





INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

IN COMPUTER & COMMUNICATION ENGINEERING

Volume 11, Issue 12, December 2023



Impact Factor: 8.379









International Journal of Innovative Research in Computer and Communication Engineering



| e-ISSN: 2320-9801, p-ISSN: 2320-9798| www.ijircce.com | | Impact Factor: 8.379 | Monthly Peer Reviewed & Referred Journal |

|| Volume 11, Issue 12, December 2023 ||

| DOI: 10.15680/IJIRCCE.2023.1112012 |

We Safe: Enhancing Human Security App

Dr. Jyothi A P¹, Garima Swami², Kalash Nag³, Bindu Shree P⁴

Assistant Professor, Department of CSE, Faculty of Engineering and Technology, Ramaiah University of Applied Sciences, Bengaluru, Karnataka, India

U.G Student, Department of Computer Science, Faculty of Mathematical and Physical Sciences, Ramaiah University of Applied Sciences, Bengaluru, Karnataka, India

U.G Student, Department of Computer Science, Faculty of Mathematical and Physical Sciences, Ramaiah University of Applied Sciences, Bengaluru, Karnataka, India

U.G Student, Department of Computer Science, Faculty of Mathematical and Physical Sciences, Ramaiah University of Applied Sciences, Bengaluru, Karnataka, India

ABSTRACT: With increasing incidents of women's safety at risk, there have been increase in the number of women safety application, devices and measures and these are not just for women but in overall for human security and safety at best. This study proposes a novel method to track the victim by using the latest technology. Fake calls can be initiated in case of emergency and provide the alert messages to the closed ones of the victim. The project includes many more features which provides the security and the sense of safety for every human who finds themselves in a critical situation.

KEYWORDS: Human security, location tracking, Fake calls.

I. INTRODUCTION

Unfortunately, the times nowadays is not safe for anyone going out during night or day especially for women. According to the report of the World Health Organization (WHO), and the National Crime Records Bureau (NCRB), 35% of women all over the world are sadly facing a lot of unethical physical harassment. Also, human security has faced multifaceted challenges globally, jeopardizing the safety and stability of people across different regions. World is facing a serious situation with rise in extremism and terrorism which is a great concern for human security. Intolerance and lack of humanity are the main reasons for the increase in the recent rise of harassment and assaults cases globally.

Therefore, the need for human security devices and measures have increased exponentially. With every new innovation and feature the applications are getting better with the integration of latest technology. As the mobile device has become a very integral part of everyone's life it comes handy in critical situations. Mobile phones have become such important that without it nobody dares to leave their homes. We can use this situation to develop the mobile application that will be reliable, user friendly and easily accessible.

II. LITERATURE REVIEW

We researched on various market ready application for women's security and technologies being adapted for human security as well.

Proactive Safety: Designing & Implementing a Mobile Application by Erich H. Fruchtnicht, Leslie D. Lutz, John W. Fellers, Clay D. Hanks in which a survey was conducted on the mobile app which intended to provide safety measures to the people in campuses. The app achieves goals such as managing safety information, presenting consistent campus-specific details, and encouraging frequent user interaction with daily-use information. By incorporating feedback and collaborating with TAMUS safety departments, the HSC EHS team strives to empower users in handling diverse situations.

Outline of a Smart Safety Device for Women using IoT. Procedia Computer Science Volume 165, 2019, Pages 656662 by Wasim Akram, Mohit Jain, C. Sweetlin Hemalatha provided the survey on a safety device for women in critical situation.



e-ISSN: 2320-9801, p-ISSN: 2320-9798| www.ijircce.com | | Impact Factor: 8.379 | Monthly Peer Reviewed & Referred Journal |

|| Volume 11, Issue 12, December 2023 ||

| DOI: 10.15680/IJIRCCE.2023.1112012 |

features such as fingerprint recognition, a distress-triggered buzzer, and text message alerts to ensure effective security in stressful situations. The inclusion of a shockwave generator for self-defense adds a practical layer of protection.

Survey On Women Safety Using IOT by B. Sindhu Bala, M. Swetha, M. Tamilarasi and D. Vinodha provides a deep analysis on the usage of various technologies used nowadays aimed at ensuring women security. The current analysis suggests limitations in GPS, GSM, and sensor-based systems, primarily restricted to tracking nearby locations and sending alerts to limited contacts. To address this, a new automated safety system is proposed, aiming to enhance accuracy by detecting multiple physical parameters without human intervention, allowing for immediate alert messages during potential violations against women.

A Survey Paper on Android App for Women Safety by Kunal Kataria, Rushikesh Khade, Rohit Kurhade, Amit Pende, Prof. Sonal Chanderi aims to develop a user- friendly, reliable, and comprehensive safety application that empowers women to seek assistance efficiently during emergency situations. This article discusses the creation of the Android app "Security Alert" for women's protection, Future enhancements could integrate the app with law enforcement databases, potentially offering significant aid during emergencies when the device lacks network access. Overall, the app aims to provide crucial assistance in perilous situations for both women and men.

III. PROPOSED SYTEM

In this system, the stoner can set manly or womanish laugh admonitions as well as police enchantresses so that when they're in peril the admonitions will scream and the stoner can reach the people who can help them. They can also make a fake call with this system, and the call will be initiated for a nanosecond with the frequenter's name and number. The stoner can partake their current position with their family or musketeers who can help them by tracking their position. A link will be generated when the user turns their share location on and then the user can send that web link to anyone who can track them on Google Maps. The list of family members and friends will be displayed with their details to the user for quick access. When the user turns on the SOS feature and they shake their mobile more than phone five times an email or SMS will be sent to all friends from their lists with a location link. Additionally, a predefined default number, typically designated for emergency services such as the Police Station, is seamlessly integrated into the system to automatically receive the same distress message. In critical situations, users can record an audio message, and this recording can be accessed by their friends through a dedicated web page generated by the system. Furthermore, the Settings module allows users to personalize their emergency messages by choosing the preferred language for communication.

IV. PROJECT DESIGN

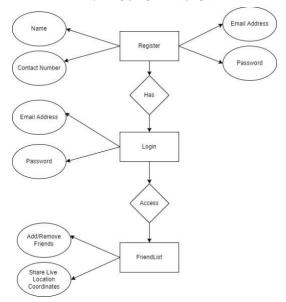


Fig. 1. The poject design of the proposed sytem.



| e-ISSN: 2320-9801, p-ISSN: 2320-9798| www.ijircce.com | |Impact Factor: 8.379 | Monthly Peer Reviewed & Referred Journal |

|| Volume 11, Issue 12, December 2023 ||

| DOI: 10.15680/IJIRCCE.2023.1112012 |

V. SEQUENCE DIAGRAM

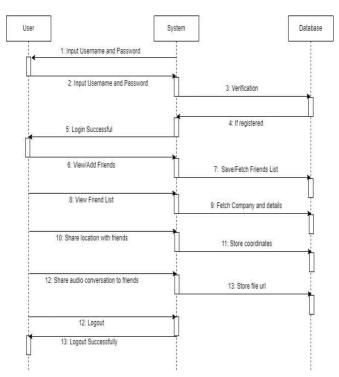


Fig. 2. Sequence diagram

VI. ACTIVITY DIAGRAM

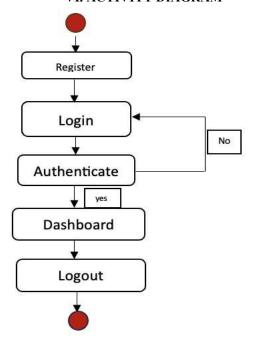


Fig. 3. Activity diagram



| e-ISSN: 2320-9801, p-ISSN: 2320-9798| www.ijircce.com | | Impact Factor: 8.379 | Monthly Peer Reviewed & Referred Journal |

|| Volume 11, Issue 12, December 2023 ||

| DOI: 10.15680/IJIRCCE.2023.1112012 |

VII. CLASS DIAGRAM

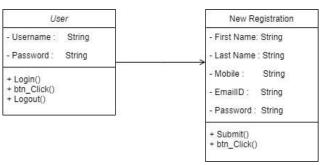


Fig. 4. Class diagram

VIII. DATA FLOW DIAGRAM(DFD'S)

A data flux illustration is like a visual storyteller for understanding how information moves within a system. It's the central storyteller that lays the foundation for everything else. Think of it as a guide that walks you through the journey of data, from where it begins to where it makes an impact. This journey, from input to outcome, can be logically explained without getting into the nitty-gritty of the physical aspects of the system. We affectionately call these logical data flux plates the narrative pieces that make sense of the data's journey.

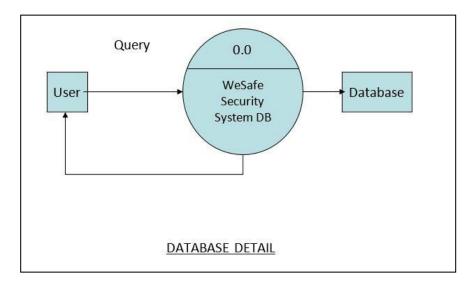


Fig. 5. Data Flow diagram

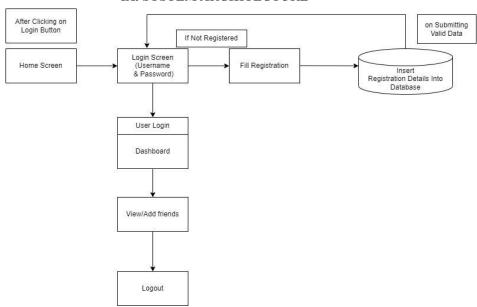


e-ISSN: 2320-9801, p-ISSN: 2320-9798| www.ijircce.com | | Impact Factor: 8.379 | Monthly Peer Reviewed & Referred Journal |

|| Volume 11, Issue 12, December 2023 ||

| DOI: 10.15680/IJIRCCE.2023.1112012 |

IX. SYSTEM ARCHITECTURE



A. This Project is implemented in Android Studio. The database we have used is SQL Server. it is better to use it.

X. IMPLEMENTATION

- B. Hardware Requirement
 - 1) Laptop or PC
 - a) MacOS Sierra and above (If Mac setup is required)
 - b) Windows 7 or higher
 - c) I3 processor system or higher
 - d) 8 GB RAM or higher
 - e) 100 GB ROM or higher 2) Android Phone (6.0 and above)
 - 3) iPhone (iOS 9 and above) (If iOS version needs to be checked)
- C. Software Requirement
 - 1) Laptop or PC
 - a) Android Studio with Flutter Plugin
 - b) XCode (Latest version) (If iOS version needs to be checked on Mac)
 - c) Azure Data Studio

The proposed system for enhanced safety incorporates various functionalities aimed at providing comprehensive support to users in distress. This system features customizable male/female scream alarms and police sirens for alerting help in dangerous situations. Additionally, it enables users to initiate simulated phone calls and share their live location via a generated web link on Google Maps with trusted contacts. A list displaying family and friends' details allows quick access, while an SOS feature, activated by shaking the phone, sends distress messages including location links to designated contacts and predefined emergency services. Users can also record audio messages for critical situations, accessible to their contacts through a dedicated web page. Moreover, a settings module allows users to personalize their emergency messages, including preferred language for communication. This comprehensive system requires robust backend development, integration with relevant APIs, intuitive user interface design, rigorous testing, and continuous improvement for optimal functionality and user safety.

International Journal of Innovative Research in Computer and Communication Engineering



| e-ISSN: 2320-9801, p-ISSN: 2320-9798| www.ijircce.com | |Impact Factor: 8.379 | Monthly Peer Reviewed & Referred Journal |

|| Volume 11, Issue 12, December 2023 ||

| DOI: 10.15680/IJIRCCE.2023.1112012 |

XI. CONCLUSION

The "WeSafe Security System with Scream Alert" project, developed using the Java programming language, signifies a significant effort and commitment from the team. Despite the challenges, the development process culminated in a system that brought a sense of fulfillment and satisfaction to everyone involved. Acknowledging the iterative nature of software development, it's understood that perfection is an elusive goal, and there's always room for improvement in applications. This project served as a valuable learning experience, providing insights and practical knowledge in the field of software development. The lessons learned and the skills acquired throughout this endeavor are expected to be beneficial in future projects, contributing to personal and professional growth within the development field. The team is optimistic that the efforts invested in this project will yield valuable outcomes and pave the way for further advancements and improvements in similar endeavors.

ACKNOWLEDGMNETS

We would like to express our sincere gratitude to several individuals whose support and guidance were invaluable in the completion of this research project. We would like to extend our deepest appreciation to our Mentor, Dr. Jyoti A P, whose unwavering encouragement, insightful feedback, and expertise significantly shaped the direction and quality of this study. Their dedication and mentorship were instrumental in every stage of this research

REFERENCES

- 1. A Survey Paper on Android App for Women Safety by Kunal Kataria, Rushikesh Khade, Rohit Kurhade, Amit Pende, Prof. Sonal Chanderi. International Journal of Research Publication and Reviews, Vol 3, no 11, pp 19051911 November 2022. https://ijrpr.com/uploads/V3ISSUE11/IJRPR8026.pdf
- 2. Proactive Safety: Designing & Implementing a Mobile Application by Erich H. Fruchtnicht, Leslie D. Lutz, John W. Fellers, Clay D. Hanks.

https://aeasseincludes.assp.org/professionalsafety/pastissues/059/08/037 042 F2Fru 0814Z.pdf

- 3. Design of a Smart Safety Device for Women using IoT, by Wasim Akram, Mohit Jain, C. Sweetlin Hemalatha, Procedia Computer Science, Volume 165,2019, Pages 656-662,ISSN 1877-0509, https://doi.org/10.1016/j.procs.2020.01.060. (https://doi.org/10.1016/j.procs.2020.01.060. (https://doi.org/10.1016/j.procs.2020.01.060.
- 4. Survey On Women Safety Using IOT by B. Sindhu Bala, M. Swetha, M. Tamilarasi and D. Vinodha. https://ijcert.org/ems/ijcert_papers/V5I201.pdf
- 5. A Survey on Smart Security Applications for Safety. Authors: Aayush Viswase, Akanksha Shelar, Ekant Mirje, Anupam Kumar, S M Shelke. https://www.ijraset.com/research-paper/smart-security-applications-for-safety





Impact Factor: 8.379







INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

IN COMPUTER & COMMUNICATION ENGINEERING







📵 9940 572 462 🔯 6381 907 438 🖂 ijircce@gmail.com

