LIFECRAFT: AN ANDROID BASED APPLICATION SYSTEM FOR WOMEN SAFETY

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Abstract

Women have ensured the stability, progress and long-term development of the nations throughout the history. If women are subjected to violence and harassment, they cannot be genuinely included in society. With increasing heinous incidents involving women and children, an advanced system is needed to serve the purpose of getting help as soon as possible. At present time, the use of smartphones has increased rapidly, making it possible to use a smartphone efficiently for security or other protective purposes. All the recent atrocious incidents have made us think about to go for the safety issues. The crimes against women can be minimized with the help of our application "LifeCraft". It is an application for android for women's safety though men can also use it at a distress situation. It can be activated by voice command or SOS key. An alert message with location is sent to the user defined numbers in every five minutes until the system is turned off. Many cases remain mysterious due to insufficient evidence. So, we have kept audio recording option to keep evidence. Continuous location tracking, showing the victim safe zone, offline mode is some of the most useful features of this system.

1 Introduction

Ladies security is a significant issue in India just as other isn't safe for ladies to travel forlorn at 12 PM or pondering an obscure spot. There ought to help hand for ladies since they are not physically solid as men. As this time cell phone can be the closest companion of client and client can remain in contact with their cherished one whenever. Anyone needs to make a call or communicate something specific in crisis at whenever from anywhere. We introduces an app which ensures the safety of women. This helps to identify and SMS on resources to help the one out of dangerous situations. This reduce risk and bring assistance when we need it and help us to identify the location of the one in danger. The Android SDK gives the instruments and APIs used to create applications on the Android stage utilizing the java programming language. Ladies in crisis use voice-based contact list, they can work the application through voice and make the call when required. It permits sending short instant messages between cell phone gadgets. Voice acknowledgement is the fundamental procedure of this application.

2 Literature Survey

Paper Name : SURVEY ON WOMEN SAFETY DEVICES
Authors :Ramya K1, Vimal T2 .2020
Description: Today in the current global scenario, women feel less secure to go outside. They are facing so many consequences in this independent world. Here , we are focusing on as cenario where the women walking alone in there oadf aces harassment either front he front or back side during day or night time. To overcome these issues, we have developed a smart portable device which can track the current location of the victim. When they feel in secure , their heartbeat increases which can be measured by the pulse sensor and their stress level is monitored

Paper Name :Design of a Smart Safety Device for Women using IoT
AUTHORS :Wasim Akram, Mohit Jain,2019
Description: not safe anywhere and are most vulnerable when traveling alone into lonely roads and deserted places. Existing hand held safety devices for women require human intervention for activating the device such as pressing the button or shake the device etc. after sensing the danger. We propose a solution which will try to over come the disadvantages of the existing systems and also aim at providing false proof safety to women.

Paper Name : Analysis of Women Safety in Indian Cities Using Machine Learning on Tweets
AUTHORS : Deepak Kumar1, Shivani Aggarwal2 year-201
Description : Women and girls have been experiencing a lot of violence and harassment in public places in various cities starting from stalking and leading to sexual harassment or sexual assault. This research paper basically focuses on the role of social media in promoting the safety of women in Indian cities with special reference to the role of social media websites and applications including Twitter platform Facebook and Instagram.

Paper Name : Smart Shoe For Women Safety
AUTHORS : Vishesh Sharma, Yati Tomar, D. Vydeki
Description : The world needs to be concerned about the women around and treat them the way they deserve to be treated. Despite having so many laws for women, it doesn't stop thieves, assaulters or molesters to abuse women.

3 Proposed Work/System

Our system is designed such a way that it will be unique from other existing app by integrating all the features offered by those. The user needs to initialize the application by registering. User can login with the registered email and password. User has to put three contact numbers manually. They will be registered with the Firebase Database. Every time the user uses this application, she needs to start the app by turning on the On/Off button. Then the app will start working until the user turns it off. Whenever the user presses the SOS key or screams with the voice command the app will start its emergency service and will send alert message containing the user's name with the location to the registered contacts. The location will be sent in every 5 minutes to the contacts so that if the person changes his/her place, they can know about it and reaches out for help. Also there is a system of live streaming. When the user travels from one place to another, the registered contacts can watch his/her positions using Geofire. There is a system of audio recording. After getting the SOS command the system will start recording the surrounding for the first 5 minutes so that the user can use it later as a proof. By safe zone option user can see nearer police stations through map. Besides the emergency contacts, there is another option called emergency number which is country's helpline number. Whenever the application gets SOS command, it will make a call to that number which is toll free. The user needs to put that helpline number manually as we are planning this application for worldwide use.
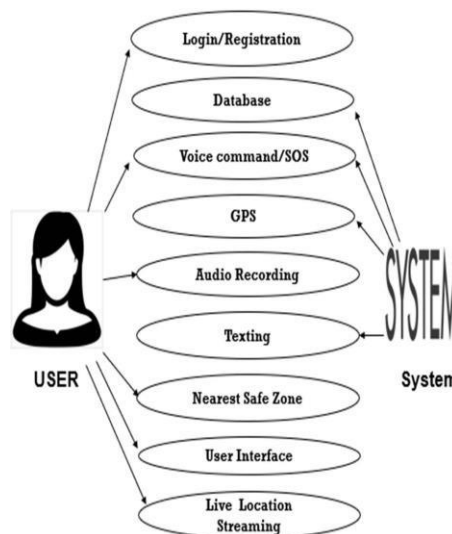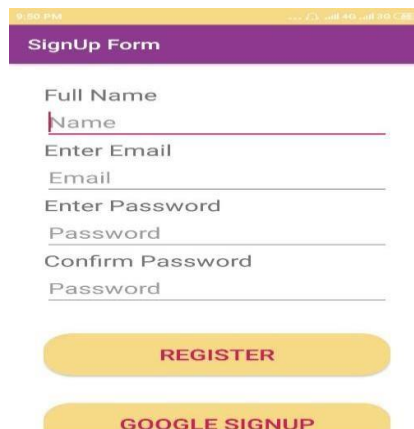

Fig 1: Use Case Model

3.1   Objectives

1. Prevention of Violence: The primary objective is to prevent incidents of violence against women by raising awareness, educating communities, and implementing preventive measures.

2. Emergency Response: Establishing effective emergency response systems and protocols to ensure timely assistance and support for women in distress.

3. Empowerment: Empowering women with knowledge, skills, and resources to protect themselves and access support services when needed**.**

4. Legal Support: Providing legal aid and assistance to women survivors of violence, including access to justice and support through legal proceedings.

 5. Community Engagement: Engaging communities in discussions and activities to challenge social norms and attitudes that perpetuate violence against women and promote gender equality.

6. Technology Solutions: Leveraging technology such as mobile apps, wearables, and digital platforms to enhance women's safety, including real-time tracking, SOS alerts, and reporting mechanisms.
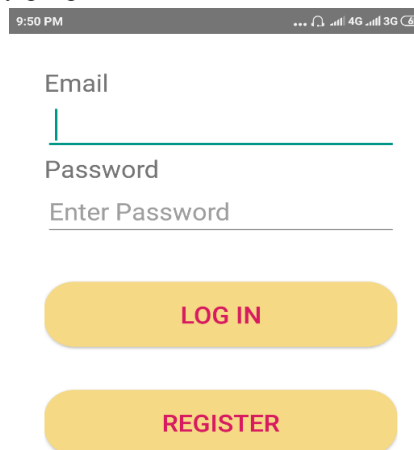
4 Result and Discussions

Here are some screenshots of the design of our proposed system by which our system can be more understandable.

Fig 2: Sign Up Form

Figure 2 represents the signup form of the application. After filling it, user details will be saved into the database. User can also register through any google account.
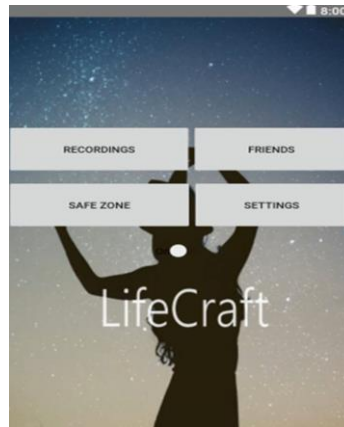

Fig 3: login Page

Fig 4: Screen shot of UI
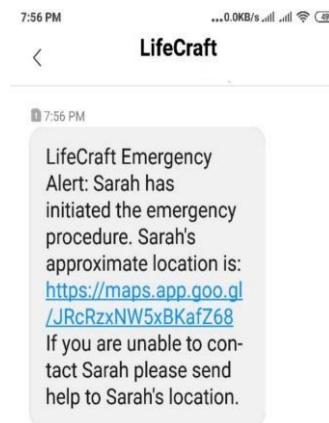

Fig 5: Alert Messasges

Fig 6: Google Map

5 Conclusion

This paper proposes a new women's safety model that aims to provide a very safe environment. Many unfortunate incidents took place in the case of women. Problems can come from anywhere. This paper analyzes the key needs of the intelligent security system with technology demand and system building challenges. Since the prediction of such incident is not possible hence to minimize it our proposed mobile application will be very helpful. It will not only help the women but also the children as it can work with voice command which is easy for a child to operate. And men can also use it when they face any big trouble and need help. Not only in sexual related problem, it can be used when someone faces accident or hijacking or public attack. Whenever anyone is in any kind of danger, our system will help to decrease the risk and make the world a better and safer place.

6 Reference

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