IOT BASED SAFETY GADGET FOR CHILD

SAFETY MONITORING AND NOTIFICTION.

TEAM ID : PNT2022TMID44697

TEAM LEADER : GRACERANI M

TEAM MEMBERS : ELAKKIYA S (732519104005)

GRACERANI M (732519104007)

PAVITHRA M (732519104704)

SUMITHRA A (732519104501)

DEPARTMENT : COMPUTER SCIENCE AND ENGINEERING

COLLEGE NAME : SHREE VENKATESHWARA HI-TECH ENGINEERING COLLEGE, GOBI.

LITERATURE SURVEY

BASE PAPER

A.RFID-based System for School Children Transportation Safety Enhancement

This paper presents a system to monitor pick-up/drop-off of school children to enhance the safety of children during daily transportation from and to school. The system consists of two main units, a bus unit, and a school unit. The bus unit the system is used to detect when a child boards or leaves the bus. This information is communicated to the school unit that identifies which of the children did not board or 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 personnel. A complete prototype leave of the proposed system was implemented and tested to validate the system functionality. The results show that the system is promising for transportation safety.

B. Design and Development of an IOT based Wearable Device for the Safety and Security of Woman and Girl Children

The aim of this work is to develop a wearable device for the safety and protection of women and girls. This objective is achieved by the analysis of physiological signals in conjunction with body position. The physiological signals that are analyzed are galvanic skin resistance and body temperature. Body position is determined by acquiring raw accelerometer data from a triple axis accelerometer. Acquisition of raw data is then followed by activity recognition which is a process of employing a specialized machine learning algorithm. Real-time monitoring of data is achieved by wirelessly sending sensor data to an open source Cloud Platform. Analysis of the data is done on MATLAB simultaneously.

C. Child Safety Wearable Device

Parents need not have a smart mobile. Set of keywords are used to gain information from the kit. LOCATION keyword is used to obtain the location of the child. UV keyword is used to obtain the temperature of the surroundings. BUZZ keyword is used to turn on the buzzer which is fixed in that device. SOS is used to send a signal to the device.

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PROBLEM STATEMENT

The Increasing need for protection of the child at present times and also when child can be lost in crowded areas. Using Blutooth and Wi-Fi not possible to track longer distance. Crimes against children are increasing Year on Year. According to a study, roughly 60,000 children to missing in India every Year. Incase of an emergency, or in a situation of panic, the child must be able to communicate with there parents. This can be done Via live transmission of audio from the device with the child, to the parents device.