

SCHOOL OF COMPUTATIONAL SCIENCE SWAMI RAMANAND TEERTH MARATHWADA UNIVERSITY NANDED (MAHARASHTRA) – 431606 YEAR 2024-25

"Women's Safety App – Ensuring Safety with Innovation"

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In partial fulfilment for the award of the degree of MSC (Computer Application & Science)

Guided by

Director

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Objectives

To develop a mobile application aimed at enhancing the safety and security of women by integrating features such as emergency contact management, real-time location sharing, SOS alerts, and other safety tools. This application aims to provide women with a reliable platform for immediate assistance and preventive safety measures.

Women's safety remains a significant concern in today's world. While technological advancements have improved communication and connectivity, there remains a need for specialized solutions that address women's safety concerns effectively. This project seeks to create a user-friendly, feature-rich mobile application that empowers women to stay safe, especially in emergency situations.

Abstract

Women's safety is a critical concern in today's world, requiring innovative solutions to address challenges faced by women in ensuring their personal security. This project proposes the development of a comprehensive Women's Safety Mobile Application designed to empower women by providing essential safety tools and features. The application functionalities such emergency includes managing as contacts, real-time location sharing, an SOS alert system, and safety tips. Leveraging modern technologies like GPS, APIs, and secure communication protocols, the app aims to ensure quick responses in emergencies and promote preventive safety measures. With a user-friendly interface and multilingual support, the app caters to diverse demographics and aims to instill confidence and peace of mind among women. This project not only focuses on immediate assistance but also on fostering awareness and preparedness, contributing to a safer environment for women worldwide.

Introduction

Women's safety remains a significant concern in today's world. While technological advancements have improved communication and connectivity, there remains a need for specialized solutions that address women's safety concerns effectively. This project seeks to create a user-friendly, feature-rich mobile application that empowers women to stay safe, especially in emergency situations.

Features of the Application:

1. Emergency Contacts Management:

- Pre-saved emergency contact numbers, including police, women's helpline, and trusted contacts.
- Option to add, edit, or remove personal emergency contacts.
- Quick dial feature for one-tap calling.

2. GPS Location Sharing:

- Real-time location fetching using GPS.
- Option to share live location with selected contacts via WhatsApp, email, or SMS.
- Integrated Google Maps link for accurate navigation and assistance.

3. SOS Alert System:

- One-touch SOS button to alert pre-selected emergency contacts.
- Automated message with live location sent to all emergency contacts.
- Audible alarm to draw attention in nearby areas.

4. Safety Advice Section:

- Tips and guidelines for staying safe in different scenarios.
- Regularly updated safety advice and articles.

5. User-Friendly Interface:

- Simple and intuitive design suitable for users of all ages.
- Accessibility features for users with disabilities.

6. Additional Features (Optional):

- Fake call functionality to help women escape uncomfortable situations.
- Integration with wearable devices for quick access to safety features.
- Multilingual support to cater to diverse user demographics.

Technical Overview

- Frontend Technologies: HTML, CSS
- Backend Technologies: Java Script
- Database: My Sql and Mongo DB database.
- **APIs and SDKs:** Google Maps API for location services.
- Security Measures:
 - End-to-end encryption for data sharing.
 - Secure login with multi-factor authentication.
 - GDPR-compliant data storage policies.

Expected Outcomes

- Enhanced sense of safety and security for women.
- Faster response times in emergency situations.
- Increased awareness about preventive safety measures.
- Widespread adoption of the app by women across various demographics.

Target Audience: The primary target audience includes women of all age groups, especially working professionals, students, and travelers. Secondary audiences include parents and guardians who wish to ensure the safety of their dependents.

Implementation Plan:

1. Requirement Gathering:

 Conduct surveys and focus groups to identify key safety concerns.

2. Design and Prototyping:

 Create wireframes and mockups for the application interface.

3. Development:

Build the app using agile development methodology.

4. **Testing:**

 Perform rigorous testing to ensure functionality, usability, and security.

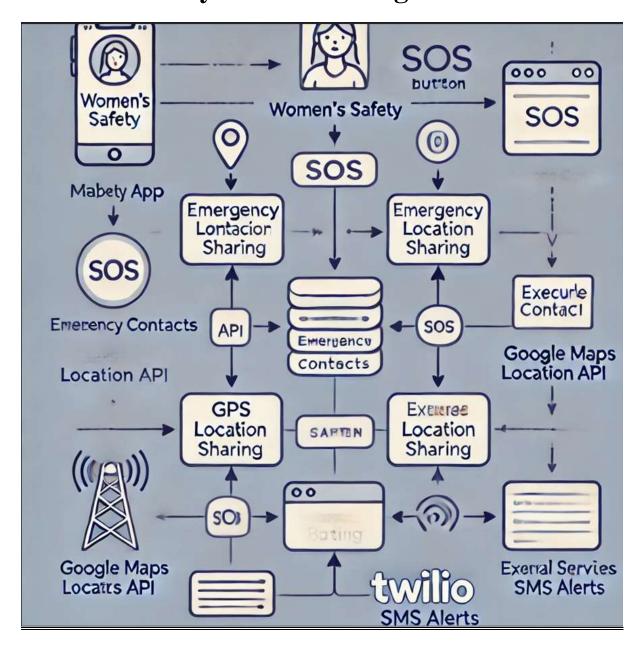
5. Deployment:

 Launch the app on Google Play Store and Apple App Store.

6. Marketing and Outreach:

 Promote the app through social media campaigns, workshops, and partnerships with NGOs and educational institutions.

System Flow Diagram



Project Timeline

Phase	Duration
Requirement Analysis	2 weeks
UI/UX Design	3 weeks
Development	6 weeks
Testing	2 weeks
Deployment	1 week
Total Duration	14 weeks

Conclusion

This Women's Safety App aims to provide an all-in-one solution for ensuring safety and peace of mind for women. By leveraging modern technology and user-centered design, the app seeks to make a positive impact on society by addressing a critical need for personal safety and security.

Team Members:

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