LITERATURE SURVEY ON THE SELECTED PROJECT & INFORMATION GATHERING

Child safety - IOT Based Safety Gadget for Child Safety Monitoring & Notification

The internet of things (IOT) refers to the set of devices and System that stay interconnected with real-world sensor and to the internet.

During years' Child safety is under threat and it is Very important to provide a technology-based solution which Will help them under panic situations and monitor them using a Smart gadget. The proposed system is equipped with GSM and GPS modules for sending and receiving call and SMS between Safety gadget and parental phone, the proposed system also Consists of Wi-Fi module used to implement IoT and send all The monitoring parameters to the cloud for android app Monitoring on parental phone. Android application can be used to track the current location of safety gadget using its location Coordinates on parental phone android app and via SMS Request from parent phone to safety gadget. Panic alert system Is used during panic situations and automatic SMS alert and Phone call is triggered from safety gadget to the parental phone Seeking for help and monitored for plug and unplug from Hand, as soon the gadget is unplugged from hand a SMS is Triggered to parental phone and the alert parameter is also Updated to the cloud. Heartbeats, temperature is monitored, and the values are Updated to cloud continuously for parent app monitoring. Boundary monitoring system is implemented on safety gadget with the help of BEACON technology as soon as the safety Gadget moves far away from the binding gadget an alert is Provided to parent on binding gadget. The system is used to Monitor the health parameters and used for location Tracking during necessary situations in safety concern.

Existing solutions:

The parent can send a message to the GSM module, according to the message information the GSM module reply with details of the children. The location can be seen on the Google map. When a particular child is facing an emergency, device button should be pressed so that the device captures the image along with the user information to the enrolled mobile numbers. The life of

the child can be saved within no time. For the children point of view GPS, GPRS and GSM are used to monitor the speed and location tracking purpose. The system is fixed on the bus or car or in any vehicle so that the vehicle is going on routine route or not can be identified by the GPS tracker, the speed of the bus can also be extracted. Now-a-days the digital technology plays a significant role for connecting persons via internet

Challenges:

- A unified solution which can be integrated with several types of Internet of Things devices.
- This paper provides an Android based solution for the parents to track their children in real time.
- The proposed solution takes the location Services provided by GSM module. It allows the parents to get their child's current-location via SMS.
- The concerned device is connected to server via internet

Technical papers:

[1] M Nandini Priyanka, S Murugan, K. N. H. Srinivas, T. D. S.Sarveswararao, E. Kusuma Kumari, 'Smart IoT Device for Child Safety And Tracking' International Journal of Innovative Technology and Exploring Engineering, Volume 8, Issue 8, June 2019.

[2] Akash Moodbidri, Hamid Shahnasser (Jan. 2017) 'Child safety wearable Device', International Journal for Research in Applied Science & Engineering Technology, Vol. 6 Issue 2, pp. 438-444.

[3] Gupta, Vibhor Harit, 'Child Safety & Tracking Management System By using GPS, Geo-Fencing & Android Application: An Analysis,' 2016

Second International Conference on Computational Intelligence & Communication Technology.

[4] Dheeraj Sunehera, Pottabhatini Laxmi Priya, 'Children Location Monitoring on Google Maps Using GPS and GSM,' 2016 IEEE 6th International Conference on Advanced Computing.

[5] Asmita Pawar, Pratiksha Sagare, Tejal Sasane, Kiran Shinde (March–2017) 'Smart security solution for women and children safety based on GPS using IoT', International Journal of Recent Innovation in Engineering and Research, vol. 2, Issue 3, pp. 85-94.