Ideation Phase
Literature Survey

Date	19 September 2022
Team ID	PNT2022TMID18337
Project Name	Project - IoT Based Safety Gadget for Child Safety Monitoring and Notification
Maximum Marks	4 Marks

Abstract:

Child safety and tracking is of utmost importance as children are the most vulnerable. Children can become victims to harm, injury, violence and abuse as they are vulnerable by virtue of their young age and evolving capacities.

Unfortunately, a child goes missing once every 10 minutes in India. With increasing crime rates such as child kidnaping, child trafficking, child abuse and so on, the need for an advanced smart security system has become a necessity, and thus our project aims at accomplishing the same.

SNo	Title	Inference
1	Children Security and Tracking System Using Bluetooth and GPS Technology	This device uses the alarm technique. It will trigger when the Bluetooth connection is disconnected, and the GPS application is used to track the location of the child whose wearing this device. The child detector device has 2 main units which is for parents and children. The child's units function as a transmitter that transmits a GPS signal, while the parent's units will receive the signal which will determine the position and distance of their child using their own smartphone.
2	IoT-enabled Smart Child Safety Digital System Architecture	This IoT –enabled digital system architecture integrates the Cloud, Mobile and GPS technology to precisely locate the geographical location of a child on an event map. It contains a basic architecture model for reference.
3	Crowdsourced Children Monitoring and Finding with Holding Up Detection Based on Internet –of –Things Technologies	CCMF framework can cooperatively find missing children equipped with wearable devices consisting of mobile iBeacon and 3axis accelerometer modules through crowed sensing networks formed by smartphone users with outdoor GPS and indoor IoT localization.
4	Design of Wearable Device for Child Safety	The problems overawed here using Arduino UNO, GSM, sensors like temperature and panic button by using IOT. Sensor tracks the best rate for children and sends the emergency message by using the GSM to save contacts.
5	Intelligent Child Safety System using Machine Learning in IoT Devices	This electronic system comprises of an Arduino controller and sensors to detect the changes in parameters such as temperature, BVP. The location of the victim is traced using the GPS module and is sent to the registered contacts as a text message using GSM module.