Panic Guardian Mobile Application

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Abstract

All over the arena, human beings are confronted with a number of catastrophic conditions, some of which might also occur overtly and a number of that are guy-made. In some situations humans die due to the fact they do no longer get the right remedy at the right time. In this case, the sufferer is complete of worry and unearths it hard to satisfy believers. Now if that is a massive trouble then the door itself. To help humans get out of these panic situations, we flip our device right into a phone and ship a customised message, message and modern-day region to the sufferer to a pre-selected list of contacts. , try turning off a button to address the state of affairs. Our SOS app allows people in panic to contact our friends they depend upon and get help with just one click.

Keywords: SOS Alert, Web Application, Security, Agile (Scrum), GPS location.

INTRODUCTION

In a generation of rapid technological development and more interconnectedness, SOS alerts have emerged as a beacon of hope and a image of powerful emergency response. In our rapid-paced lives, unexpected injuries are at the upward thrust, from scientific crises to natural screw ups and security threats. In times like those, the capacity to speedy get the care you need can suggest the distinction among lifestyles and demise. An SOS is a notification. A entire and advanced emergency manipulate platform meets this important mission and is at the forefront of present day emergency response systems.

In short, SOS indicators provide people the capacity to cause emergency indicators with remarkable speed and ease. With a click on or a gesture, customers can immediately hook up with the assist they need, be it medical, legal or various emergency offerings. This capacity is valuable in a diffusion of complex conditions, tracking simple responses speedy and successfully. Using modern-day GPS and geo location generation, the system pinpoints the user's vicinity, substantially improving the accuracy and velocity of emergency response.

But an SOS alert is greater than simply an emergency tool; this is a reaction that reflects a conventional barrier. Provides customers with reliable, interconnected network guide, permitting them to designate depended on notifications to get hold of actual-time notifications while an SOS signal is activated. This community provides an introduced layer of protection so that help continues even in cases where in the affected person cannot be reached. In addition, the system enables communique among clients and first responders, creating a channel through which essential statistics can be communicated, risk control and warnings can be furnished, and efficiency may be elevated. User protection and protection.

SOS alerts provide all protection related preventative measures thru protection delays, allowing clients to ensure their properly-being at some point of this time. If the person does now not respond, the tool routinely sends a signal to accept as true with contacts or assist, ensuring on the spot action anyways, even though the person is not able to take action. This device also serves as a effective beneficial aid. Provide customers with essential data such as first resource orders, emergency contact records and evacuation approaches. This information lets in customers to take a proactive stance to make certain their protection and preparedness.

Furthermore, SOS Alert is committed to maintaining the confidentiality and protection of facts as sensitive data and surrounding information are treated with utmost confidentiality and security. SOS indicators are available thru net get right of entry to and cell apps, and are to be had on multiple devices, from smartphones and capsules to computers. Users can personalize their emergency profiles, such as primary clinical facts, hypersensitive reactions, and special emergency instructions, offering first responders with the maximum vital statistics for effective care.

In short, SOS Alert is more than an emergency system; It stands for preparedness, instantaneous reaction and related support networks. In a state of affairs wherein surprises are usually a present, getting instantaneous assist and support could make the difference in lowering the impact of accidents and saving lives. SOS is a safety, a beacon, a parent of wish and a warning sign in a wandering international.

OBJECTIVE

The major purpose of the software is to offer protection to the person who is mentally aggrieved on the time of the situation; that scenario will be something, as an example, attack or theft. In case of an emergency, this app can be used to defend the man or woman with the aid of sending an SOS to the emergency contact and greater.

RELATED WORK

This technique to the problem has been particularly studied for 5 years through researchers and car groups in an try to find answers and answers with the aid of reading key driving force traits and growing precise types of distraction behavior.

Pratibha Sharma 1 [6], Android based real-time location tracking The gadget is designed for GPS primarily based location tracking A cell smartphone will update the current cell cellphone e GPS hunting sensor on cell telephone and paper by means of display From exercise, it's going to percentage actual-time location. The consumer prefers a given set of contacts for security functions Continue till the tool disconnects.

Recommended by way of Harini, Hemasree [3], MAS App for Women's Health Member's cutting-edge region on Android GPS device Share our cell with simply one click Live broadcast of the location to our mobile phone relied on people and It reminds us that we are at danger and maintains you in your ft. service to them. Acts as a slope to assist them cope situations

Haejung Yun, Dongho Han, Chong C. Lee[18] We recognize about the location of the device Uses person protocols in which there may be no area To percentage with everybody else, it should be organized for the user's privateness The room is modified most effective in emergency cases i.e. Selected contact.

Shaveda Bhatia, Saba Hilal[21], "A New Approach to Location Based Surveillance." In this technique, calculating the location of the tower to the nearest house calculates the distance from the signal tower to the cellular receiver. What is the appropriate path and signal for bus multiple towers in cellular Thanks to the recipient, the place can be searched.

Many smart devices and programs had been developed for protection functions. There are many clever devices and packages inside the marketplace; But this does not provide a beneficial solution. [1] Women are subjected to violations or denied simple human rights. Domestic violence has come to be a countrywide and global difficulty because of civil society struggles with girls's moves. [2] It generates a sign that the phone transmits. Software or app access to GPS and messaging offerings is pre-programmed in order that every time he gets an emergency sign, he can ask the nearest police station, relatives and close by people for help with place coordination. Who advantages [3] this article presents a new angle on technologies to enhance

women's health. "Every day 848 Indian girls are molested, abducted and killed!" [3] In this article, devices are configured to learn personal traits and temperature and coronary heart price, after which determine a threshold to cause an alarm. [4] To save you those crimes, we evolved a girl's safety device included in Arduino and GSM module with GPS to send emergency message with area and alarm. [5]

EXISTING SYSTEM

Scalability: As the SOS alert system person base grows, making sure that the platform can scale efficiently and manage huge numbers of users and indicators without performance degradation is a regular project.

User adoption: A not unusual problem is to inspire more users to continue using the SOS alert gadget. Raising recognition and instructing the general public about the advantages of this device may also stay a mission.

False alarms: Missing false alarms or by chance activating the SOS button is a frequent problem. False alarms can divert resources from actual emergencies.

Data Privacy and Security: As era evolves, so do the strategies and methods of ability attackers. The continuous advancement in statistics privacy and security features poses a prime assignment in defensive person data.

Cross-Platform Compatibility: Ensuring an SOS alert gadget works seamlessly throughout more than one devices and operating structures may be a challenge, especially with constant updates and changes in technology.

Emergency Services Integration: Integrating with emergency services and making sure SOS indicators are seamlessly included into your response structures can be complicated and requires ongoing collaboration.

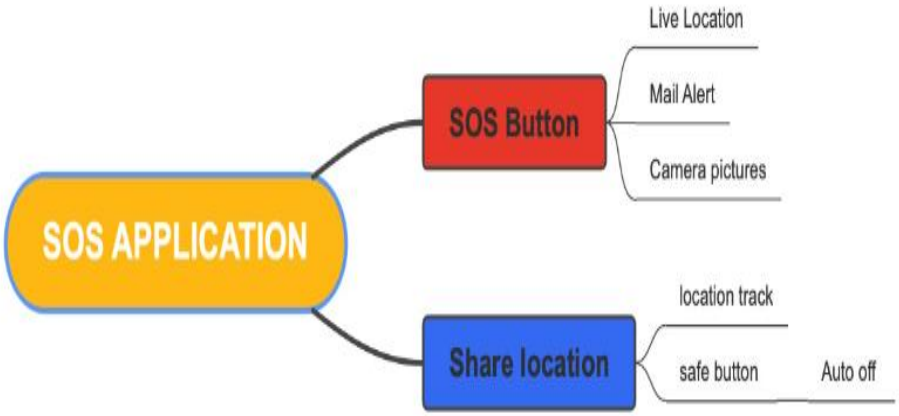
Localization and Internationalization: Adapting the device to distinctive areas, languages, and emergency response systems is an open trouble, specifically whilst thinking about cultural and linguistic range.

PROPOSED SYSTEM

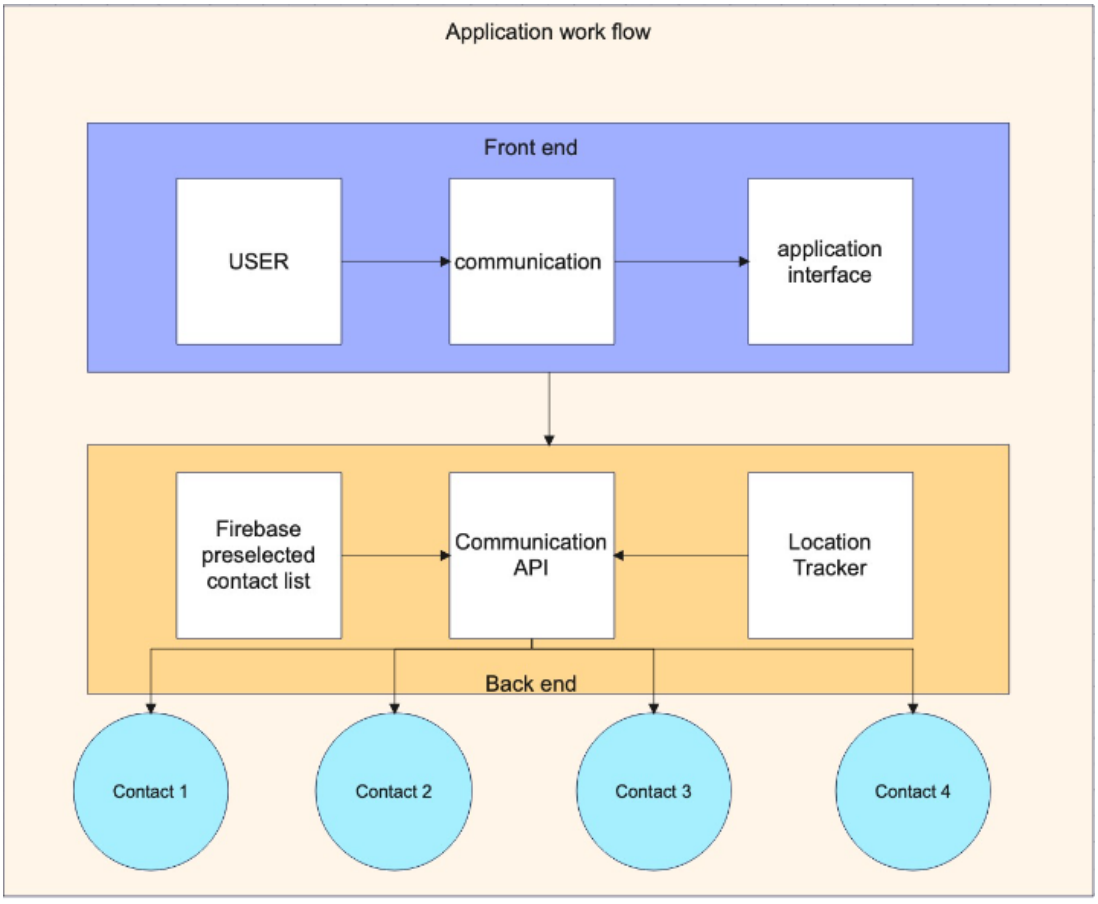
The proposed SOS Alert System is a comprehensive and superior emergency reaction platform designed to satisfy the urgent want for rapid and efficient crisis management in an unpredictable international. When emergencies, from scientific crises to herbal failures, can arise all of sudden and all of sudden, SOS alert systems provide a lifeline to people in distress. Basically, it allows users to prompt emergency signals with a click on or gesture, letting them instantly connect to assist in times of want. This feature is priceless in diverse disaster conditions, making sure that medical, regulation enforcement and emergency offerings are notified right now. Using GPS and geolocation generation, the machine pinpoints the consumer's place, facilitating quick response and help. SOS alert systems not only accelerate connections with emergency offerings, however also foster an interconnected assist community. Users can designate relied on contacts who acquire real-time notifications when an SOS alert is caused, ensuring there's continually a safety net even supposing the man or woman in misery is unable to talk. Two-way verbal exchange among users and first responders affords a channel to provide crucial facts, guidance and reassurance at some stage in emergencies, similarly improving consumer protection and well-being. Additionally, safety exams act as a proactive degree to verify consumer reputation at everyday periods, triggering computerized indicators to depend on contacts or emergency offerings. Method. A caution.

ARCHITECTURE DIAGRAM

The block diagram of the proposed machine is shown in the above figures. The camera captures the image of the person inside the vehicle and sends it to the HOG version for training and the use of facial context generation inside the pc to detect each facial function. The subsequent step within the system is whilst you start to stumble on the nation and circumstance of each feature,subsequent step of the method, you need to find out if he is abnormal, and then the computer robotically starts off evolved to understand whether or not the character is sleeping or not. Any of those characteristics, particularly eye and head posture/position, produce a siren sound. This is in which the very last judgment on the driver's condition, whether or not he's paying interest or being distracted, is available.



WORK FLOW



MODULES

Agile (Scrum) Methodology:

Rationale:

Flexibility: Given the crucial nature of emergency response, an SOS alert system is a complicated project. Agile lets in for flexibility and adaptableness, adapting to modifications in consumer needs and technological advances.

Iterative Development: An agile and incremental approach adapts well to the dynamic nature of the undertaking. This lets in you to constantly improve the gadget primarily based on person comments and evolving needs.

Stakeholder Engagement: Agile emphasizes collaboration with stakeholders, which include customers and emergency response businesses. This ensures that your expertise is incorporated all through the development process.

User-targeted: Agile emphasizes user stories and ideas, making it best for a system that objectives to improve consumer protection and well-being.

Efficient emergency response: SOS alert structures can also require a quick reaction to changing user desires or emergency conditions. Agile's rapid iterations permit green responses to those challenges**.**

Scrum Framework:

Roles: Define clear roles in the Scrum framework along with Product Owner (accountable for defining requirements and priorities), Scrum Master (chargeable for making sure the Scrum method is accompanied) and Development Team.

Sprint: Divide the undertaking into timed development cycles called "sprints". Each dash typically lasts 2-four weeks and creates a potentially exportable product increment.

Product Backlog: Create and maintain a product backlog, a prioritized listing of functions and consumer tales that permit for dynamic changes in necessities.

Sprint Planning: *At the start of every sprint, the group selects a hard and fast of user stories from the product backlog and commits to completing them in the course of the dash.*

Daily stand-ups: *Hold every day meetings to review development, limitations and plan the day's work.*

Sprint Review and Retrospective: At the cease of every dash, review Visualization of completed paintings and retrospectives to enhance the development manner.

SYSTEM REQUIREMENTS

Development Framework: Use React Native for move-platform cell app development, making sure compatibility with Android and iOS gadgets.

Geolocation Services: Leverage the device's geolocation services to allow real-time monitoring, area-based indicators, and direction making plans.

User Authentication – Implement a comfortable consumer authentication mechanism for Android and iOS devices to guard user money owed and facts.

Data encryption: Ensure that the facts sent among the cellular app and the server is encrypted to keep information safety.

Integrated Development Environments (IDEs): Developers want access to each iOS (Xcode) and Android (Android Studio) improvement environments to build and test apps, and Vcode is straightforward and easy to use for each iOS and Android. Android.

Backend Server and Database: Server Operating System: The backend server could be hosted on Microsoft Server as the desired running machine. This desire is made to make sure compatibility with the selected improvement tools and enterprise requirements.

Hardware Specifications: The notebook hosting the server need to meet the subsequent minimum hardware requirements: Memory (RAM): four GB or greater to make certain foremost device performance.

Processor: A processor with a frequency of 1.5 GHz or better can effectively take care of computer tactics.

Server Software: For server side development and scripting, the subsequent software program additives are required:

Backend Architecture – Specify the backend structure or technology layer you're the usage of for server improvement.

Integrated Development Environment (IDE) - Specify the favored integrated development surroundings to apply for server-aspect scripting. For example, you could use Visual Studio Code (VSCode).

Database Management System (DBMS): The machine integrates with the Firebase real-time database to enable real-time records synchronization and relaxed garage of consumer profiles, indicators and location information. Specify the Firefox Realtime Database version or description.

RESULT AND DISCUSSION

User Interface:

We have created UI using node js and angular js in which it shops map and sos and public placeholders.

Emergency Alert System:

When we press the SOS button, the computer acts as though it takes the region from the device, is going to the energetic place and sends the coordinates to them.

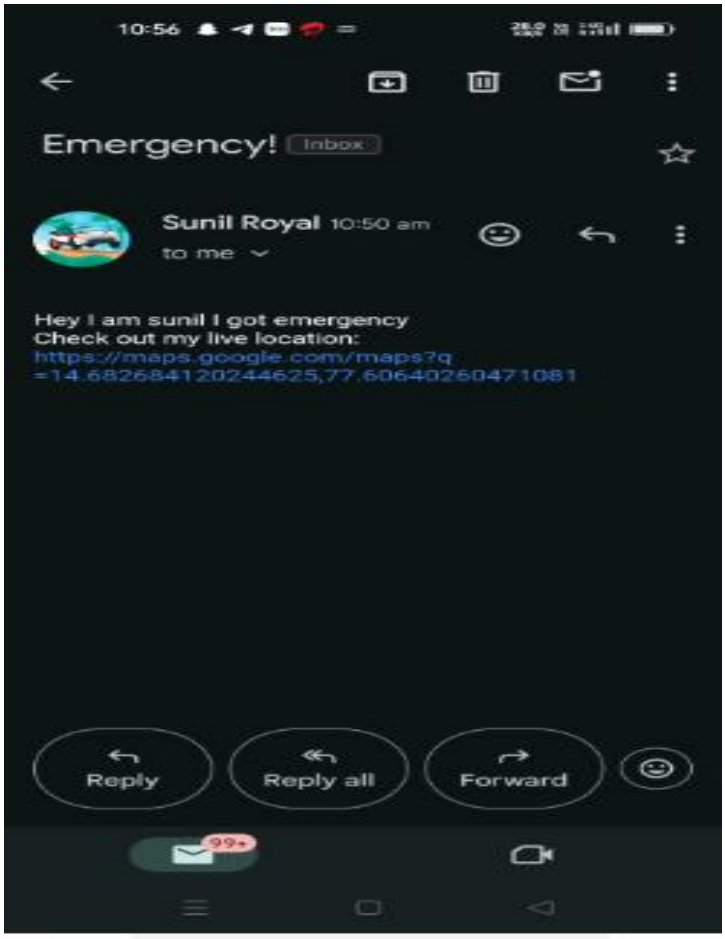
Local Religion:

To start the person, we've got taken the cutting-edge location the use of the man or woman app's mobile smartphone and only need to provide get right of entry to to the region in the app.

List of contacts:

When resetting applications, the person most effective desires to specify the touch info of the trusted party within the relevant field to ship alert messages.

The undertaking is a completely on-line version that updates the vicinity each three seconds and sends facts to the database to capture the location of the cellular cellphone and determine the region of the man or woman.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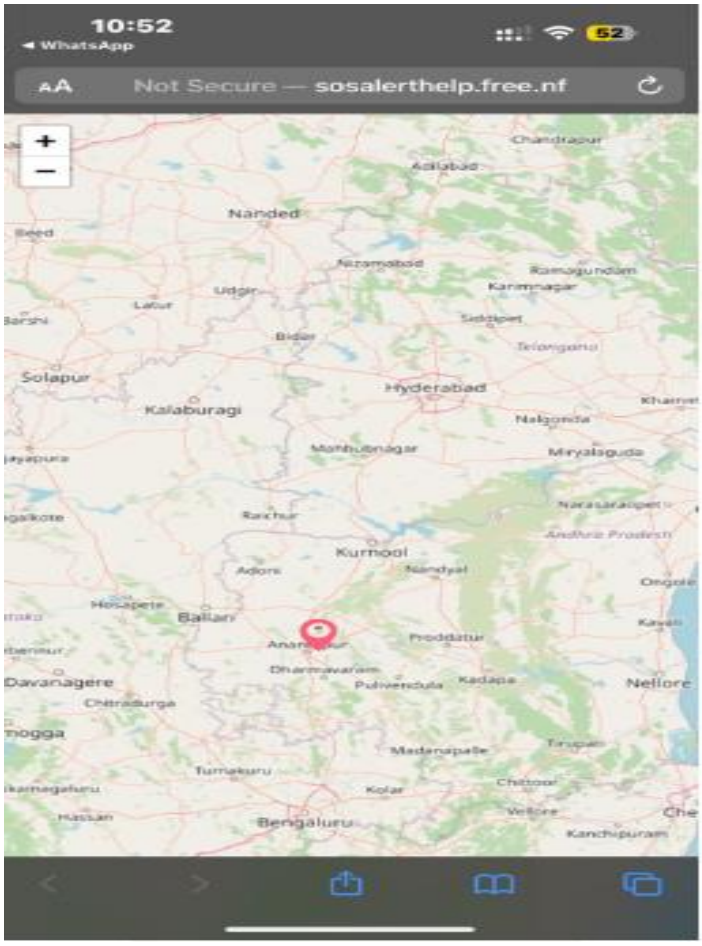
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Ballari
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Bengaluru
Nellore


Somanadoddi
Anantapur
Bukkar
Stop sharing
SOS

CONCLUSION

The transition from software improvement to implementation is a critical step in ensuring the success of an SOS alert gadget. The plan outlines the sports and responsibilities needed to make this transition smooth and green. This guarantees that the machine is operating optimally and ready to meet its important function in emergency response.

FUTURE ENHANCEMENT

The future intention of the sos app is to leverage the wi-fi sensors inside the automobile in emergency situations to robotically notify the police, close by hospitals and trusted contacts via contacting the app while an coincidence happens. Clearly are expecting what has been done, ship get right of entry to tothe view of the rear camera and the place of trusted elements

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