Womens Safety App

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Abstract - Imagine you're a woman commuting back home late at night. You're in an unfamiliar area, and you're feeling a bit uneasy. You pull out your smartphone and open the Women Safety System Android app. Instantly, you share your real-time location with your close friends and family, so they can keep an eye on your journey.

You notice that the app suggests a safer route based on live data, helping you avoid potentially risky areas. As you walk, you come across an unexpected situation that makes you uncomfortable. With a single tap, you send an emergency alert to your trusted contacts, who receive your location and a distress signal, ensuring immediate assistance.

Moreover, the app provides you with useful tips on self-defense and safety, empowering you with the knowledge to protect yourself. This app becomes your trusted companion, helping you feel more secure and confident in navigating various situations.

Key Words: A one-touch feature that immediately alerts predefined contacts and shares the user's location for immediate assistance. This applications can use to recognizes current location message send to predefined numbers.

1. INTRODUCTION

Safety is a fundamental human right, and ensuring the safety of women is a societal obligation. Unfortunately, women continue to experience various forms of harassment, assault, and discrimination in different settings. In light of these challenges, it is crucial to harness the power of technology to create tools and solutions that enable women to protect themselves and access help when needed. Moreover, Women protection is still a serious issue in various countries like India. Gender ideologies in India have seen an improving sign among all people within the society in upbringing the social status of women in different workplaces and environments but the status of women security remains the same or has been worsened. So we develop a system who find the safest path for the women while she is going outdoors alone. And also we provide safety to that women when she is in the trouble or in the helpless condition, she can also notify the situation to the family members or to the nearest police stations.

1. Real-Time Supervised : Picture having an app that continuously tracks your real-time location and shares it with your trusted contacts. Whether you're walking home late at night or traveling to a new place, your friends and family can keep an eye on your safety.
2. Automated : Imagine that the app can automatically send alerts to your emergency contacts if it detects that you're in a potentially dangerous situation. If you stop moving for a prolonged period in an unusual location, the app steps in to ensure you're okay.
3. Manually Work Manage: You also have the power to manually send an SOS alert through the app with a single tap. Whether you're feeling threatened or need immediate help, you have the control to reach out for assistance whenever you need it.
4. Accessible : The app allows you and your trusted contacts to access and control safety features from anywhere using a mobile device with an internet connection. This means your support network can stay connected to you, even if they're miles away.
5. Safety Alerts: Picture receiving safety notifications directly on your phone. If you're approaching an area with a high risk of danger or if the app senses something unusual, it sends you alerts so you can take timely action.

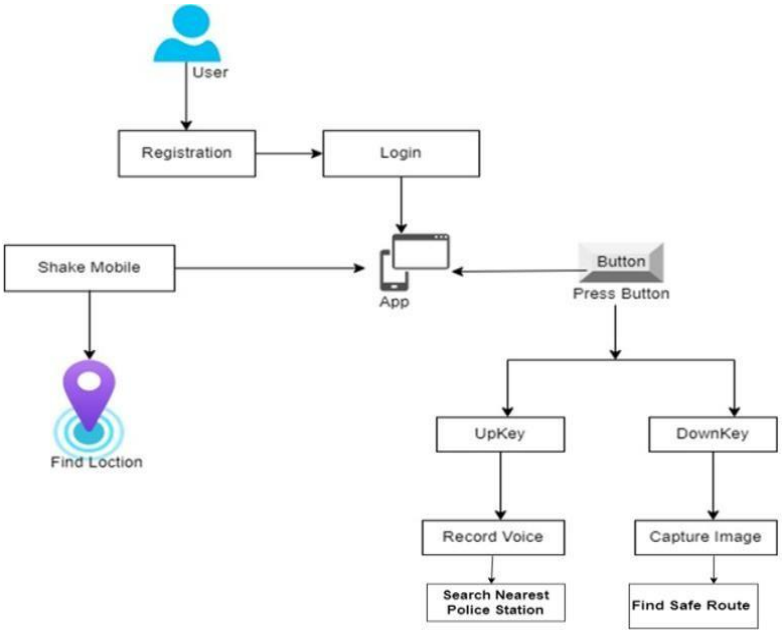
2. ANALYSIS MODEL:

The software development cycle is a combination of different phases such as designing, implementing and deploying the project. These different phases of the software development model are described in this section. The SDLC model for the project development can be understood using the following figure The chosen SDLC model is the waterfall model which is easy to follow and fits bests for the implementation of this project. Requirements Analysis: At this stage, the business requirements, definitions of use cases are studied and respective documentations are generated. Design: In this stage, the designs of the data models will be defined and different data preparation and analysis will be carried out.

Implementation: The actual development of the model will be carried out in this stage. Based on the data model designs and requirements from previous stages, appropriate algorithms, mathematical models and design patterns will be used to develop the agent's back-end and front-end components.

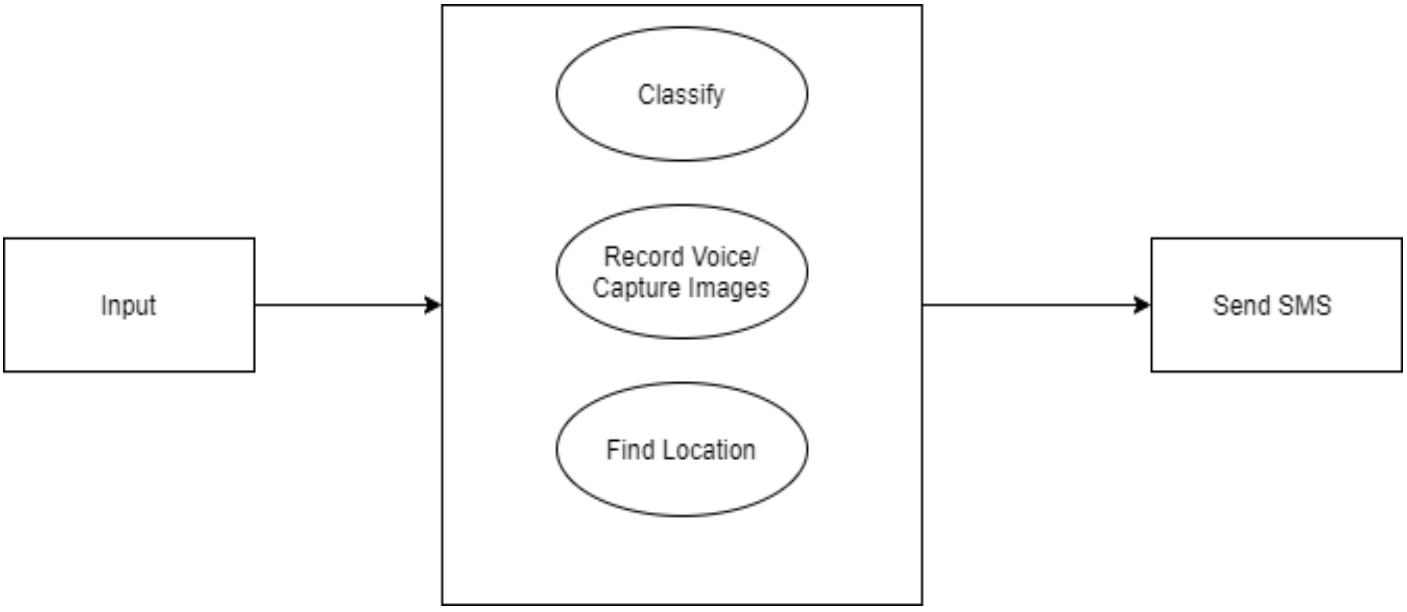
Testing: The developed model based on the previous stages will be tested in this stage. Various validation tests will be carried out over the trained model. Deployment: After the model is validated for its accuracy scores its ready to be deployed or used in simulated scenarios. Maintenance: During the use of the developed solution various inputs/scenarios will been countered by the model which might affect the models overall accuracy. Or with passing time the model might not fit the new business requirements. Thus, the model must be maintained often to keep its desired state of operation.

3. SYSTEM DESIGN :



4. DFD- 0 DIAGRAM :

5. DFD- 1 DIAGRAM :



6. ADVANTAGES OF THE PROPOSED SYSTEM

1. Quick Response: In emergencies, every second counts. The app's ability to send emergency alerts with a single tap ensures that help is on the way immediately. This can be a lifesaver in critical situations, allowing you to reach out for assistance quickly and easily.
2. Informed Decisions: Safe route planning helps you avoid potentially dangerous areas. By providing real-time data on safer routes, the app empowers you to make better choices about where to go, reducing the risk of encountering unsafe situations.
3. Support Network: The ability to share your location and send alerts to trusted contacts ensures that you're never truly alone. Your support network is just a tap away, ready to assist you whenever you need it.
4. Proactive Safety: Safety alerts keep you informed about potential risks, enabling you to take proactive measures to avoid danger. Being alerted to unsafe areas or unusual activities helps you stay one step ahead.

7. CONCLUSIONS

This project about the existing safety application for women and children and comes out with idea for making safe environment for women in the so ciety, and allows them to go anywhere fear free. and it help reducing the crime rate against the women.The Women Safety System Android project represents a significant step towards addressing the critical issue of women's safety and security in our society. Safety concerns, harassment, and violence against women continue to be pressing challenges that restrict their freedom and opportunities. In response to these issues, we have developed a mobile application that aims to empower women, enhance their personal safety, and provide access to crucial resources.

8. ACKNOWLEDGEMENT

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9. REFERENCES

- Ye Zhang,Asif Ali Laghari,Muhhammad,Rizwan Asif “Image processing based Proposed Drone For detecting and controlling street Crimes” 2017 IEEE 17th International Conference on Communication Technology (ICCT), 27-30 Oct.2017
- Amarjot Singh,Devendra Patil,S.N.Omkar “Eye in the Sky: Real-Time Drone Surveillance System(DSS) for violent Individuals Identification using Scatter Net Hybrid Deep Learning Network” 2018 IEEE/CVF Conference on computer Vision And Pattern Recognition Work
  shops(CVPRW), 18-22 June 2018.
- Margherita bonetto,Pavel Korshunov,Giovanni Ramponi,Touragj Ebrahimi “Privacy in Mini-Drone based video survelliance” 2015 IEEE International Conference on Image Processing (ICP),27-30 Sept.2015.
- Ya-ching chang,Hua-Tsung Chen,Jen-Hui Chuang,I-ChunLiao “Pedestrian Detection in Aerial Image using Vanishing Point Transformation and Deep Learning” 2018 25th IEEE International Conference on Image
  Processing (ICIP),7-10 Oct.2018