LITERATURE SURVEY – IOT Based Safety Gadget Child Safety Monitoring and Tracking

Date	1 September 2022
Team ID	PNT2022TMID00975
Project Name	**Project** - IOT Based Safety Gadget Child Safety Monitoring and Tracking
Maximum Marks	4 Marks

N. Manjunatha H.M Jayashree N. Komal K.Nayan (2020) IoT Based Smart Gadget for child Safety and Tracking

This paper is mainly streamed towards child safety solution by developing gadget   which can be tracked by its GPS location and also a panic button on gadget is provided to alert the parent via GSM module calling for help. To Track the device anytime parental android app is developed. Smart gadget is always connected to the parental device and this device can receive and make phone calls and also receive SMS on gadget via GSM module and also a wireless technology is implemented on the device which is useful to bound the device within a region of monitoring range. An alert will be triggered on binding gadget if device is moving out of monitoring range and this will helps you keep a virtual eye on child. Health monitoring system on gadget checking for parameters like heart beat/pulse rate and temperature is included and it can be monitored via parental app. Gadget also monitors whether it is plugged on hand or not using contact switch and it alert the parent as soon as it is unplugged.

Dheeraj Sunehera, Pottabhatini Laxmi Priya(2016) Children Location Monitoring on Google Maps Using GPS and GSM.

This paper provides an Android based solution for the parents to track their children in real time. Different devices are connected with a single device through channels of internet. The concerned device is connected to server via internet. The device can be used by parents to track their children in real time or for women safety. The proposed solution takes the location services provided by GSM module. It allows the parents to get their child's current-location via SMS.

Prof. Sunil K Punjabi, Prof. Suvarna Chaure, Smart Intelligent System for Women and Child Security

A portable device which will have a pressure switch. As soon as an assailant is about to attack the person or when the person senses any insecurity from a stranger, he/she can then put pressure on the device by squeezing or compressing it. Instantly the pressure sensor senses this pressure and a conventional SMS, with the victim's location will be sent to their parents/guardian cell phone numbers stored in the device while purchasing it, followed by a call. If the call is unanswered for a prolonged time, a call will be redirected to the police and the same message will be sent. Additionally, if the person crosses some area which is usually not accessed by the person then a message with the real-time location is sent to the parent/guardian's phone via conventional SMS.

Mirjami Jutila, Esko Strommer, Mari Ervasti, Mika Hillukkala, Pekka Juhani Laitakari(2015) Safety services for children, a wearable vest with wireless charging

Wearable sensors constitute an increasing market in providing various promising opportunities for improving an controlling safety issues for children in daycare and school. This paper presents the technological enablers and requirement for building a complete end- to- end energy efficient safety system. A wearable vest integrated wireless charging ,designed to enhance the security

of children. The wireless charging take place in the ordinary repository for the vest, such as in a wardrobe or coat rank, without requiring any specific actions from the user. The developed sensor vest provides information about the location and wellbeing of the children , based on received signal strength indication, global positioning system, accelerometer and temperature sensor. This paper also discuss the experience of the "safety service for the children" school pilot ,which utilize a various sensor with end-to-end application. Piloting and technological implementation are based on participatory study conductor among the children, teacher and parents, to gain important knowledge and understanding about the real user needs and service system usability requirement.

Reference:

[1]. N. Manjunatha H.M Jayashree N. Komal K. Nayan (2020)

[2]. Dheeraj Sunehera, Pottabhatini Laxmi Priya(2016)

[3]. Prof. Sunil K Punjabi, Prof. Suvarna Chaure

[4]. Mirjami Jutila , Esko Strommer, Mari Ervasti, Mika Hillukkala, Pekka Juhani Laitakari(2015)