

Advanced Women Security And Sms Alert System Using Android App

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Abstract

Women are good at sharing different teams to achieve common goals. They often promote peace by eliminating ethnic, religious, cultural and intellectual differences. We all know the importance of women's safety, but we also need to know that they should be left alone. Another factor is the unexplained deaths of women while working in the entertainment and tourism industry. This was not because of suicide, but because of the struggle of women. In today's world, the number of smartphone users is rapidly increasing and therefore smartphones can be used effectively for personal security or various protection purposes. The serious incident that shocked the country also made us think about security issues and led to the emergence of many new applications that will enable women to ensure security on their mobile phones. Women do not have physical strength compared to men and it is an aid to help them in emergency situations. Many negative situations happen to women. Problems can arise in many ways, such as when women walk on the street after work, go to the market, or go alone for various reasons. Residents are unsure if they can return safely. This advice app for women's safety has three modules; the app can show the security guard's location, the second user can call nearby police officers, and the user can register an online harassment complaint with one click. Click on this application to check the location of the place on Google Geo Location and send a message with the location to the person and call the first person to help the person in a horrible situation.

Index Terms—Women's Safety Alert, Newspaper. android studio HTML5, CSS3, Bootstrap, PHP, MYSQL. Android emulator, xampp-win32-5.5.19-0-VC11

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I. Introduction:

In this rapidly evolving world, women's safety is a growing concern. We already know many negative things that happen to women, and it's only getting worse. Today's women are working women and the global economy has made us aware of gender equality. In the past, women were not allowed to work at home. As the situation changes, women are competing with men in every field. We can see women succeeding in every field, be it business, science, education, business or other activities[1]. Women's safety is very important at home, when going out, even when going to work. Many of the crimes committed against women lately, especially in Delhi, are quite appalling. Due to the increase in crime, women's safety has become an important issue. According to statistics, two out of every three women have experienced trauma in the last year[2]. According to women's analysis, women have lost their self-confidence due to such situations[3]. A survey by the Delhi government's Women and Children's Department found that nearly 80% of women in the city are worried about their safety. Women are harassed not only at night and in the evening, but also during the day, at home, at work, in places such as streets and clubs[4]. They range from portable computers to smartphones, from tablet computers to personal assistants. This device will receive information by sending and receiving signals. These devices are configured for full-duplex operation so they can send and receive signals simultaneously[5]. They don't have to wait for one device to finish communicating before another can start communicating. The tools described above work using existing and installed networks. It will usually be wireless.

With the rapid increase in Android users and decreasing Internet costs, we can provide an easy environment for young women and teenagers to become security conscious. The women's safety app can tell your relatives, guardians and friends the location of women in need and where you can go for help. Women's Safety App provides additional protection for relative tracking in different positions and locations[6]. We focus on proposed models that can be used to solve women's security problems using GPS and GSM-based tracking systems. And create an app on your phone as an emergency. Here, mobile communication refers to the infrastructure designed to ensure efficient and reliable communication[7]. These will include the infrastructure,

services, bandwidth and portal equipment required to facilitate and support the services described. The data type is also defined at this stage. This ensures that there are no conflicts with other existing systems that provide the same services. Since the medium is undirected/boundary, the coverage infrastructure is simple airwave oriented. In other words, the signal is transmitted from the air to a target that can receive and send a similar signal.

II. Proposed System:

They cannot immediately protect attackers and protect their own safety in an emergency situation. The system is very useful for women and users in terms of security, just press and hold the volume up button for 5 seconds. The proposed system will prevent suspicious situations by giving pop-up messages on the device, and since it will run in the background, we will not need to open the application immediately[8]. When an emergency occurs, if the user presses the voice button for 5 seconds, the SOS system will activate and send a message with the user's location. Create an app where Android users can track multiple apps. This mobile phone uses GPS technology to determine the coordination of people in dangerous situations. Meanwhile, the system is divided into 2 modules: 1. The first module is the user device on which this application is installed; For example, the underlying device uses a 3G/2G data connection to track the victim's location via GPS. 2. The next mode is the content of the problem file, the people with whom the user wants to share their location, the content that needs to be close to the user, and the message with a URL link sent by the rooted device. victim's site[9]. Now the recipient can track the victim's location in real time by opening the URL link in the message. In addition, since a message containing the victim's location is sent from the user's smartphone every fifteen seconds, it becomes easier to communicate with the user, thus preventing errors. Block diagram:

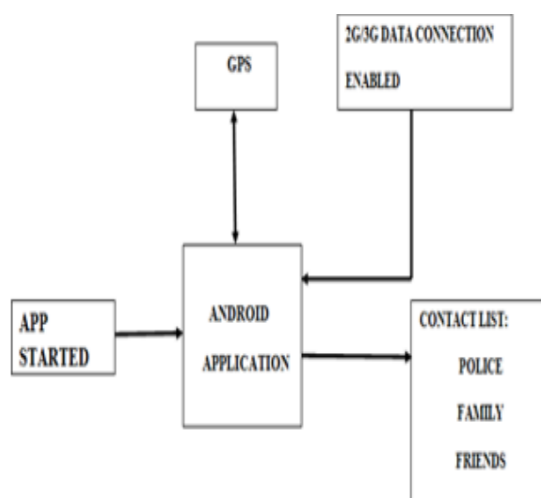


Fig.1. Block diagram of women safety System

Flow chart diagram:

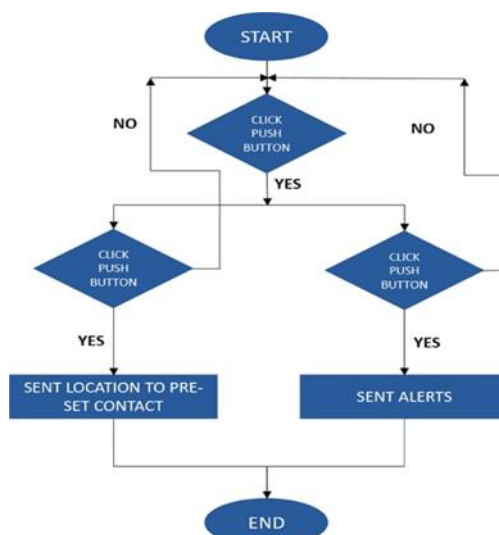


Fig.2. flow chart diagram of women safety device

III. Literature Survey:

1. "Safety of Women Using Smartwatches and CWS Apps" by A. Z. M. Tahmidul Kabir, Al Mamun Mizan, Tasnuva Tasneem, In this project, we are developing IoT devices and Android applications to make women's sports safer. Women can get fast support and maximum security by pressing the quick change button on the device. In case of an emergency, the device can instantly track the user's location and send it to nearby police and volunteers[10]. Users can also get the location of the safest area via the device. Moreover, the tool can work in both online and offline mode. Even if there is no internet, users will still be able to use the device to reach the nearest police station and get free assistance. Devices include Arduino nano, GPS, GSM, Bluetooth, etc. is available. Bringing all these elements together makes the device affordable and easy to navigate. Maximizing women's safety is the biggest concern of our project. For this reason, we produce projects with some features[11]. One of the main features of our system is that it can work in online and offline mode. In both cases, police and volunteers are near the user's location and will assist the user. On the other hand, the most important and unique feature of our application is that when the user encounters a problem[12], he will receive help from permanent staff and volunteers close to the users. App users will receive help faster, as the app can find volunteers at its discretion. We will add a time monitor and smart bracelet with a heart rate monitor and blood oxygen sensor so that the user can provide information about his or her body and his family can enjoy the convenience of obtaining this information.

2. Safety solutions for women using smart bracelets and CWS applications.

Women today are subjected to a lot of harassment and this is a growing concern. This problem is very serious even in developed or underdeveloped countries[13]. Therefore, it creates a great challenge for women's empowerment and capital development in the country. In this project, we are developing an IoT device and Android application to make sports safer for women. Women can get fast support and maximum security by pressing the quick change button on the device. In case of an emergency, the device can instantly track the user's location and send it to nearby police and volunteers[14]. Users can also get the location of the safest area via the device. Moreover, the tool can work in both online and offline mode. Even if there is no internet, users will still be able to use the device to reach the nearest police station and get free assistance.

3. Abhaya: an Android app for women's safety Ravi Sekhar Yarrabothu; Bramarambika Thota This article introduces Abhaya, an Android application for women's safety that can be launched with a single tap whenever necessary[15]. With a single click, the application detects the location of the location via GPS and sends a message with the location link to the registered number, making a call from the first registered number to help the right people who are abusing dangerous situations. In order to avoid errors, the safest road and the nearest police station should also be shown in addition to the specific location

IV. Implementation Methodology:

Modules List

Administration page includes login, register new police station, manage police details, create police station, update/delete police station, view all complaints, receive user SMS notifications (second story), view users location

Police page consists of Login, View Complaint, Update Complaint Status

Then user registration, login, new moderator - mobile number, update location, SOS button emergency, SMS alert supervisor, supervisor management, Locating near Police station, includes creating a complaint, my complaint attracted my attention. This project is an Android application that we need to install on our mobile phones[16]. A model will be seen as safe or bad, if we choose the one that is not good, a message (model) will be sent to the people we like and to our address.

Android SDK:

Android SDK is a program that creates applications to run on the device in the operating system. Google explains that "Android apps can be included using the SDK with the help of "Kotlin, Java, and C++." Any language or assembly language other than the Java virtual machine, such as "Go, JavaScript, C, C++" requires Java Virtual Machine Language Code (JVMLC) Various programming Their languages and tools allow us to use applications (for example Android and IOS).

Java Development Kit (JDK):

The Java Development Kit includes a private Java Virtual Machine and some other resources to complete the development of a Java App[17]. Because of the introduction of Java platform, it's been by far the most used Software Development Kit (SDK).

Android Studio:

Java Development Kit contains a Java virtual machine and some services to complete the Java Application. It has become the most widely used software development kit (SDK) since the inception of the Java platform.

Virtual Android Device:

Android Studio is an integrated development environment (IDE) for Android application development, designed specifically for Android development and based on IntelliJ IDEA. It can be downloaded from Windows, Mac-OS and Linux as operating systems. It is a powerful code editor and development tool. It provides many benefits when developing Android applications to provide automated testing services.

Virtual Android Device:

An Android Virtual Device (AVD) is a setup that identifies an Android smartphone, tablet, Wear-OS, Android-TV, or Automotive Operating System device of one's choice based on the emulator's capabilities. AVD admin interface can be developed by Android Studio and help create and manage AVD Women's Safety App and Security Project is a new mobile application designed to improve the safety and security of women in many times[18]. The app provides users with technology tools with great features to provide quick assistance in emergencies, share location information, and facilitate quick communication. Its three main points, including shared space, proximity to police for investigation and online complaint registration, offer solutions to women's safety issues.

V. Results And Discussions:

Use the app settings as soon as it opens on the user's device. It has a large number of subscribers and the user can choose who to send messages to. After entering the phone number, click "Save" to save the registered number in the Crisis Aware application. We have mentioned many Android applications that have similar functions to my application in the current system[19]. In all of these applications, the user's location, SMS, e-mail, etc. It is sent once to the registered number using various methods.

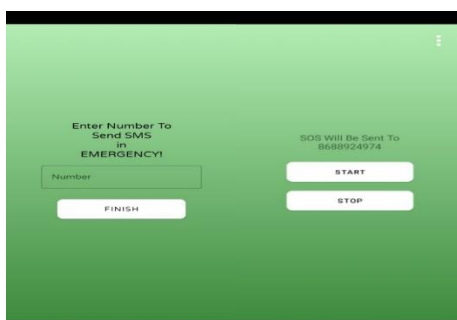


Fig.3. Login page Fig.4. Upload page

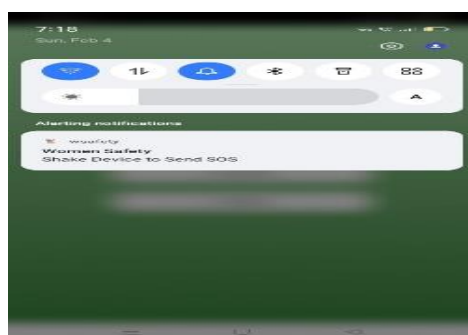


Fig.5. SOS alert

- Login: The main function in the application is the user login page. There is a login page behind the other modules. This module only fills the username and password.
- Registration: Users need to register their basic information to access this service application

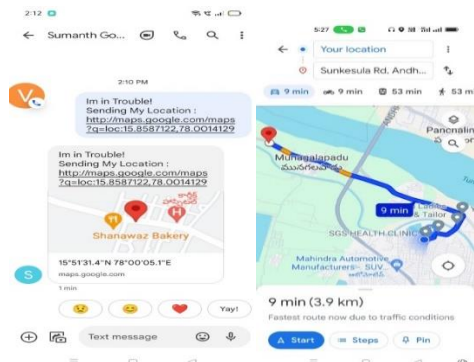


Fig.6. Alert SMS with location Fig. Live location tracking

Notification SMS image with location. Real-Time Location Tracking

- Change Geographic Location: User updates his current location at any time based on his latitude and longitude location.
- SOS Button – Emergency: If this happens, a message is sent to the operator's mobile phone and the user is given latitude and longitude information.
- Send SMS Alerts to Caregivers

However, in real scenarios, the user's location will change within a few minutes. The user will be on the move. So in all other applications, we can get the location once when the app is opened and we do not give the location when it is opened, but actually the user will not stop at the same place after some time[20]. A feature of our application is that location information will be sent continuously every five minutes until the "Stop" button in the application is pressed. Additionally, when a call comes to a phone number, sometimes people cannot read the message and may decide that it is a user problem by reminding them that they can see the received message.

VI. Advantages:

1. Quick response: One-button shortcut button and fast GPS can quickly locate in emergency situations, allowing users to get help in time.
2. Non-disclosure contact options: Adding a non-disclosure notice allows users to seek help silently, which is important in situations where speculation could lead to risk.
3. Real-time location tracking: GPS tracking continues to increase user safety by providing accurate, real-time location information to trusted contacts and emergency services.
4. Community support and collaboration: The community support center promotes unity among users and creates a network where people can support and help each other when needed.
5. Intelligent risk assessment: Intelligent risk assessment provides personalized security recommendations to help users make informed decisions based on time, location, historical data, and more.

VII. Conclusion:

In this article, we revealed violence awareness for the safety of women. The app helps track the user's location in real time. The good thing about this app is that it can effectively track users even if they move around the city or region; We can determine the address. In the future we will try to combine the application with a police database containing all phone numbers in the police district. It has uses such as rescuing the user when the mobile phone cannot be reached, after the first warning or after a power outage. This article analyzes the key requirements of intelligent security based on the needs and challenges of development. Since it is not possible to predict such situations in advance, our mobile application will be very useful to reduce them. It can help not only women but also children because it works with commands that children can easily operate. Men can also use it when they have serious problems and need help. It can be used not only in gender-related issues but also in situations where a person is faced with an accident, robbery or public assault. When someone is in danger, our body helps reduce the risk and make the world better and safer. We also plan to develop this application for Windows and IOS platforms so that more users can use our application, thus helping to protect more users from all kinds of bad situations.