

AN INTELLIGENT TECHNOLOGY FOR CHILDRENS TRACKING SYSTEM USING MOBILE TERMINALS

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Abstract

Now a day's most of the children's are missing because of their un secured place. Mostly parents are working to run their life. So that they are missing to take care of their children's regularly. Parents always worry about their children's whenever they are outside from the home. By using this concept parents can observe their children's conditions without fear. They can also track the school atmosphere from anywhere. If child is going outside the defined area, the message can be automatically send to parents mobile. Voice playback circuit gives main role in this concept, it is used to track the voice, if the child crying, the circuit records that voice and send the message to their parents. Android used to alert the parents to take over from dangerous position. GPS and GSM modems are used to communicate by internet and also to pass the messages

immediately. This system uses android based mobile phone to track the children's by internet.

INTRODUCTION

Cell phones make life easy. With single device you can make call, send messages, and take photos, recording and videos. And also can check your email, search in web and use GPS on many mobiles. Child tracking system is an android application that help parents to track their child's mobile phone activities. Cell phone monitoring can not only help them to avoid dangerous situations, but also can help to keep monitoring of your children in other situations.

It use android operating system based on linux kernel and designed for touch screen mobile devices. This android based approach is used to monitor the location of child whenever parents need and also to

alert parents if child moving outside the define area.

HARDWARE SYSTEM DESIGN

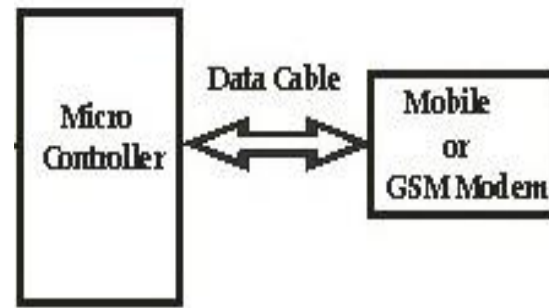
Each and every process need hardware to give clear result. In this concept some of the hardware's are used for that.

ARM PROCESSOR

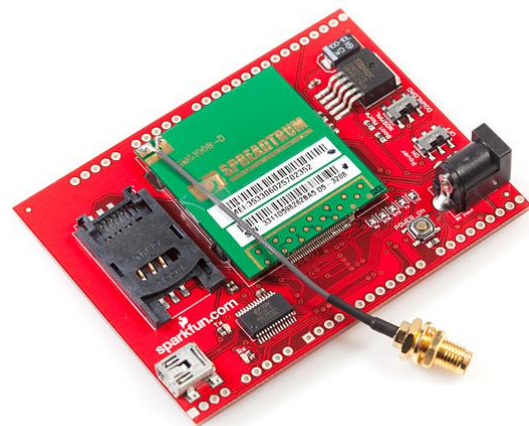
This type of microcontroller based on 32/16 bit ARM7-S CPU with real time embedded trace support. Speed of ARM is very high and it have interface features which is required for GSM, GPS and voice playback circuit. It has low power for functioning that is the main advantage in this microcontroller. It is mainly used to send the message to mobile phone through GSM module.

GSM

GSM (Global System for Mobile Communication) is used to send and receive the messages from one mobile to another. GSM network operator use any SIM card and act by the use of unique number. GSM modem works with a GSM wireless network.



This method plays main role in this concept. It is enough to handle more transaction in short time.



GSM MODEM

GPS

GPS is a satellite based navigation system it gives the location and time based information in all the weather condition and can collect the information from anywhere in this earth. It is satellite based radio positioning system.

It is used to transmit the data. GPS positioning is accurate measuring the time taken for a signal to reach a receiver.



VOICE PLAYBACK CIRCUIT

Voice playback circuit is used to identify the crying child. First, voice clip of the child will be save. Some of the features are:

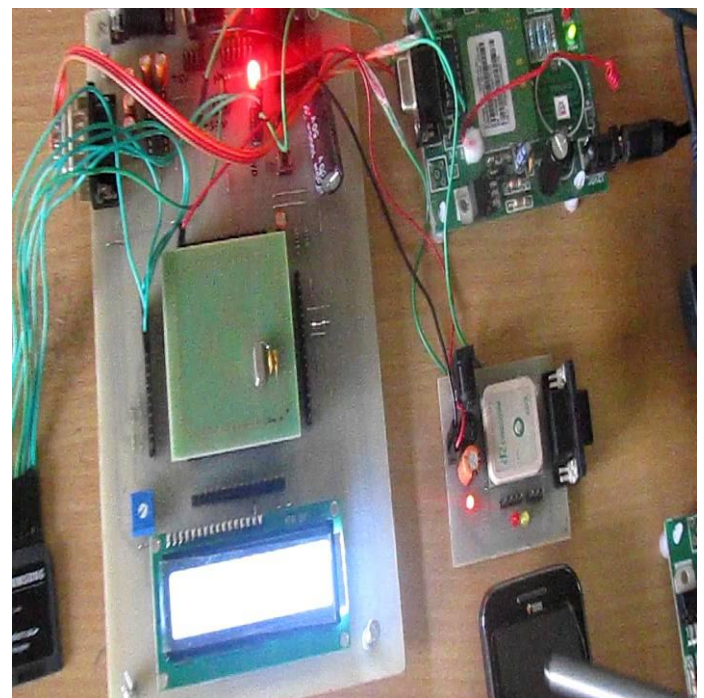
1. Low power consumption.
2. User friendly.
3. High quality voice recording in single chip.
4. Playback solution.
5. Non-volatile flash memory technology.
6. Security

7. Programming systems not required.

Can record voice with the help of on-board microphone or via audio input.

IMPLEMENTATION

In Implementation, microcontroller get on and send signal to GPS. By sensing child position the GSM receives message and it send to parents mobile.



CONCLUSION

This child tracking system focus on tracking a child's position and can send voice recording to parents mobile. There are two main component, GPS and GSM services. This application is very flexible. This system can fulfill the identified inconvenience. It can be extended by placing voice recognizing sensors which notes cry of the children inside the school and it send the message to the parents.

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