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My Kid : An Android Based Child Tracking System

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Abstract— **Child tracking system is extensively used across the world to insure parents that their wards are safe from dubious actions and their child is happy in school atmosphere without crying. The child module includes ARM7 microcontroller (lpc 2148), Global positioning system (GPS), Global system for mobile communication (GSM), Voice playback and the receiver component includes Android mobile device in parent's hand and the other as monitoring database in control room of the school. The proposed system includes monitoring of the child's movement to and from school. The info pertaining to missed child is sent to their respective parents. Not only the information about the child's whereabouts but also whether the child is crying is sent to parents through text message to their Android mobile device.**

Index Terms—**Android, GPS, GSM, Ipc2378**

I. Introduction

Recently, all during the reality, lapse against children is increasing at higher rates and it is steep time to try safety act as a witness route for the children mended to schools. This duty focuses on implementing children tracking system for separately child attending school. However the current systems are not powerful enough to hinder the misdemeanour against children as a result of these systems try reference virtually the children everyone and not approximately each child resulting in low assurance[1][3] about their lad safety to parents and besides does not concentrate on sensing the cry of the child and intimating the same to its parents. The information pertaining to missed child is sent to the control room of the school as well as to their respective parents, if they move beyond the coverage area[2][6]. The proposed

system includes a child module and a receiver module for getting the information about the missed child on periodical basis[5]. The child module includes ARM7microcontroller (lpc 2378), Global positioning system (GPS), Global system for mobile communication (GSM), Voice playback circuit and the receiver module includes Android mobile device in parent hand.

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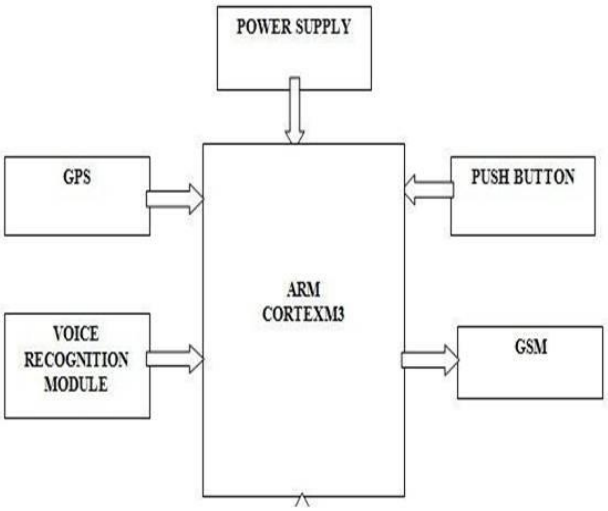
II. LITERATURE SURVEY

In this project a child tracking system is developed which can be extensively used across the world to insure parents that their wards are safe from dubious actions. The child module includes ARM7 microcontroller (lpc 2148), Global positioning system (GPS), Global system for mobile communication (GSM), Voice playback and the receiver component includes Android mobile device in parent's hand and the other as monitoring database in control room of the school.

III. My kid

My Kid is a child tracking system which contains child module with the assistance of which kid press the push button and PIC18F45K22 microcontroller gets on and send signal to GPS. At the point when supply is given to GPS board(fig.), by detecting of current position of kid and the information get sent to microcontroller. By detecting child's position the GSM module(fig.) gets longitude and scope flags and send it to parent's mobile.The message is gone to parent's mobile at whatever point switch is pressed, furthermore at whatever point child cry matches with cry in voice recognition module.



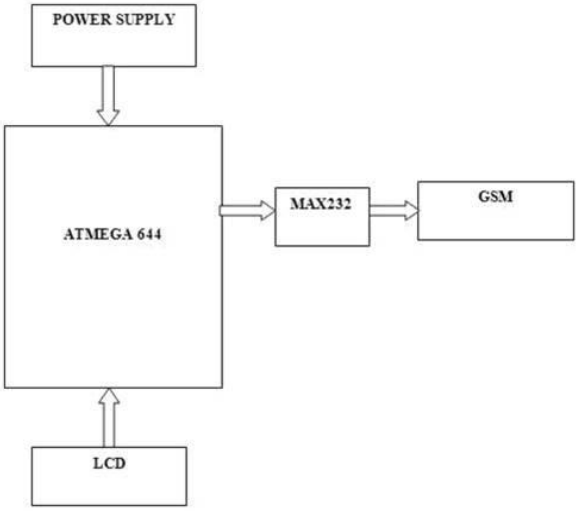


Fig 1 Child module

PUSH BUTTON

GSM

GPS

IV. HARDWARE SYSTEM DESIGN

A. ARM7 (LPC 2378)

IC 18F4SK22 has a place with programmable interface controller family. It has high timing speed and furnishes improved interfacing highlights with outside gadgets. It needs low force of 5.5V for working. It is a 40 pin IC deals with 64MHz recurrence which is versatile neighborly. It has high timing speed and gives improved interfacing highlights with outer gadgets. The inserted microcontroller has the learning to give AT orders to start and send the child data message to cellular through GSM module.

B. GPS

GPS is a space based satellite route framework that gives area and time data in all climate conditions. Satellite transmits information that permit client to a correctly measure the separation from the chose to its receiving wire and to figure position, speed and time parameters.

C. GSM (SIM300)

This module can acknowledge any GSM system administrator SIM card and act simply like a cell phone with its own particular one of a kind phone number. The best a portion of utilizing this modem is that its RS232 port to impart and create installed applications. At the point when the scope of area is spotted it is shown by LED and the principle favorable position is it is basic and of ease.

D. PUSH BUTTON

Whenever the child feels that he is in danger, he press the push button. By pressing the push button the message get forwarded to parents mobile and detects the location of child and send it as text message to parents mobile.

V. SOFTWARE SYSTEM DESIGN

MPLAB IDE (V8.00)

MPLAB is a free incorporated improvement environment for the advancement of embedded applications on PIC and DSPIC microcontrollers, and is created by Microchip Technology.

It incorporates inserted C dialect which is utilized to initiate the PIC IC and entire child module. It is utilized for composing codes. The coding is composed for GPS and GSM which gives the accurate area of child module.

VI. CONCLUSION AND FUTURESCOPE

This project concentrates on following a child's position and its location is sent to the guardians 'versatile. It can be reached out to all children by diminishing size of child module as little chip which gets settled to the id card. It can likewise be adjusted by implying the missing kid data to the police control room. A camera can likewise be added to the child module.It can also be utilized for girls women well being is imperative these days.

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