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A Women's Safety Application utilizing Android to give security to women

[1]Vanshit Mehta, [2]Pratik Ingale, [3]Vaishnavi Kulkarni, [4]Divya Maind, [5]Pradip Patil

[1][2][3][4][5] Dept. of Computer Engineering, PVGCOE & SSDIOM Nashik, Maharashtra, India

ABSTRACT :

Today, the safety of women is widely discussed everywhere. Now it has become a severe problem. The crime rate is skyrocketing. There are laws, but adequate security measures must be strictly followed to protect against violence against women. The goal of this project is to develop Android software that will aid in protecting women in any circumstance they may encounter on a daily basis. We have developed a straightforward Android application that includes a number of safety features that women may access with only a few presses on the screen to quickly and easily get assistance or to avoid and flee a dangerous situation. This app can be activated with a single click when the user feels she is in danger. This application communicates the user's location to the registered contacts for every few seconds in the form of a message. Thus, it acts like a sentinel following behind the person till the user feels she is safe. This paper presents an analysis a unique feature of this application to send the message to the registered contacts continuously till they are pressing 'HELP' button. Continuous location tracking information via SMS helps to find the location of the victim quickly and can be rescued safely. This application aims to ensure women's safety. This is achieved by addressing the circumstances that compromise the safety of women in today's day and age. This app ensures women are not put into such situations through various features offered by our system.

Keywords: Android Application, Safety, SMS, Location, Security, GPS, Contacts.

Introduction

Women's safety is a crucial issue that society must address. Eve teasing, sexual assaults, and domestic abuse are just a few of the crimes against women whose frequency is rising daily. A smartphone may be the simplest way to get assistance when security is an issue. The goal of this project is to develop Android software that will aid in protecting women in any circumstance they may encounter on a daily basis. We have developed a straightforward Android application that includes a number of safety features that women may access with only a few presses on the screen to quickly and easily get assistance or to avoid and flee a dangerous situation. This project uses SQLite as its back end and the Java Software Development Kit as its front end. Due to the significant growth in the number of smartphone users in the world today, a smartphone can be effectively used for personal security or numerous other defense objectives. When the need arises to notify the persons connected to the woman, the app can be triggered with a power button. With just pressing the power button, this software uses GPS to pinpoint a position and sends a message that includes that location. This project uses SQLite as its back end and the Java Software Development Kit as its front end. Due to the significant growth in the number of smartphone users in the world today, a smartphone can be effectively used for personal security or numerous other defense objectives. When the need arises to notify the persons connected to the woman, the app can be triggered with a power button. With just pressing the power button, this software uses GPS to pinpoint a position and sends a message that includes that location.

Motivation

In today's world, it is not safe for a person to travel alone at night especially for women; it will be high time to travel alone because a woman is not highly strong as men to protect herself from them. The good way to reduce chances in becoming a victim of violent crime (robbery, sexual assault, rape, domestic violence) is to identify and call on resources to help you out of unsafe situations.

Problem Definition

To design and implement an application utilizing Android to give security to women. To give women the wellbeing how to take them out from any unsafe circumstance to protect them from being a victim to any heinous or violent action is to distinguish all assests in the hand and use them.

Literature survey

This app is developed by Dr. K Srinivas et al Int. J. Sci. Res. Computer. Sci. Eng. Inf. Technology, May June - 2021. In this existing system, the user writes the message content and also selects the contacts to which the message has to be sent and saves it. So, whenshe is in some danger by just opening the app and pressing the HELP button, the message stored will be sent to those numbers hehas added to this application. So that he can receive help at the correct time. The key feature of the application are: Supports multiple connections at the same time. Different work modes: "view only" and "full control". Different display modes: "windowed", "fullscreen", and "scaled". Runs as a service on the NT systems.

1. The principal significant step is to enter the contact subtleties in the application made. Those contacts can be our family members, companions, and boss cop of the specific city the individual we live in. At the point when the application is introduced on the primary run: Save the given data in the application.

2. The subsequent significant step is to send the GPS data (GPS data can be as the Co-ordinates or the URL which prompts the area of the individual any stock guide application in any semblance of outsider application like Google, Nokia and so forth) to the enrolled contacts at risk times or when the individual is required to have been saved. This step is followed just when the rescue button is squeezed or pressed in the application. The entire course of this step is done just when the device is associated with the appropriate portable organization and area administration in the gadget is turned on (GPS)

3. The third significant step includes work done in sending the message containing the area URL persistently to the enlisted contacts. Here, we have established the point in a time span as 5 minutes, so for like clockwork of time-pass, SMS is shipped off the enlisted contacts. In this way, the specific area of the individual can be followed by the application constantly which is the essential point of the proposed framework and the individual can be protected.

MODULES

This project includes five modules and is listed below:
1. Authentication
2. Add Emergency Contacts
3. Add Personal Information
4. Change personal Information
5. Sending SMS

1. Authentication:

Authentication module contains all the information about the authenticated Person.Authentication is the process of verifying the identity of a Person by obtaining some sort of credentials and using those credentials to verify theu users identity. If the credentials are valid, the authorization process starts. Authentication process always proceeds to Authorization process. User without her username and password can't enter into the login. If she is only the authenticated Person, then she can enter into her login.

2. Add Emergency Contacts:

In this module user add the Emergency Contacts. It contains information about the Id, Name, Mobile Number1 and Mobile Number. The Emergency Contacts are stored in the database and retrived when an emergency message needs to be sent.

3. Add Personal Information:

In this module user enters the Personal Information. It contains information about 10A Women Safety Application utilizing Android to give security to women 11 the Id, Name, Mobile Number, email id and address. The Personal Information is stored in the database.

4. Change Personal Information:

In this module the user can her change or update the Personal Information. It changes can be done to information like
Name, Mobile Number, email Id, Address.The changed personal information gets updated in the database.

5. Sending SMS Information:

It is the core module of this application. In this module the women safety feature is added. This app is activated by a single click by the women whenever she feels that she is in a stranded situation. A single click on this app identifies the location of the place through GPS and sends a message comprising

this location URL to theregistered emergency contacts and to the nearest police station immediately and to carry out the rescue operation as soon as possible.
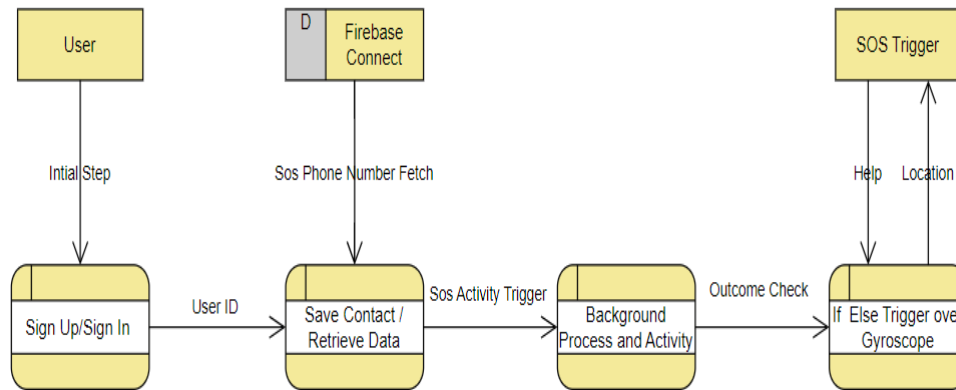
DATA FLOW DIAGRAM

FIGURE 1: DATA FLOW DIAGRAM

Conclusion

Around 80 percent of ladies are losing certainty and have fear of the acknowledgment of opportunity. In this study, we are going to propose the design and implementation of a women's safety system in the form of an application. The process is maintained more simple and easy in ensuring the women's safety. The system is highly scalable and user-friendly. The system minimizes the problem arising in the existing manual system and it ensures immediate action is taken when an unfavorable situation is encountered.

Future work

Women harassment includes a range of actions, from verbal transgressions to sexual abuse or assault. Harassment can occur in different social settings such as the workplace, the home, school, or religious institutions. For many businesses or organizations, preventing sexual harassment and defending employees from sexual harassment charges have become key goals of legal decision-making. Measures are needed to address this social cause. Implementing the application, which will provide safety even when the system is switched off, is the main aim and future scope of the application. In such scenarios, safety can be provided by taking visuals like photos and videos of the surroundings when an event is triggered.

You can never completely provide safety to young ones and old aged people. You can, however, reduce the risk of injuries by making a few changes to your home and keeping them under constant supervision. Safety may be compromised, outside the home. Making the application useful for children, old aged people, and disabled people in the future is the main goal of the project.

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