construction does not necessitate a lot of technical the user's knowledge to operate it, and it is simple. This device's objective is to assist the parent or guardian in finding with no difficulty and ensuring the health

		of it. So that the child will remain safe.
5.	Business Model (Revenue Model)	Parents are main target for this device's in the market. The initial pricing range would start at Rs. 4000 and above taking into account the tracking capability of the gadget, Hardware quality, technology used, and sensors. As sensors plays major role , range of sensor varies. These kinds of wearable safety systems are essential today and would be a must-have item on the market.
6.	Scalability of the Solution	The system is created with the current requirements for monitoring the youngster in mind. The parent can establish the geofence to decide the child's safer boundaries, and it features a location database to keep track of the child's whole location history. The system can be made more effective over time if it needs to incorporate further sensors to increase accuracy.