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One Touch Women Security System

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Abstract: In recent times, role of women in all industries have increased. Simultaneously, crime against women is also increasing day by day and this is the high time to provide safety for all working women. This paper focuses on women tracking system for all working women. There is no powerful existing system to prevent the crime rates against women. This system gives information about a woman or a victim who has low assurance about their safety to their respective family and the place where they work, which have to be more concerned about their women workers.

This system includes the victim module and two receiver modules for getting information about the missed women. This arrangement includes Micro-controller, Global Positioning System (GPS), and Global Arrangement for Mobile communication (GSM), and the receiver module that includes a Android mobile mechanism of the victim's relations and a monitoring database in the manipulation room of the corresponding association or workplace.

Key words: Micro-controller, Communication

I. INTRODUCTION

How we came on This Idea Our group was always more inquisitive about security purpose projects. We decided that our project will be security based we also wanted to make something unique, something that is not unique in the market and for a social cause. So, we came up with this idea of Women Security.

The main objective the project is to provide highly reliable security system for the safety of women. The proposed system is based advanced sensors, Micro-controller and GSM. Here we introduces an app which ensures the safety of women. This helps to identify and call on resources to help the one out of dangerous situations. This reduce risk and bring assistance when we need it and help us to identify the location of the one in danger. We recommend our app since it have some key features which diverse it from others. They are quoted below:

There is a rising needs for pursuing mechanisms, that can be a existence saving devices. Across eras of low assurance, people can use these arrangements to retain trail of victims. Pursuing provides countless services such as discovering their locale, retain trail of employers to monitor whereas they are at all periods across the workday, teenagers to manipulation their movements, tinier children, pets and elders after they go missing and for countless supplementary purposes. The progress to location-dependent services and requests in wireless arrangements endures to need the progress of extra precise and reliable positioning and pursuing systems.

II. LITERATURE SURVEY

A GPS & GSM Based Vehicle Tracking and Employee Security System combine the installation of an electronic device in a vehicle. When the car picks up the employee; he/she needs to swap the RFID card. The micro controller matches the RFID card no. with its database records and sends the employee's id, cab id & the cab position co-ordinates to the company unit via GSM module. The GSM Modem will receive the message through GSM in the company unit. If employee finds himself/herself in a problem, he/she will press the button. Microcontroller will detect the action & sends a signal to the GSM which will coordinate with to the company unit and police. Microcontroller will also send a signal to the relay which will turn off the car ignition & stop the car. The GSM Modem will receive the message. This message will then be transferred to the computer through the serial port. The employee name, employee id & cab position coordinates (longitude and latitude) get displayed on computer. Once the data is obtained on the computer, it can be used for further analysis. In this way the company unit keeps a track of the vehicle. This will be a much simpler and low cost technique compared to others.

An Android based application on Women security is already out in the market. This application is placed on the home screen of your Smartphone which when pressed calls to the predefined contacts or sends email or SMS along with the name, real-time, location, type of emergencies and enables to identify different location. This is the best application for security of women for Smartphone users. But what about other women who don't have Smartphone or else what if their Smartphone's battery is low. So, to meet these requirements, I thought to build a project using microcontroller, GPS and GSM system which is easy to carry and cheaper in price.

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III. PROBLEM STATEMENT

The proposed research to design and implement a system for safety of women during time of emergency.

IV. PROPOSED SYSTEM

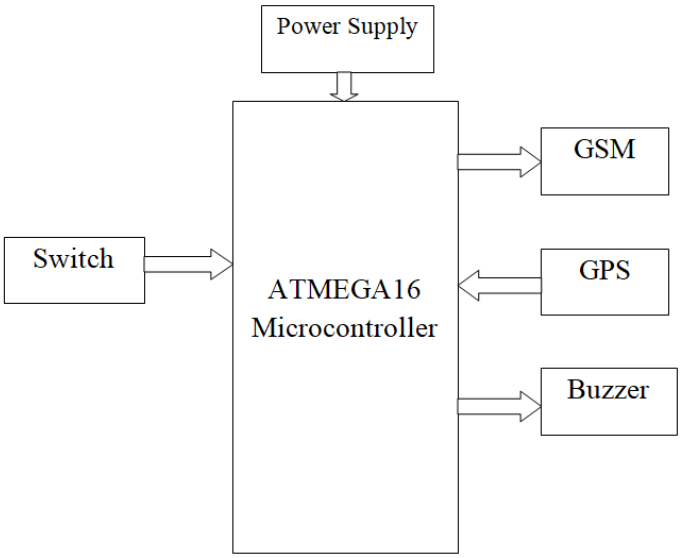

Fig: - System Block Diagram

In This Proposed System the One Touch Women Security System allows women to track the current GPS position of women. The System consists a feature with the help of that women can ask for help by sending a distress signal to authority and close ones when in need. The GPS modem sends the latitude and longitude position which can help track the current position of the person. The system is very helpful for getting location information and providing them instant help ATmega16 microcontroller, GSM module and GPS antenna for Sending message of location to the authority.

Design Schematics:

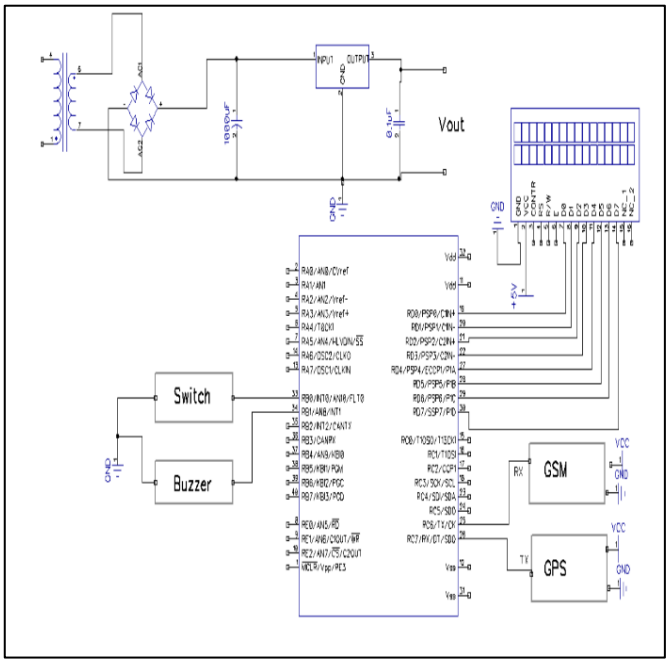

Fig:- Schematic Circuit Diagram

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Algorithm

1. Start
2. Initialization of hardware
3. If button is pressed then buzzer turns ON and SMS is send via GSM
4. Otherwise buzzer is OFF.
5. Repeat step 3
6. Stop

Power Supply Design

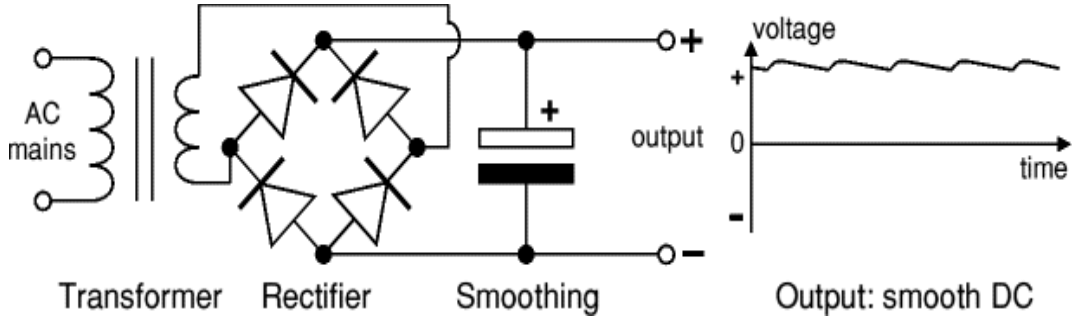

Fig:- Power Supply Design

Block Diagram Description:

- Transformer - steps down high voltage AC mains to low voltage AC.
- Rectifier - converts AC to DC, but the DC output is varying.
- Smoothing - smooths the DC from varying greatly to a small ripple.

V. EXPERIMENTAL RESULTS

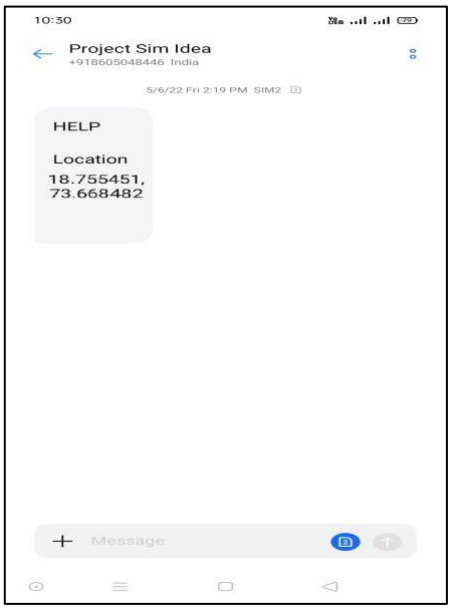

Fig:- SMS on Emergency Situation

VI. CONCLUSION

With the constant progress of intelligent mobile phone hardware and multimedia technologies, it becomes more and extra facilely for mobile phones and supplementary mobile terminals accessing to the web and becoming information. This

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paper proposes a monitoring arrangement established on Android mobile terminals, alongside SMS as the medium. Our proposed work has been developed as a project but it could be enhanced further using nanotechnology concepts.

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