
A FEMALE SAFETY MOBILE APPLICATION: FEMSAPP

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ABSTRACT

Women's safety is also a priority of skyrocketing urgency in India and different countries. the primary issue in handling these cases by the police lies in constraints pre- emanation them from responding quickly to calls of distress. These constraints embrace not knowing the position of the crime and not knowing the crime is occurring at all: at the victim's end, reaching the police assuredly and discreetly is also a challenge. to help with removing those constraints, this project introduces Associate in Nursing associate application that has girls with a reliable thanks for putting associate emergency call. In today's world, people's use of smartphones has hyperbolic chop-chop, and hence, a smartphone are used with efficiency for personal security or varied different protection functions. The monstrous incident that indignant the entire nation has wakened the US to travel for the safety issues. Then many recent apps square measure developed to supply security systems for girls via their phones. The user can quickly and discreetly trigger the Image and Video capturing operation by pressing the amount up button. A message containing the user's geographical location, what is more as contact details of a pre-selected list of emergency contacts, is instantly sent to the chosen contacts

Keywords: Humanitarian Technology, Women's Safety, Smartphone Application, Android; Gps; Url; Registered Contact.

I. INTRODUCTION

Women square measure accomplished at mobilizing varied groups for frequent causes. they sometimes work across racial, sacred, opinionative, and intellectual divides to encourage tranquility. However, we tend to tend to ought to acknowledge that they have to be secured. a woman isn't loads of powerful than men physically throughout a crisis and wishes help to alleviate them. the foremost effective because of minimize the chances of fixing into a victim of a violent crime (robbery, statutory offence, rape, domestic violence). is to identify and switch resources to help you out of dangerous things. whether or not you're in instant hassle or got separated from friends throughout the night and don't acumen to induce home, having this app on your phone can diminish your risk and manufacture facilitate once you wish it. inside the light-weight of recent outrage during a metropolis, Hyderabad, Unnao, that barrel the state and woke North yankee country to the protection issues for our daughters, the general public is mechanical device upbeat in many ways that during which to fight back. These women's protection application is supposed to forestall crimes like associate degree assault against seizure and stalking. A report compiled by the world Health Organization in 2013 expressed that 35 you look after ladies worldwide had been victims of sexual violence. The National Crime Records Bureau of Asian nation reported that a woman is maltreated each three minutes. The police cannot facilitate, as data relating to the crime doesn't reach them in time, if at all. With the number of criminal acts towards ladies increasing at such Associate in appalling Nursing rate, it's evident that a method is required from the technical community to ameliorate matter

II. LITERATURE REVIEW

Paper 1 Topic: A Mobile Application for Women's Safety: WoSApp Author: Dhruv Chand, Sunil Nayak, Karthik Bhat, Shivani Parikh, Yuvraj Singh, Amita Ajith Kamath Year: 2015 This paper introduces a mobile application known as WoSApp (Women's Safety App) that gives ladies with a reliable thanks to place associate emergency decision to the police. The user will quickly and discreetly trigger the vocation perform by shaking her phone or by expressly interacting with the application's program via a straightforward press of a push button on the screen. A message containing the geographical location of the user, additionally as contact details of a pre-

selected list of emergency contacts, is instantly sent to the police. This paper describes the applying, its development, and its technical implementation.

Paper 2 Topic: M-WPS: Mobile-based ladies Protection System Author: Vallidevi Krishnamurthy, Saranya. S, Sharanya Srikanth, Simran Modi. Year: 2015 A hands-free and internet-free automaton application to assist ladies throughout threatening things has been developed. the assistance request containing the user's (woman in danger) GPS coordinates are then forwarded to a network of emergency contacts and police management rooms via SMS. in contrast to most mobile applications offered within the market, a voice-triggered alarm permits the user to need facilitate quickly. As future work, the applying may be enforced on different mobile platforms like iOS and Windows for a wider reach. tho' the applying is primarily meant for ladies, it's not restricted completely for them and may be utilized by males, females, and children alike.

Paper 3 Topic: Abhaya: associate automaton app for the security of girls Author: Ravi Sekhar yarrabothu, bramarambika Thota department of ECE vig- nan's university Year: 2015 This paper presents Abhaya, associate automaton Application for the security of girls, and this app may be activated by one click whenever the requirement arises. one click on this app identifies the place's location through GPS. It sends a message comprising this location uniform resource locator to the registered contacts and calls on the primary registered contact to assist in dangerous things. The distinctive feature of this application is to send the message to the registered contacts ceaselessly for each 5 minutes till the "stop" button within the application is clicked. Continuous location trailing info via SMS helps realize the victim's location quickly and may be saved safely.

Paper 4 Topic: Survey on women's safety mobile app development Author: Pavitra, Karthikeyan physics, and communications engineering PSNA school of engineering and technology Dindigul.

Year: 2015 The transportable application assumes a vital half everywhere the globe. to create up a conveyable application given the EPC stage. it's utilized to send a gift space through SMS. it's effectively adjustable. The client's requirement adds specific functionalities. It offers a assured and safe condition framework once contrasted and alternate advancements. the popular position is, it inclines that it will consequently send SMS notices and demonstrate the current space of the individual on the Google delineate. it'll diminish wrongdoings against ladies.

III. PROBLEM STATEMENT

Therefore, this project aims to effectively build a robust platform for women's empowerment in our society. We endeavored to achieve this by creating a mobile application named "FemSAPP (Or Any Name You Want)-Right to safety" Using Android, we will implement SMS sending, Image capturing, audio recording, Accessing GPS Locations. Through GPS, the current address of the one in danger is converted into SMS and can be sent to any contact depending on the user.

IV. OBJECTIVE

To develop an adaptive system for the End-users that support the system support features. It should be a highly secured authentication system. It maintains privileges among the set of users. The emergency alert feature activates with the user's command, and the system is protected after the alert process. The functionality will be transparent to the end-user and easy to use.

V. SYSTEM SPECIFICATION

1) SOFTWARE SPECIFICATION

Operating System: Windows 10, Android Studio, Front end: Java Programming, Android SDK 2.3, Back end: SQL-lite

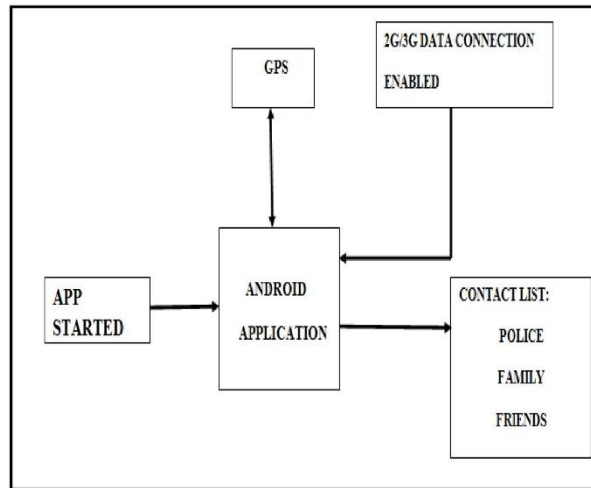
2) HARDWARE SPECIFICATION

4 CPU System, Having Clock Speed of 3.0GHz, 4GB RAM (Minimum Required for Desktop)

VI. SYSTEM ARCHITECTURE

A system design or systems design is the abstract model that defines the structure, behavior, and additional views of a system. Associate design description may be a formal description and illustration of a system, organized during a means that supports reasoning regarding the structures and behaviors of the system. The system architecture will include system parts, and therefore the subsystems developed that may work along to

implement the general system. There are efforts to formalize languages to explain system design, put together these area units known as design description languages (ADLs).



The project introduces a mobile application i.e. femsapp that provide women with a reliable way to place an emergency call to police. The user can discreetly press the volume button at twice by which the camera will capture an image of person and the voice recording will also start.

A link containing the GPS location of the user along with the image and voice recording will be sent to the preselected contact list.

VII. MODULE DESCRIPTION

- GPS Location Module
- Image Capturing Module
- Audio Capturing Module
- Notification Module

1. GPS Location Module

The location of the user is tracked. The location is sent in SMS in URL form. The URL is directed to G-Maps. Even then, the shortest path is detected. The exact location is detected quickly.

2. Image Capturing Module

After the function is triggered, Images from the front and back camera are captured. Also, the images are stored in the devices and the database. Along with this, these are backed up in the cloud. The SMS sent to the contacts also contains a link if images.

3. Audio Recording Module

After the function is triggered, audio is recorded. This audio is stored in the device and even in the database. Along with this, it is backed up in the cloud.

4. Notification Sending Module

An alert is generated, which is sent to all the other users. Also, this goes to the dashboard provided to securities.

VIII. ALGORITHMS DETAILS

1) Decision Tree

Decision Tree algorithmic rule belongs to the supervised learning algorithms. In contrast to different supervised learning algorithms, the choice tree algorithmic rule is also used to find regression and classification issues. The goal of employing a call Tree is to form a coaching model that will predict the category or worth of the target variable by learning easy call rules inferred from previous information (training data).

2) KNN algorithmic rule (K-Nearest-Neighbor)

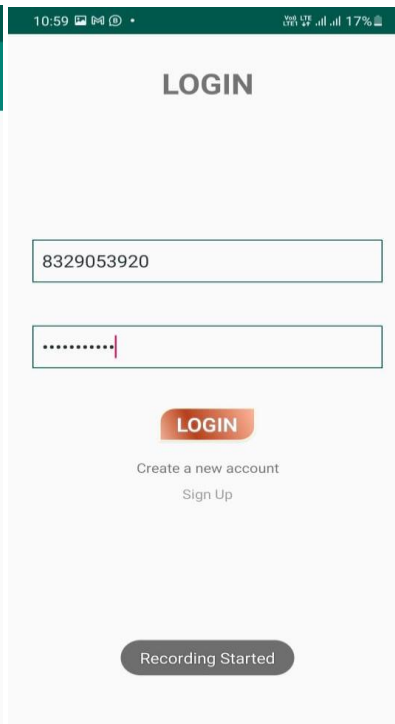
K-Nearest-Neighbor is employed in field pattern recognition. It learns by analogy, i.e., by comparison, a given take a look at tuple with coaching tuples area unit the same as it. The coaching tuples have n attributes, and each tuple represents a degree in n-dimensional house. All coaching tuple area units hold on in associate n-

dimensional pattern house-Nearest-Neighbor searches the pattern space for the k coaching tuple that area unit highest to the unknown takes a look at tuple. The k coaching tuple area unit is the k” nearest neighbor” of the unknown tuple. Closeness is outlined exploitation distance metrics like geometrician distance. The Manhattan (City block) distance or different distance measurements may be used. The formula is given below. Search out the geometrician distance between 2 points or tuples. Let. $Y1=y11, y12, y13 \dots y1n$ And. $Y2=y21, y22, y23, y2n$
Distance $(Y1, Y2) = (y11-y21)^2$

IX. RESULTS



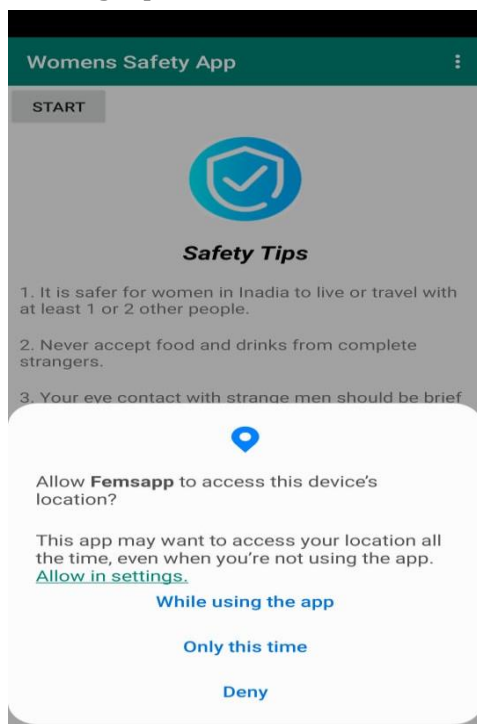
Signup



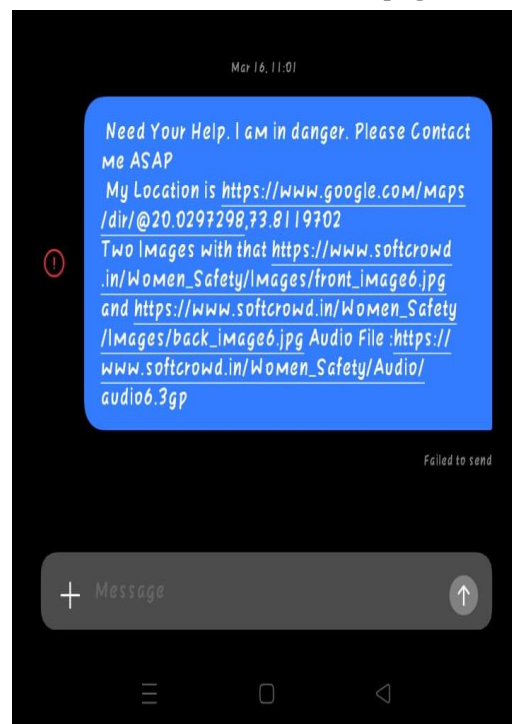
Login



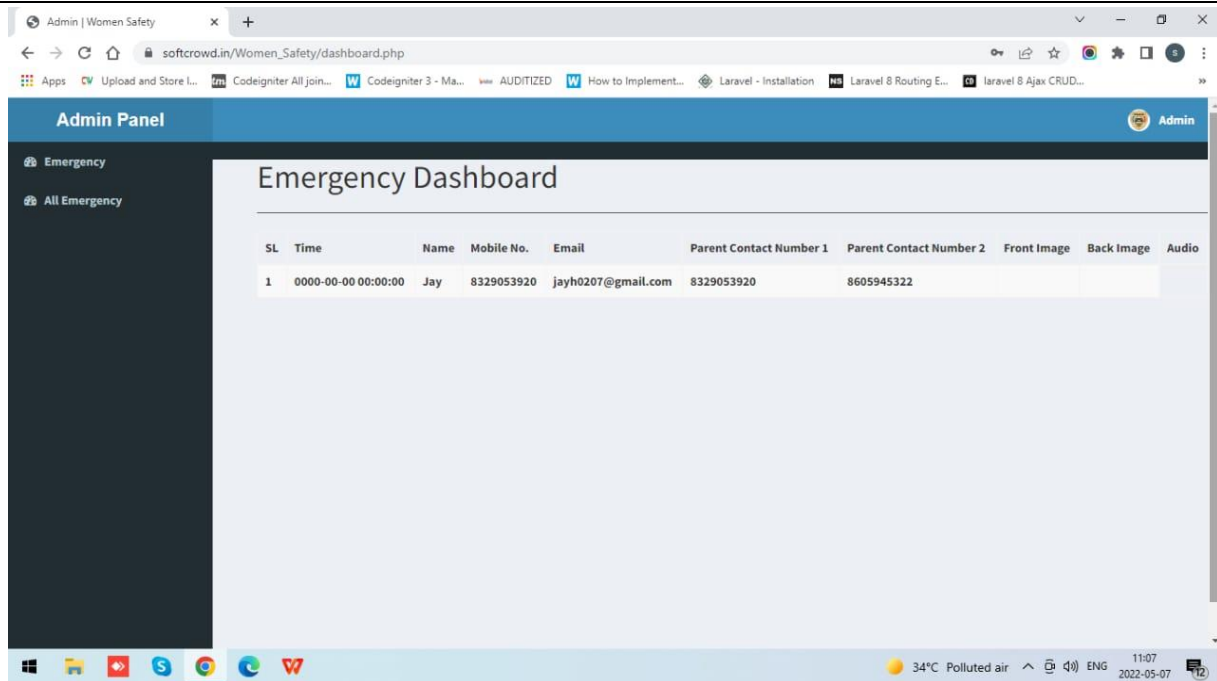
Homepage



Permissions Page



Message Result



Admin Panel

X. CONCLUSION

Our app is a straightforward method for a woman to place an emergency call when in a crisis. All the users should press the volume button twice on the phone. An emergency message containing her GPS coordinates and pre-selected emergency contacts is immediately and automatically sent to the police, after which a call to a dedicated police helpline is placed & the camera and voice recording will start. No user intervention is required whatsoever if it cannot be easily given. The police receive an audio alert, images & the location of the crisis is plotted on a Google Maps interface at their station.

XI. REFERENCES

- [1] National Crime Records Bureau (Ministry of Home Affairs), "Crime in India 2012 Statistics," Government of India Press, June 2013.
- [2] Dhruv Chand, M.; Sankaranarayanan, S.; Sharma, C., "Project Jagriti: Crowdsourced abuse news," International Humanitarian Technology Conference (GHTC), 2014 IEEE, vol., no., pp.609,613, 10-13 Oct. 2014 DOI: ten.1109/GHTC.2014.6970346
- [3] Jou-Chih Chang; Pi-Shih Wang; Kang-Hsuan Fan; Shih-Rong Yang; De-Yuan Su; Min-Shiung Lin; Min-Te Sun; Yu-Chee Tseng, "iMace: protective Females from Sexual and Violent Offenders during a Community via Smartphones," data processing Workshops (ICPPW), 2011 fortieth International Conference on, vol., no., pp.71,74, 13-16 Sept. 2011 DOI: ten.1109/ICPPW.2011.57
- [4] VithU: V Gumrah Initiative on the Google Play Store:
<https://play.google.com/store/apps/details?id=com.startv.gumrah>. Accessed 2015-06-01.
- [5] Nirbhaya: Be Fearless: <http://www.nirbhaya.mobi>. Accessed 2015-06-01.
- [6] International Labour Organization, 2012, "ILO international Estimate of Forced Labour: Results and Methodology," p. 14, Geneva.
- [7] F. Vanderschueren, 2000, "The hindrance of Urban Crime." Paper conferred at the Africities 2000 Summit, Windhoek, Namibia. Cited in UN-HABITAT, 2006, State of the Worlds Cities 2006/2007, p. 144, Nairobi.
- [8] Directorate-General for Employment, Industrial Relations, and Social Affairs, 1998, "Sexual harassment at the geographical point within the global organization," p. iii, Brussels, European Commission. Cited in U.N. General Assembly, 2006, "In-depth Study on All varieties of Violence against Women: Report of the Secretary-General," A/61/122/Add.1, p. 42, New York.

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- [9] James Martin. 1991. fast Application Development. Macmillan publication Co., Inc., Indianapolis, IN, USA.
- [10] PhoneGap: <http://phonegap.com>. Accessed 2015-06-01.
- [11] Red-Folder Background Service plugin to be used with Cordova (PhoneGap): <https://github.com/Red-Folder/Cordova-PluginBackgroundService>. Accessed 2015-06-01.
- [12] A. Gibson, A custom' shake event plugin for mobile net browsers victimisation device accelerometer: <https://github.com/alexgibson/shake.js>
- [13] Cross-platform plugin for Cordova/PhoneGap to send SMS: <https://github.com/cordova-sms/cordova-sms-plugin>. Accessed 2015-06-01
- [14] N. Bhardwaj and N. Aggarwal, "Design and Development of "Suraksha"-A ladies Safety," International Journal of knowledge & Computation Technology, vol. 4, no. 0974-2239, pp. 787-792, 2014.
- [15] Premkumar.P, Cibi Chakkaravarthi.R, Keerthana. M and Ravivarma. R'Sharmila.T, "One bit device For Women's Safety victimisation GSM," International Journal of Science, Technology & Management, vol. 04, no. 2394-1537, March 2015.
- [16] A. Wadhawane, A. Attar, P. Ghodke and P. Petkar, "IoT primarily based sensible System for Human Safety," International Journal of pc Applications, Vol. 179, No.7 , March, 2017.
- [17] S. B. Gadhe, G. Chinchansure, A. Kumar and M. Ojha, "Women Anti-Rape Belt," a global journal of advanced engineering, vol. 4, no. 2320-0790, April,2015.
- [18] IOT Reference Model, 04 June 2014. [Online]. Available:
- [19] http://cdn.iotwf.com/resources/72/IoT_Reference_Model_04_June_2014.pdf.
- [20] "Temperature sensors," [Online]. Available: http://www.coastalwiki.org/wiki/Temperature_sensors
- [21] "Heart rate sensors," [Online]. Available: https://en.wikipedia.org/wiki/Heart_rate_monitor. 1209
- [22] "Global positioning systems," [Online]. Available: https://en.wikipedia.org/wiki/GPS_navigation_device.