

Women Security System

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Abstract : The main aim of this project is to implement real time women security system in public places which aims to provide the 100% safe environment .This project focuses on a security system that is designed solely to serve the purpose of providing security and safety to women so that they never feel helpless while facing such social challenges. This project describes about a smart intelligent security system for women. The system incorporated with sos switch as an input which when pressed shows the result screaming alarms and activates the electric shock device which are imposed for self-defending purpose and send geographic location and messages to the two emergency contacts.

Index Terms:

- 1.PIC 16F877A
- 2.GPS
- 3.GSM

I. INTRODUCTION

India which sees itself as a promising super power and an economic hub can achieve its goal if and only if a large numbers of women participate in the development process. This paper presents an analysis review on the principal need of intelligence security system with technology requirement and challenges to build the system. Since the prediction of such incident is not possible hence to minimize the possibility of physical violence (robbery, sexual assault etc.) by keeping all the help tools ready to safely escape from violent situation. This reduces risk and brings assistance when needed. The social networking is the part of our life and also a source for women harassment by uploading the offensive photograph taken by hidden cameras, even though these cases might happen with innocence males, in some such cases these guys end their life by committing a suicide. The de facto spokesperson of United Nation Ban Ki-Moon, stated that "There is one universal truth applicable to all countries, cultures and communities: violence against women is never acceptable, never excusable, and never tolerable". The report of WHO states that. "A violence act against female gender disturbed the public health life of society and also it violates the human rights of women."

In today's world, women safety has become a major issue as they can't step out of their house at any given time due to physical/sexual abuse and a fear of violence. Even in the 21st century where the technology is rapidly growing and new gadgets were developed but still women's and girls are facing problems. Women are adept at mobilizing diverse groups for a common reason. They often work across ethnic, religious, political, and cultural divides to promote liberty. We are all aware of importance of women safety, but we must analyze that they should be properly protected. Women are not as physically fit as men, in an emergency situation a helping hand would be assistance for them. The best way to cur tail your probability of becoming a dupe of violent crime (robbery, sexual assault, rape, domestic violence) is to recognize, defense and look up resources to

help you out of hazardous situation. If you're in dilemma or get split from friends during a night out and don't know how to find back residence, this device with you will guard you and can reduce your risk and bring assistance when you need it. There are several app reduce the risk of sexual assault on women by informing control centre and their associates through SMS, but inlay of those this apparatus have much more efficient way to inform those this respected personals and also has a defending system which cannot be provided by existing app.

LITERATURE SURVEY

[1] SMART GIRLS SECURITY SYSTEM.

The status of women in India has gone through many great changes over the past few millennia. From equal status with men in ancient times through the low points of the medieval period to the promotion of equal rights by many reformers, the history of women in India has been eventful. This paper focuses on a security system that is designed solely to serve the purpose of providing security to women so that they never feel helpless while facing such social challenges. The system consists of various modules such as GSM shield (SIM 900A), Arduino ATmega328 board, GPS (GYGPS6MV2), screaming alarm (APR 9600), a set of pressure sensors for activation and power supply unit. The Delhi Nirbhaya case that triggered the whole nation was the greatest motivation for this system. It was high time we women needed a change.

[2] Women Employee Security System using GPS And GSM Based Vehicle Tracking.

Womens security is a critical issue in todays world and its very much needed for every individual to be acting over

such an issue. This paper describes a GPS and GSM based vehicle tracking and women employee security system that provides the combination of GPS device and specialized software to track the vehicles location as well as provide alerts and messages with an emergency button trigger.

[3] A Mobile Based Women Safety Application

Many unfortunate incidents have been taking place in woman's case. Problems may come from any direction such as women walking on the road after the work, going to super market or many other reasons for which they go alone. People at home are not sure of their return safely. Another factor is woman die without knowing the reason as they attend excursions and industrial trips conducted by the organizations. It happens due to attacks on woman but not suicides.

[4] International Journal of Computer Applications According to the reports of WHO, NCRB-social-government organization 35% Women all over the world are facing a lot of unethical physical harassment in public places such as railway-bus stands, foot paths etc. In this paper the authors have reviewed of various existing systems on women security. The authors have felt a need of advanced women security system to provide the safety measure in public places as well as travelling alone through public transports (school buses, company vehicle etc). This paper proposed a new model for the women security in public places which aims to provide the 100% safe environment.

Aim And Objectives

A. Aim:

The main aim of this project is to implement real time women security system in public places which aims to provide the 100% safe environment.

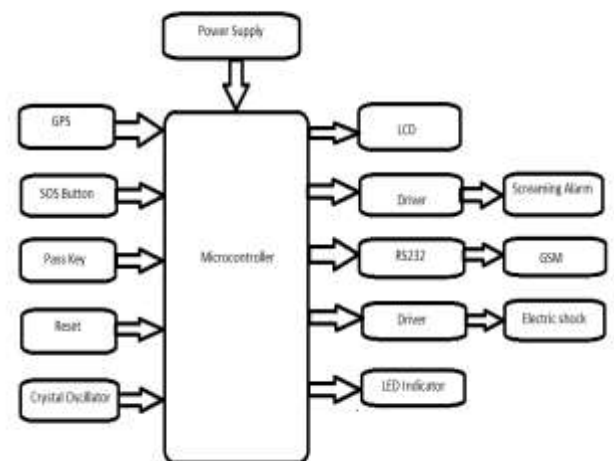
B. Problem Statement:

This paper focuses on a security system that is designed solely to serve the purpose of providing security to women so that they never feel helpless while facing such social challenges. The system resembles a normal clothes which when activated, tracks the location of the victim using GPS (Global Positioning System) and sends emergency messages using GSM (Global System for Mobile communication), to three emergency contacts and the police control room. The system also incorporates a screaming alarm that uses real-time clock, to call out for help and also generates an electric shock to injure the attacker for self defense.

C. Objectives:

1. To make woman safety.
2. The purpose of providing security and safety to women so that they never feel helpless while facing such social challenges.

BLOCK DIAGRAM



Microcontroller(PIC16F877A)

PIC 16F877 is one of the most advanced microcontroller from Microchip. This controller is widely used for experimental and modern applications because of its low price, wide range of applications, high quality, and ease of availability. It is ideal for applications such as machine control applications, measurement devices, study purpose, and so on. The PIC 16F877 features all the components which modern microcontrollers normally have.

The PIC families of microcontrollers are developed by Microchip Technology Inc. Currently they are some of the most popular microcontrollers, selling over 120 million devices each year. There are basically four families of PIC microcontrollers:

- PIC12CXXX 12/14-bit program word
- PIC 16C5X 12-bit program word

GSM

GSM (Global system for mobile communication) is a globally accepted standard for digital cellular communications. The concept of GSM emerged from a cell-based mobile radio system at Bell Laboratories in the early 1970s. GSM is the name standardization group established in 1982 to create common European mobile telephone standard that would formulate specifications for a pan-European mobile cellular radio system operating at 900MHz. GSM uses narrowband Time Division Multiple Access (TDMA) for providing voice and text based services over mobile phone networks.

GSM is a circuit-switched system that divides each 200 kHz channel into eight 25 kHz time-slots. GSM operates on the mobile communication bands 900 MHz and 1800 MHz in most parts of the world. In the US, GSM operates in the bands 850 MHz and 1900 MHz. GSM owns a market share of more than 70 percent of the world's digital cellular subscribers. GSM was developed using digital technology. It has an ability to carry 64 kbps to 120 Mbps of data rates.

GPS

GPS stands for Global Positioning System by which anyone can always obtain the position information anywhere in the world. GPS was initially meant for military applications and was built by the American Department of Defence (DOD) in 1978. It was originally called NAVSTAR and was introduced with the launch of the first satellite. GPS technology became a reality through the efforts of the American military, which established a satellite-based navigation system consisting of a network of 24 satellites orbiting the earth. GPS is also known as the NAVSTAR (Navigation System for Timing and Ranging).

The Indian Regional Navigation Satellite System or IRNSS with an operational name of NAVIC ("sailor" or "navigator" in Sanskrit, Hindi and many other Indian languages, which also stands for NAVigation with Indian Constellation) is an autonomous regional satellite navigation system that is being set up by India, that will be used to provide accurate real-time positioning and timing services over India and the region extending to 1,500 kilometres (930 mi) around India. The NAVIC system will consist of a constellation of 3 satellites in Geostationary orbit (GEO), 4 satellites in Geosynchronous orbit (GSO), approximately 36,000 kilometres (22,000 mi) altitude above earth surface, and two satellites on the ground as stand-by in addition to ground stations.

ADVANTAGES & APPLICATIONS

ADVANTAGES

- It is an all-in-one system. Hence no need to carry multiple devices.
- Ultra low power consumption.
- Compact in size.
- Wireless connectivity.
- Low cost with high performance.
- Fast response.
- Environmental friendly system.

Applications

- Women safety.
- Children tracking and safety.

CONCLUSIONS & FUTURE SCOPE

Conclusion

It can be concluded that the system helps to supports the gender equality by providing safe environment to women in the society, and allows them to work till late nights. Anyone before doing any crime against the women will be deterred and it help reducing the crime rate against the women.

Future Scope

As the technological changes or new requirement from user to enhance the functionality of product may

requires new version to introduce. Although the System is complete and working efficiently, new modules which enhance the system functionality can be added without any major changes to the entire system. By keeping this ability of the product I mind, an incremental process model has been used to design and develop the system. Among the various modules few are identified, which couldn't be included in the last increment due to time constraints. These are as follows :

1. Primary School Children Safety
2. Vehicle Safety System Module
3. Mobile and other valuables Safety System Module

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