IOT BASED SAFETY GADGET FOR CHILD SAFETY MONITORING & NOTIFICATION

LITERATURE SURVEY

1. ***K.P.Dutta, P.Rai, and V.Shekher "Microcontroller Based Voice Activated Wireless Automation System," VSRD International Journal of Electrocal ,Electronics & Communication Engineering,vol. 2, pp. 642-649,2012.***

This research aims to design and implement a cost effective but yet flexible adaptable, and secure home automation system. Paper presents design and prototype implementation of a basic home automation system based on SMS technology and voice recognition.When automating a home load not available in the visible range, fault identification system in this design helps the user to ensure that their home applications had gone exactly ON or OFF. Automation of 2 loads such as fan and light has been tested by giving 4 voice commands through personal computer.

2. ***"RFID-based System for school children Transportation Safety Enhancement" Al-Lawati, Shaika Al-Jahdhami,Asma Al-Belushi,Dalal Al-Adawi,Medhat Awadalla and Dawood Al-Abri,IEEE GCC Conference and exhibition,Muscat,Oman,1-4 February,2015.***

The system will recognize eacch child and detect when every child boards or leaves the bus and has a database to store student's information.The system consists of two main units,a bus unit and a school unit.The bus unit the system is used ton detect wen a child boards or leave the bus .This information is communicated to the school unit that identifies which of the children did not board or leave the bus and issues an alert message accordingly.The system has a developed web-based database-driven application that facilities its management and provides useful information about the children to authorized personal.

3. "Multi-sensor Wearable for Child safety", ushashi Chowdhury,Pranjal chowdhury,Sourav Paul,Anwesha Sen,Partho Protim Sarkar,Shubhankur Basak,Abari Bhattacharya,IEEE 10th Annual Ubiquitous Computing ,Electronics conference(UEMCON), October 2019.

This paper mainly focuses on IoT Sensors that are used to sense various parameters. It's made to look like wristands,which are usually worn by children.It has temperature sensor,heartrate sensor to monitor body tempersture and heartbeat.If the sensor senses high temperature and abnormal heartbeat then it will alert for this situation.If a parent request for a specific time then the device will send a reply SMS with the requested data.It also coontains GPS to track the kid's location.

4. " IoT based Intelligent Real-Time system for Bus Tracking and monitoring" MonaKumari, Ajitesh Kumar,Arbaz Khan,IEEE International Conference on power electronics &IoT Applications in renewable energy and its control (PARC)GLA University,Feb 2020

It is an android based IoT application which facilitates people to track real time location of bus using raspberry pi controller.The people are provided with an Android app where they can register their details like username,email-id,password and mobile number.After the process of registration,users can login,it will notify the number of buses on that particular route along with number of vacant seats available .A GFID system is connected with the raspberry pi,GSM and GPS module to notify the location and updated count of passengers refers to the traffic in that area that facilitates the administrator to increase or decrease the bus services in that area.

5. " Geographical Correlation-Based Data Collection Sensor " Augmented RFID Systems-Xin Xie, Xiulong Liu, Heng Qi, Bin Xiao, Keqiu Li and Jie Wu, IEEE Transactions On Mobile Computing,October 2020.

Radio frequency Identification (RFID) has been widely used in various promising applications scenarios such as supply chain management, warehouse monitoring, and inventory control. An RFID system typically consists of readers, tags, and a back-end server. A tag is a microchip with an antenna in a compact package that has limited computing power and communication changes. RFID tags can be classified into two types: active tags, which use the internal battery to power their circuits, and passive tags, which do not have their own power source and are powered up by harvesting reader’s electromagnetic fields.