IDEATION PHASE

LITERATURE SURVEY

Date	21 October 2022
Team ID	PNT 2022TMID23807
Project Name	IOT Based Safety Gadget for child Safety Monitoring and Notifications

S.No	Title Of Paper	Author	Year	Methodology	Result	Advantages	Limitations
1		Sadhana B Navya A Nidhishree Vidhyashree Vishwa	2022	In this project, a child belt is attached with sensor in order to keep track of child's Activity. Whenever child get into school bus from home the parents will get message and through GPRS the location of child is monitored by parents through a developed software. Whenever Child get into classroom the camera inside classroom get activated and the video clip is send to parents. Here Cloud Computing is used to store video. And whenever child play in playground the information is sent to parents. Hence these are safety zone for child.	Though parents are far from child they can monitor when child reached school, what child is doing in classroom and playground.	Atomization of the system with a cloud-based real-time database and precise sensors makes kid monitoring simple. This design concept is simple to apply and very flexible to meet the needs of the user. The integration of several sensors with live video monitoring will improve kid monitoring in the classroom or on the bus	Though parents are far from child they can monitor when child reached school, what child is doing in classroom and playground.
2	IoT-based Child Security Monitoring System	Lai Yi Heng Intan Farahana Binti Kamsin	2021	An IoT-based wearable smart band for children is proposed in this research for child security purposes. Some of the sensors used are the heart rate, sleep quality, motion, and temperature sensors. The altimeter and pedometer are also included in this smart band. The information indicating children's status, along with reference values will be sent to parents' devices with the app installed and if this data is not along the reference values then an alert notification is sent to the parent. Also, when children leave geofences, notification will be sent to parents' devices	Almost all the data, and actions of the child are monitored and sent to the parent via IoT thus allowing the parent to remotely monitor their child. In case situations happen, notifications will be sent to parents so that actions can be taken. Through this, child safety can be ensured and the crime rate can also be reduced to some extent.	The smart band is waterproof, chargeable, and equipped with various sensors and location trackers along with alert notifications.	Almost all the data, and actions of the child are monitored and sent to the parent via IoT thus allowing the parent to remotely monitor their child. In case situations happen, notifications will be sent to parents so that actions can be taken. Through this, child safety can be ensured and the crime rate can also be reduced to some extent.
3	Smart and Secure IOT based Child Monitoring System	Dipali Badgujar Neha Sawan Prof. Dnyaneshwar Kundande	2020	This system mainly focuses on a child remote monitoring system. Obstacle sensors which will detect the alert when the child enters the danger zone or else he/she is approaching towards harmful object then alert will be given to the caretaker through the mobile using an alarm or notification. For sensing purpose Waterproof Ultrasonic Obstacle Sensor is used which are placed in the simple locket that is given to the baby so that locket will give an alert to the caretaker and for battery backup, we are using a solar panel through which the energy will get stored in the care taker's shoes and this energy will be dependent on the steps covered by the caretaker.	When the baby is on height then radar sensor takes the distance between the baby and the object then decision making will take place. When the depth is below the height 50, then low alert will be given to the caretaker and when the height is greater than 50 then high alert will be provided to the caretaker for the alert purpose the display device like mobile, tablet etc.	This project proposes Smart IOT Devices for child safety and tracking helps the guardian/parents to locate and monitor the baby. If any abnormal values are read by the sensors then an SMS is sent to the guardian/parents mobile	When the baby is on height then radar sensor takes the distance between the baby and the object then decision making will take place. When the depth is below the height 50, then low alert will be given to the caretaker and when the height is greater than 50 then high alert will be provided to the caretaker for the alert purpose the display device like mobile, tablet etc.
4	Child monitoring system using IoT	Vibha Chandrala Niveditha N Neha B Reddy Urmila N	2019	It will share the current location of the child using GSM, GPS, G-MAPS CLOUD,CAMERA and RFID. It will detect when the child entering and leaving the school. This can be monitored by the parents time to time. It has a panic button, if it is pressed the will send a message to the nearby police stations and hospitals.	When the child enters the school parents receive the message that the child entered the school. When the child is in danger parents the longitude and latitude details via SMS.	Parents can ensure the location of the children by tracking them in the smart phone. Alerting nearby Police stations and hospitals.	When the child enters the school parents receive the message that the child entered the school. When the child is in danger parents the longitude and latitude details via SMS.

5	Child Safety Monitoring System Based on IoT	N. Senthamilarasi N.Divya Bharathi D.Ezhilarasi R.B.Sangavi	2019	In this autonomous real-time monitoring system, the collected values are used to detect the child's status and alert the respective guardians using GSM. The major components are temperature, pulse sensors, GPS, GSM, Web camera, and Rasberry Pi. Any abnormal rise or fall in temperature will be notified to the parent and they can also monitor the child lively through a web camera following they can check the live location through GPS as well. If the device moves out of that boundary the server transfers an alert call by activating the GSM to the user.	Parents can monitor their children lively and find their location 24/7. The temperature of the child and surrounding data are also shared with the parent to monitor the health. If the child moves out of the boundary, an alert call is sent to the parent.	Parents can keep an eye on their child and monitor their actions,health status without even being by their side.	Parents can monitor their children lively and find their location 24/7. The temperature of the child and surrounding data are also shared with the parent to monitor the health. If the child moves out of the boundary, an alert call is sent to the parent.