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A Women's Safety Application Utilizing Android to Give Security to Women

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ABSTRACT:

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 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.

Keyword: 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.

1. PURPOSE

Security for women has become a significant issue in today's era, as the number of crimes against women and girls increased over a period of time. Women's safety matters a great deal whether at home, outside the home, or working spot. A large portion of ladies of different ages, right up to today are being exposed to brutality, rape, etc. To determine this issue, we know in this day and age, people using smartphones have expanded quickly and consequently, and hence, a smartphone can be used efficiently for personal security or different other assurance purposes. Here we present an easy-to-use application that can be accessed by anyone who has installed it on their smartphone. Our motive is to provide you with the quickest and most straightforward approach to contact your closest assistance.

EXISTING SYSTEM

In the 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, when she is in some danger by just opening the app and pressing the HELP button, the message stored will be sent to those numbers he has added in this application.

So that he can receive help at the correct time. The key feature of the application is: Supports multiple connections at the same time. Different work modes: "view only" and "full control". Different display modes: "windowed", "full screen", and "scaled". Runs as a service on the NT systems.

OBJECTIVE OF SYSTEM

- To provide awareness on the time of critical situations for women.

- To identify and call on resources to help the one out of risky circumstances

- To provide security to women in a reliable way

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, when she is in some danger by just opening the app and pressing the HELP button, the message stored will be sent to those numbers he has 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", "full screen", 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.

PROPOSED SYSTEM

The main and basic goal of our system is to provide security to women in a reliable way. The existing system consists of making calls manually to the emergency contacts from the mobile. Phones when the women face an uncomfortable situation. By the time she makes the calls the opponents may become alert and may not allow her to do so. Also, it takes more time to intimate when in there is an emergency situation. The proposed system is developed to overcome the disadvantages of the existing system indicated prior. We can create an Interactive Women's Safety Security user application using Android Mobile Application. The application created has an emergency signal or panic button that permits the user to squeeze when she is in a negative circumstance. Pressing this button intimates her crisis contacts about her circumstance right away, just tapping the SOS button to raise an emergency SOS alert. The SOS alert will be in the form of an SMS informing that you are unsafe and need help with the current location of that person. The police can arrive alongside the mentioned emergency contacts at the spot at the earliest before anything could happen.
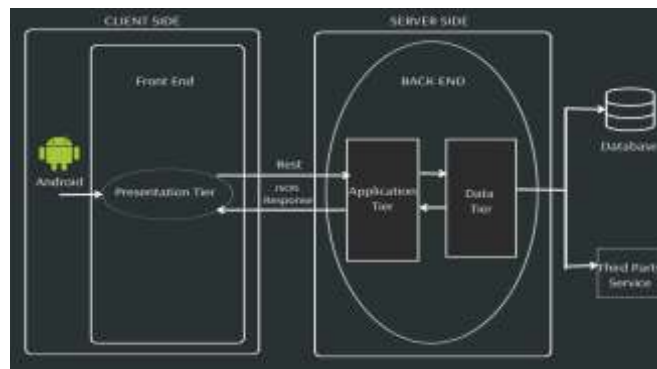
SYSTEM ARCHITECTURE

Fig -1: System Architecture Diagram

ADVANTAGES

• Your loved ones and close friends can automatically receive a text message

• Exact time of the alert triggered. Your location (with map link).

• Automatic prompt for activating location.

APPLICATION:

• Emergency Medical Help :

The Application can be useful for help at the time of a road accident or any medical emergency.

• Safety of blind and disabled people :

The application helps to find the location of blind and disabled people and provides security
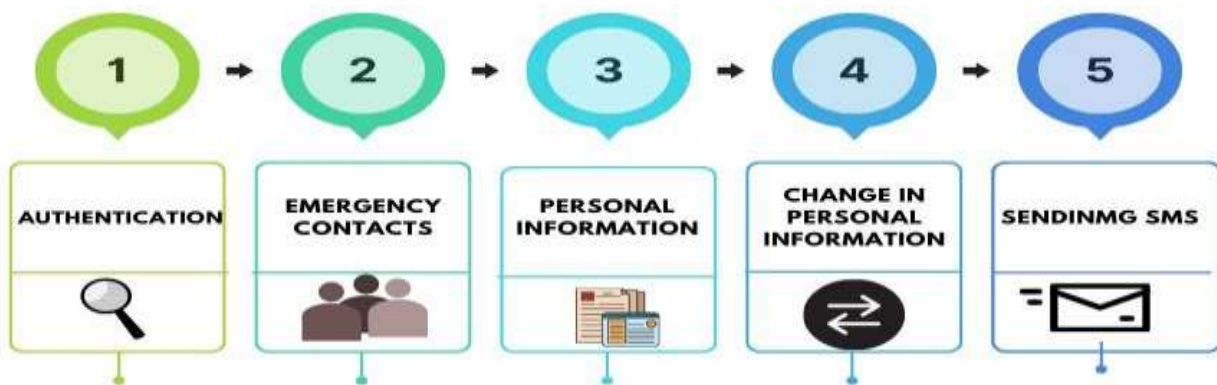
FLOW DIAGRAM:

Fig-2: Flowchart

METHODOLOGY

Our proposed model contains an Interactive Women's Safety Security user application using Android Mobile Application. The application created has an emergency signal or panic button that permits the user to squeeze when she is in a negative circumstance. Pressing this button intimates her crisis contacts about her circumstance right away, just tapping the SOS button to raise an emergency SOS alert. The SOS alert will be in the form of an SMS informing that you are unsafe and need help with the current location of that person. The police can arrive alongside the mentioned emergency contacts at the spot at the earliest before anything could happen.

SYSTEM REQUIREMENTS

- **Software Used:**
  - Operation System - Windows 10 or above
  - Tools - XML, Android Jetpack along with UI/UX Components
  - Ide - Android Studio
- **Hardware Used:**
  - 16 GB of RAM
  - CPU - Intel i5 9th Gen and above
- **Technologies in brief**

Android Studio is the official Integrated Development Environment (IDE) for Android app development, based on IntelliJ IDEA. On top of IntelliJ's powerful code 7 editor and developer tools, Android Studio offers even more features that enhance your productivity when building Android apps. IDE is a software application consisting of many tools like an editor, compiler, packages, automation tools, and debugger

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.

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