

# WOMEN SAFETY WEB APPLICATION

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## ABSTRACT

Women's safety is a growing concern due to increasing harassment and violence cases in society. Existing systems often suffer from delayed response and lack real-time support. To address this, the proposed Women Safety Protection System provides a quick and reliable emergency platform with features like user registration and trusted emergency contacts. In emergencies, users can activate a panic button that sends instant alerts with live location using GPS. The system also supports live tracking, emergency calling, and notifying authorities. This improves response time, enhances communication, and ensures better personal safety through an easy-to-use web and mobile application.

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### 1. INTRODUCTION:

Women's safety has become an important concern due to the increasing cases of harassment and violence in society. Many existing systems are not effective because they lack quick response and real-time support. This project proposes a Women Safety Protection System that provides an easy and reliable solution for emergency situations. It allows users to send alerts and share their live location with trusted contacts using GPS technology. The main aim is to ensure quick help, improve communication, and enhance the safety of women.

### 2. LITERATURE SURVEY:

The table reviews several women safety systems developed using modern technologies. Singh et al. (2022) proposed a smart wearable safety device using IoT, GPS, and a microcontroller, which includes a panic button for instant alerts, but its high hardware cost is a drawback. Patel and Mehta (2023) designed a women security mobile application using Android and Google Maps API that enables live location sharing and voice recording, though it is limited to smartphone users only.

Khan et al. (2024) introduced an AI-based safety system that uses artificial intelligence and cloud computing to detect abnormal situations and send alerts automatically, but it requires continuous internet connectivity. Reddy and Lakshmi (2025) developed a web-based safety system with GPS that provides quick emergency alerts and real-time tracking, but its performance depends on battery life and network availability. Overall, these systems enhance safety using advanced technologies, yet they face common challenges like cost, internet

### 3. PROBLEM STATEMENT

Women's safety has become a critical issue due to the increasing incidents of harassment, violence, and insecurity in public and private spaces. In emergency situations, victims often face difficulties in seeking immediate help due to lack of quick communication channels, delayed response from authorities, and absence of real-time location sharing systems. Existing safety solutions are either not easily accessible or depend on external devices, making them less effective in urgent conditions.

Therefore, there is a need to develop a reliable and user-friendly Women Safety Web Application that enables users to quickly send emergency alerts along with real-time location to trusted contacts and authorities. The system should ensure fast response, easy accessibility, and continuous monitoring support to enhance personal safety and reduce risk during dangerous situations.

Therefore, there is a need to develop a reliable and user-friendly Women Safety Web Application that enables users to quickly send emergency alerts along with real-time location to trusted contacts and authorities. The system should ensure fast response, easy accessibility, and continuous monitoring support to enhance personal safety and reduce risk during dangerous situations.

The Women Safety Web Application enables users to send instant emergency alerts with real-time location sharing.

### 4. PROPOSED SYSTEM:

The proposed Women Safety Protection System is developed to provide immediate assistance to women during emergency situations. The system offers a simple

and user-friendly interface where users can register and store their personal details along with trusted emergency contacts. It is designed to be easily accessible through web or mobile platforms, making it convenient for users to operate at any time.

In case of danger, the user can activate a panic button that instantly sends alert messages to the registered contacts. Along with the alert, the system shares the user's real-time location using GPS technology, enabling quick tracking and faster help. Additional features such as live location tracking and emergency calling further enhance the effectiveness of the system.

The proposed system reduces dependency on complex hardware and focuses on providing a reliable and efficient solution. Its main aim is to minimize response time, improve communication, and ensure better safety for women. By using modern technology, the system helps in providing timely support and increasing confidence among users.

## 2. METHODOLOGY:

The Women Safety Web Application is developed using a structured methodology to ensure effective performance and reliability. The process begins with requirement analysis, where essential features such as user registration, emergency contacts, panic button, and real-time location tracking are identified. Based on these requirements, the system design is created, including the architecture, database schema, and user interface layout to ensure smooth interaction and data flow.

In the implementation phase, frontend technologies are used to develop a user-friendly web interface, while backend development manages authentication, data handling, and alert generation. GPS integration is used to capture and share real-time location during emergencies. The system is then tested under different emergency scenarios to ensure proper functioning of alerts, notifications, and tracking features. Finally, the application is deployed to provide continuous and reliable safety support for users, ensuring quick response during critical situations.

## 6. ALGORITHM:

- 1.Start the system.
2. Open the Women Safety Web Application.
- 3.Load the home/login page.
- 4.User registers or logs into the system.
- 5.Validate user credentials.
- 6.If valid, redirect it to dashboard.
- 7.Display user dashboard with safety features.
- 8.Allow user to add emergency contacts.
- 9.Store contacts in the database.
- 10.Enable location access (GPS).

- 11.Continuously track user location.
- 12.User clicks the panic button in emergency.
- 13.System captures current location.
14. Generate emergency alert message.
- 15.Attach live location link to alert.
- 16.Send alert to emergency contacts.
- 17.Notify nearby authorities (if integrated).
- 18.Activate continuous live tracking mode.
- 19.Update location in real time until safe.
- 20.End process when emergency is resolved.

## 7. RESULTS:

The Women Safety Web Application was successfully developed and tested to ensure proper functioning of all key features such as user registration, emergency contact management, panic button activation, and real-time location sharing. The system efficiently sends instant alerts without delay, ensuring quick communication between the user, trusted contacts, and authorities during emergencies. The application demonstrates an effective solution for enhancing women's safety by providing reliable and fast emergency support. With features like live tracking and instant notifications, it improves response time and increases user security. Overall, the system is user-friendly, efficient, and suitable for real-world safety applications.

**Login / Register Page**

**Women Safety Web Application**

**Login / Register**

**Login**

Email

Password

Login

Forgot Password?

**Register**

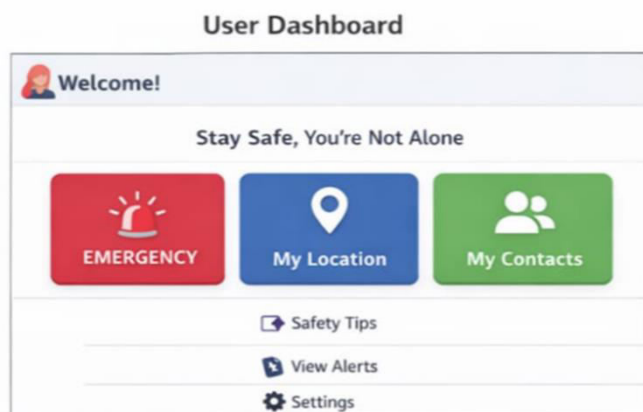
Name

Email

Phone

Register

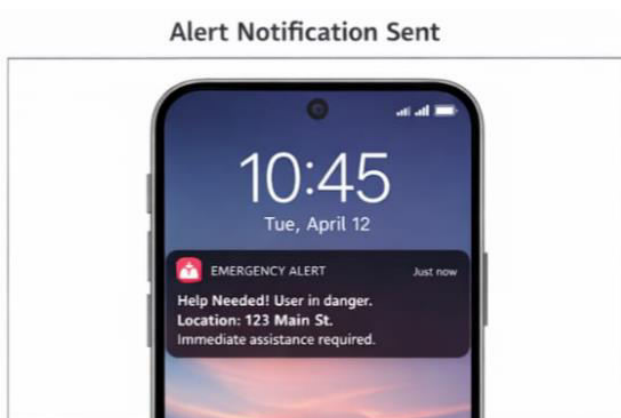
Users can register by providing basic details and emergency contacts. They can log in to access safety features like alerts and location tracking.



The user dashboard provides easy access to features like panic alerts, location tracking, and emergency contacts. It offers a simple interface for users to quickly manage and safety options



The emergency alert feature is activated by pressing the panic button during danger. It instantly sends alert messages along with the user's live location to emergency contacts.



Alert notification is sent instantly to the registered emergency contacts during an emergency. It includes the user's current location details to ensure quick and timely assistance.

## 8. CONCLUSION:

The Women Safety Web Application is an effective and reliable solution designed to enhance personal security for women in emergency situations. It provides essential features such as instant alert generation, real-time location sharing, and emergency contact notification, which help in reducing response time during critical incidents. The system ensures that users can quickly seek help with minimal effort.

The application successfully addresses the limitations of traditional safety methods by integrating web technology and GPS-based tracking. It improves communication between the victim, trusted contacts, and authorities, ensuring faster assistance. Its simple interface makes it accessible and easy to use for all users, even in stressful situations.

Overall, the project demonstrates how technology can be effectively used to improve safety and security. The system is efficient, user-friendly, and scalable for future enhancements such as mobile integration, AI-based threat detection, and voice activation features, making it a strong solution for women's protection.

## 9. FUTURE SCOPE:

The Women Safety Web Application has strong potential for further development with emerging technologies. Artificial Intelligence and Machine Learning can be integrated to detect unusual behavior patterns and automatically trigger emergency alerts, making the system more proactive and intelligent.

The application can also be upgraded into a fully functional mobile platform with features like offline SOS messaging, background location tracking, and battery-efficient GPS usage. This will ensure continuous safety support even in poor network conditions or remote areas. In addition, future enhancements can include integration with smart wearables, cloud-based emergency response systems, and direct connectivity with police and ambulance services. These upgrades will significantly improve response time, accuracy, and overall effectiveness of women's safety management.

It can also be integrated with mobile apps, wearables, and police systems for faster and more effective response.

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