

Design And Implementation of Women's Location Monitor in System on Panic Situation Combined with Google Map

R. Sujatha, K. Ajay, B. Ranjith

Abstract: *The world is getting to be dangerous for ladies in all viewpoints. The wrongdoings against ladies are expanding at a higher rate. The utilized ladies are feeling risky because of expanding wrongdoings. This paper proposes a brisk reacting component that helps ladies amid inconvenience. When somebody will bug, she can press the catch that is appended to the gadget and the area data is sent to Google map server as far as scope and longitude. The microcontroller utilized is PIC16877A. It is interfaced with a push catch, a GPS module, a GSM modem. On the off chance that the switch is squeezed, it enacts the signal circuit to catch the consideration of the general population close-by for help. The program is created in installed language to exhibit the framework ability in giving ongoing reaction. Hence the young lady can be sheltered and she can feel secured.*

Index terms- PIC16F877A; GPS; GSM; Google Map

1. INTRODUCTION

Indeed, even in this cutting edge period ladies are feeling shaky to venture out of their home due to expanding violations in our nation like badgering, misuse, savagery and so on., The corporate and IT part are presently in blast. Numerous ladies are working in corporate even in night shifts. There is a sentiment of instability among the working ladies. The proposed gadget is increasingly similar to a security framework if there should be an occurrence of crisis. This gadget can be fitted in a coat (like an overcoat for ladies). It is a simple to convey gadget with more highlights and capacities. The crisis push catch is held to one of the catches of the coat. The fundamental reason for this gadget is to hint the guardians and police about the present area of the ladies. A GPS framework is utilized to follow the present position of the person in question and a GSM modem is utilized to send the message to the pre characterized numbers. There are a few applications that decrease the danger of sexual maltreatment by sending SMS however in our model we additionally give a sound circuit which is increasingly valuable for physically tested individuals.

The square outline of the proposed framework is appeared in Figure 1. The microcontroller goes about as an implanted figuring framework and it controls the exercises of the considerable number of subsystems. The microcontroller is interfaced with the various modules of the gadget. The program for PIC microcontroller is done in Embedded C

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2. PROBLEM DEFINITION

Indeed, even in this cutting edge period ladies are feeling shaky to venture out of their home due to expanding violations in our nation like badgering, misuse, savagery and so on., The corporate and IT part are presently in blast. Numerous ladies are working in corporate even in night shifts. There is a sentiment of instability among the working ladies.

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3. LITERATURE REVIEW

In the previous years, different following/observing frameworks had been structured and these frameworks are commonly executed as youngsters or vehicle following frameworks. Mammone in 2005 collapses a method for close-by individuals in an emergency circumstance with fast requesting. This creation permits a parent to caution other individuals who are available in a fixed span

[1]. In 2007, Kennedy planned a ready notice which is content informing dependent on the Amber Alert framework which helped in tyke hijacking [2]. In the year 2005 King and Yancey had given an assault cautioning for

vehicle and area conspire. Crisis vehicles will get to a goal by voyaging rapidly and securely and are shown along them a with an with distinctive visual attributes regarding the situation of the vehicle [3]. Then Curranet all proposed a method in2012 forde fining the gadgets going into a 2D geographic zone with a client alert [4]. Pankaj and Bhatia in the year 2013 additionally have given their idea to execute GPS/GSM based vehicle following system and track the vehicle on GoogleMap and also give the briefest course to achieve vehicle effectively in insignificant time [5]. As these following frameworks are used for following youngsters or then again vehicles, this kind of procedure is in like manner utilized for individuals who are experiencing ailments like mental imbalance, dementia, and Alzheimer and oldpeople.

4. ARCHITECTURE

4.1 GPS Technology

The GPS depends on a worldwide route satellite framework to decide speed, position, heading, furthermore, time. It uses a group of stars of 24/32 dynamic satellites in Earth circle that transmit an exact microwave flag what's more, empower GPS recipient. A GPS beneficiary needs at any rate three or four satellites to figure the separation as appeare figure out its two dimensions, that is, scope and longitude, or three measurements, that is, scope, longitude, also, elevationpositions[8, 9].

4.2 GSM Technology

The GSM modem which goes about as a mobile phone recognizes any GSM orchestrate head SIM card with its own special remarkable phone number. ThisSIM900A GSM modem can pass on and make introduced usage of SMS based remote control, for example, to send/get SMS and make/get voice calls [10]. It can in like manner be used for data logging application which partners with web with GPRS mode. It isdouble band 850/1900MHz which makes it a versatile fitting and makes it

4.3 Observing Unit

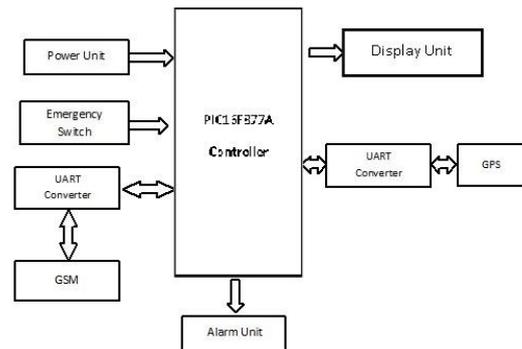
The observing unit delineated in incorporates an Android GSM versatile with a web plan and an electronic Android application supporting it. The GSM versatile will get a SMS which incorporates the programmed area referencepoint of the wearer (longitude and scope) and another SMS which incorporates the virtual span entering and leaving data [11, 12]. By opening that SMS it will straightforwardly associate with the Android application inside a second and open the Google Guide with a pointer pointing towards the directions which is the definite current area of thewearer

4.4 Microcontroller

A PC on-a-chip is a variety of a microchip which joins the processor center (CPU), some memory, and I/O (input/yeild) lines, all on one chip. The PC on-a-chip is known as the microcomputer whose legitimate importance is a PC utilizing (various) microprocessor(s) as its CPUs, while the idea of the microcomputer is known to be a microcontroller. A microcontroller can be seen as a lot of advanced rationale circuits coordinated on a solitary silicon chip. This chip is utilized for just explicit applications.

Most microcontrollers don't require a considerable measure of time to figure out how to proficiently program them, albeit a large number of them, which have eccentricities, which you should comprehend before you, endeavor to build up your first application.

Alongside microcontrollers getting quicker, littler and more power effective they are likewise getting an ever increasing number of highlights. Frequently, the primary adaptation of microcontroller will simply have memory and advanced I/O, yet as the gadget family develops, an ever increasing number of pat numbers with shifting highlights will be accessible.



Black diagram of women security

5. EXISTEDSYSTEM

In this day and age, ladies security has turned into a noteworthy issue as they can't venture out of their home at some random time because of physical/sexual maltreatment and a dread of viciousness. Indeed, even in the 21st century where the innovation is quickly developing and new contraptions were grown yet at the same time ladies' and young ladies are confronting issues. Ladies are skilled at assembling differing bunches for a typical reason. They regularly work crosswise over ethnic, religious, political, and social partitions to advance freedom. We are on the whole mindful of significance of ladies wellbeing, however we should examine that they ought to be legitimately secured. Ladies are not as physically fit as men, in a crisis circumstance some assistance would be help forthem.

6. PROPOSEDSYSTEM

This paper proposes a quick responding instrument that helps women in the midst of bother. When someone will bother, she can press the catch that is associated with the device and the region information is sent to Google map server to the extent degree and longitude. The microcontroller used is PIC16877A. It is interfaced with a push get, a GPS module, a GSM modem. If the switch is crushed, it starts the ringer circuit to get the thought of the all inclusive community close-by for help. The program is made in embedded language to show the system limit in giving constant response. Along these lines the young woman can be shielded and she can feel guaranteed.



7. IMPLEMENTATION

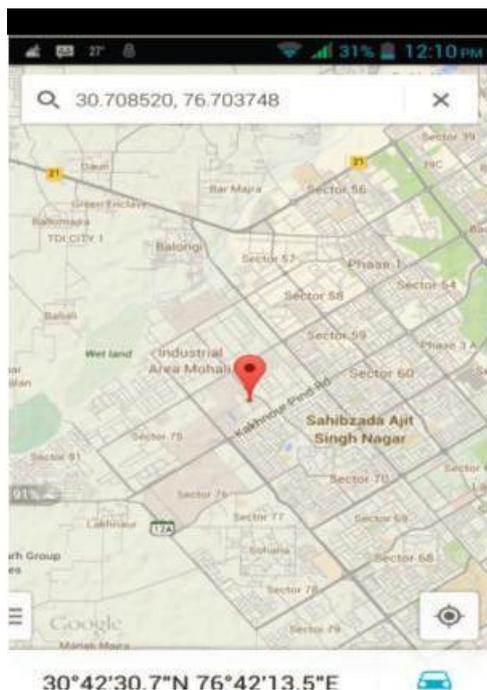
Here a catch is attached in a wearable bit of device to get to the district. While take an individual snap at the switch the estimations of expansion and longitude will be noted and dispatch by utilizing GSM fragment. This message will be sent to the guardians and to the police control room. Ensuing to getting by utilizing these uniqueness it will taken as obligation to look in google map then the accurate target will be showed up. This spot will be send to adjacent police war room of the given spot.

Hubs are focuses with a geographic location, put away as scope and longitude organize sets. These may speak to areas of intrigue, for example, heap crests or different milestones, however their increasingly normal and relevant use is as constituents of bigger items.

8. RESULT

The undertaking is ladies security in frenzy sutitation. The responsibility is tied in with making ladies other secure by the utilization of GPS, GSM innovation and a web application. The ongoing commission of ladies security is over and done with by the mplab help of programming hardened to locate the present area of ladies with aid of google map.

Output:



Hence the chart referenced above depicts the exact area of the particular individual. This area taken by scope and longitude esteems and these qualities are taken as a contribution for google map for inquiry and given a precise yield. These yield will share to the adjacent police command center and their folks.

9. CONCLUSION

In this paper we find another assault that utilizes an advanced mobile phone to follow a women without asking for access to gps module on this telephone. the assailant initially identifies the edges of vehicle turns using the changing greatness of compass readings which can be gathered from a magnetometer sensor introduced on the

advanced cell and after that contrasts women turn edges and street crossing point edges to discover the way navigated by an objective driver. to empower the correlation the assailant additionally makes its own guide database through refining what is given by the osm venture. we approve the effect of the assault through 30 driving ways gathered from true drivingencounters.

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