**LITERATURE SURVEY**

**TITLE: IOT BASED SAFETY GADGETS FOR CHILD MONITORING AND NOTIFICATION.**

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**Maghade Satish, Chavhan Nandlal, Gore Sandip [1]:** Now a days lots of cases seen of missing Childs. The Childs are missing have ages between 14 to17.Parents are v worried about childs.The paper explains about an android application which is used to track themissing children. Nowadays lots of mobile phone user shave an android phones. The application works with thehelp of android mobile. The android application based on GPS and SMS services in Android mobile. The GPS service is used for tracking exact location of Child.The GPS and GSM based systems are used to track the location of Child. There are two ways that can aapplication works. First is GPS based that is related tothe Location services and second is SMS based which is related to the Network services.

**M.Navya1, S. Mohammed Rafi2, K. Niranjan Reddy3 [2]:** In the recent years, crime against children is increased at a higher rate. It is the need of the hour to offer safety support for children going to school and also the mentally challenged special children. There are some solutions available in order to reduce this increased crime. Some systems allows parents to monitor their children through cell phone tracking. In some systems, not only transmits the longitude and latitude coordinates to the cell phone but also sets off an alarm indicating the crossing of the periphery. However the existing systems provided various services like panic button, Autonomous Clustering technique, vehicle tracking, voice playback.

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**Deepak Punetha, Vartika Mehta [3]:** This tracking system could be brought to use to track pets/children/elderly/disabled/vehicles etc. The tracking system's range can be specified depending on the usage. If the carrier of the tracking system intentionally or unintentionally tries to cross a particular predetermined area/ region then an SMS is sent to a predefined phone number disclosing the coordinates of the location. The working of the system is based on an existing GSM network and GPS satellites. This tracking system not only transmits the longitude and latitude coordinates to the cell phone but also gives a slight shock to the carrier and sets off an alarm indicating the crossing of the periphery.

**1 Reshma M, 2 Sampreetha Ram N.S , 3 Amrutha K.M , 4 Terry Xaviour [4]:** The project entitled “Child Tracking System” is an application that allows parents to monitor their child's cellphone. All incoming and outgoing calls, texts and multimedia messages can be seen and interrupted by the parents, who can also monitor where their children are (through GPS), and access a history of where they've been and set up alerts if their children are going outside of approved geographical zones. The parent can also block calls or messages to specified numbers. Our aim is to develop an efficient and improved geographical asset tracking Solution and conserve valuable mobile resources by dynamically adapting the tracking scheme by means of context-aware personalized route learning techniques. This system uses Android based mobile phones for the software to be run.

**Radhika Kinage, Jyotshna Kumari, Purva Zalke, Meenal Kulkarni [5]:** Parents are very much concerned about their children now a days and are compelled to provide an Android phone to their children. They want to monitor children activities and movements, where they are going and what they are doing. But this process is difficult. To solve this problem a Mobile Tracking System has been designed, using this system parents can track children’s location. An Android application (Mobile Tracking System) needs to install in mobile phone of the children and parents have to register this application with a password. After completing the registration, parents can monitor mobile phone’s location of their children through a web site (www.mobiletrackerbd.com) from anywhere.

**Dr/Ayman Mohamed Afifi [6]:** The research is concerned with finding out a suitable means to protect the children against this phenomenon of Children abduction using tracking systems like GSM,GPRS,GPS. The research aims at illustrating the advantages of the tracking systems that are used and developing the designing of the tracking system devices of following up the children in order to face this phenomenon to fir huge number of children with different contexts, traditions and financial possibilities. The new method helps in following up the kidnapped child for long time as the used system is connected with the parents via sending messages to their mobile phones when the child changes the defined location as it defines the location more accurately.

**J.Saranya , J.Selvakumar [7]:** Recently, all over the world crime against children is increasing at higher rates and it is high time to offer safety support system for the children going to schools. This paper focuses on implementing children tracking system for every child attending school. However the existing systems are not powerful enough to prevent the crime against children since these systems give information about the children group and not about each child resulting in low assurance about their child safety to parents and also does not concentrate on sensing the cry of the child and intimating the same to its parents. The proposed system includes a child module and two receiver modules for getting the information about the missed child on periodical basis.

**Pankaj Verma, J.S Bhatia [8]:** GPS is one of the technologies that are used in a huge number of applications today. One of the applications is tracking your vehicle and keeps regular monitoring on them. This tracking system can inform you the location and route travelled by vehicle, and that information can be observed from anyother remote location. It also includes the web application that provides you exact location of target. This system enables us to track target in any weather conditions. This system uses GPS and GSM technologies.The paper includes the hardware part which comprises of GPS, GSM, Atmega microcontroller MAX 232,16x2 LCD and software part is used for interfacing all the required modules and a web application is also developed at the client side. Main objective is to design a system that can be easily installed and to provide platform for further enhancement.

**Chandra, A., Jain, S., Qadeer, M.A [9]:** The use of mobile devices has become a part of our daily routine. Recently, mobile devices like mobile phones or portable digital displays (PDAs) are equipped with global positioning system (GPS) receptors that allow us to get the device's geographic position in real time. Location Based Services (LBS) are regarded as a key feature of many future mobile applications. GPS serves well for most outdoor applications, however, its dependence on satellites makes it ineffective for indoor environments. This document gives a detail on our ongoing project work in the field of Location Based Services for JAVA enabled mobile devices, equipped with GPS receptor. We present a novel technique to send GPS coordinates to other mobiles through Short Message Service (SMS) based on Global Positioning System (GPS) technology. This application also enables the users to get their current location coordinates (latitude, longitude and altitude) and they can also view their locations on the Google maps).

**Al-Mazloum, E. Omer, M. F. A. Abdullah[10]:** Recently many cases of missing children between ages 14 and 17 years are reported. Parents always worry about the possibility of kidnapping of their children. This paper proposes an Android based solution to aid parents to track their children in real time. Nowadays, most mobile phones are equipped with location services capabilities allowing us to get the device’s geographic position in real time. The proposed solution takes the advantage of the location services provided by mobile phone since most of kids carry mobile phones. The mobile application use the GPS and SMS services found in Android mobile phones. It allows the parent to get their child’s location on a real time map. The system consists of two sides, child side and parent side. A parent’s device main duty is to send a request location SMS to the child’s device to get the location of the child. On the other hand, the child’s device main responsibility is to reply the GPS position to the parent’s device upon request.

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