Project Design Phase-I
Proposed Solution Template

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Project Name	IoT Based Safety Gadget for Child Safety Monitoring and Notification
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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)	Children are the backbone of one's nation, if the future of children was affected, it would impact the entire growth of that nation. Due to the abuse, the emotional and mental stability of the children gets affected which in turn ruins their career and future. These innocent children are not responsible for what happens to them. So, parents are responsible for taking care of their own children. But, due to economic conditions and aims to focus on their child's future and career, parents are forced to crave for money. Hence, it becomes difficult to cling on to their children all the time. Basically, children cannot complain about abuse which they face in their daily life to their parents. They can't even realize what actually happens to them at their age. It is also difficult for parents to identify their children are being abused. To prevent children before being attacked, an autonomous real-time monitoring system is necessary for every child out there. Give a solution where this problem can be resolved in an efficient manner and makes parents to easily monitor their children in real time just like staying beside them as well as focusing on their own career without any manual intervention. Develop a system that collects collected values from every sensor like temperature sensor, pulse rate detection sensor, metal detection sensor, and the location value from GPS to detect the status of the child and alerts the respective guardians using GSM accordingly.
2.	Idea / Solution description	The paper offers an ingenious, low-cost approach based on the Internet of Things for guarding against children becoming lost when

		out with their parents or by themselves (IoT). Our suggested approach guarantees the highest level of protection and provides live tracking for their children. This study presented a system allowing parents to track their children's whereabouts using cell phones and receive the precise coordinates of the child's whereabouts anywhere in real-time.
3.	Novelty / Uniqueness	A visual baby monitor can assist parents in keeping an eye on the signs and symptoms of disease in newborns who have health difficulties. No more unintentionally awakening the baby by slipping into the nursery to check on them. The monitor's extended range allows you to check on the youngster from anywhere in your home.
4.	Social Impact / Customer Satisfaction	More and more company automation methods are beginning to centre on the Internet of Things. Businesses use sensors in the logistics chain to track delivery locations with incredibly high accuracy.
5.	Business Model (Revenue Model)	Nowadays, corporations and private homes both utilise GPS tracking technology extensively. The GPS tracking sector is expanding quickly and has incredible future potential. People's worries about their safety and the security of their assets are growing. For this reason, families are beginning to employ GPS trackers and mobile monitoring applications for their children and other loved ones. Additionally, businesses track and manage their personnel, delivery trucks, merchandise, and vehicles. "The vehicle monitoring market size was estimated at $8 billion in 2015 and is predicted to approach $22 billion by 2022," claims Global Market Insights. Without a doubt, you should launch your GPS tracking business right away.
6.	Scalability of the Solution	In this research, an image processing-based automated non-contact infant monitoring system is suggested. When a condition is abnormal, this system mails a notification to the parents. This system's key benefits include being more user-friendly, economical, and safe for babies because it is a non-contact-based baby monitoring device. Nurses in hospitals could use it to keep an eye on the infant. We chose the RPi module since it has more benefits than the Arduino and Microcontroller. It can determine if the infant is awake or asleep. This technique will lessen the likelihood of the infant slipping off the bed.