

BeSafe App

Shital P.Dhule¹, Amrapali H. Ambade², Pramita C. Kawade³, Jayashri W.Shiyale⁴, Pallavi.U.Uikey⁵, Chanchla Tripathi⁶

^{1,2,3,4,5}B.E Student ⁶Assistant Professor ^{1,2,3,4,5,6}Department of Computer Science & Engineering ^{1,2,3,4,5,6}Wainganga Collage Of Engineering & Management, Nagpur, India

ABSTRACT: In the current scenario the safety of persons is a major concern in India and other countries. The rising increase to provide safety of the persons is a major concern and challenge in front of the society. From the past many decades Individuals are facing much unethical physical and mental harassment which even leads to casualty. In the minds of every individual they feel comfortable when they are safe to move freely on the streets even in the odd hours. More accidents occur for women, children and elderly people who always feel that they need the support to move around. With the help of advanced technology individuals can make use of a simple gadget which can be used whenever they are in unpredictable circumstances to establish connectivity between police and family. The device designed is a portable one which can be activated as per the requirement of the individual which will locate the victim using GPS and with the help of GSM emergency messages can be sent to the respective locations as per the design. The gadget provides an alarm system, call for help, and electric shock to get rid of the attacker. The system provides safety for the person and makes them

Keyword: Android phone, GPS, GSM, SMS

1.INTRODUCTION

In world wise, the human having a many problem while many situation in modern world. This particular task of problem in environment not surely reduced because the lack of communication and time sequence in particular critical situation, so that situation not easy to find out problem of the spot and problem of the person. The safety of human is a concern of increasing urgency in India and other countries. The primary issue in the handling of these cases by the police lies in constraints. In human safety application, system is made for the security of human by developing a GPS which we can manage to take with us at anywhere. This security system provides the application like Location tracking of user, send location to emergency contacts and send notifications to the registered users. Here we introduces first user have to save some details. These details include: Email address and password of the user, Email address and mobile number of the recipient and a Text. preventing them from responding quickly to calls of distress. These constraints include not knowing the location of the crime,

and not knowing the crime is occurring at all: at the victim's end, reaching the police assuredly and



discreetly is a challenge. Proposed system is an attempt to provide human safety by enabling them to place an emergency service to the registered contacts quick, discreet way. The use of the application is divided into two systems: first is based on Electronic kit that is GPS and second is Android app +web portal, which output of SMS to emergency contacts and web portal, notification to Principle for over speed detection. an app which ensures the safety of women. This helps to identify and call on resources to help the one out of dangerous situations. This reduces risk and bring assistance when we need it and help us to identify the location of the one in danger. We recommend our app since it have some key features which diverse it from the Message. Then initialize this



app as a "widget", so that a finger touch is enough to alert your recipient others. They are quoted below: which includes details like latitude, longitude and altitude.

2.LITERATURE REVIEW

[1] Poonam Bhilare, Akshay Mohite, Dhanashri Kamble et .al [1] GPS and GSM based vehicle tracking .In this paper Author has proposed a system android application which is used to track the vehicle position women's. GPS device and specialized software to track the vehicles location as well as provide alerts and messages with an emergency button touch. The information of vehicle position provided by the device can be viewed on Google maps.

Our Finding: Here we are find that Vsecure application can overcome the principal restriction features of all available applications.

[2] Saleem Pasha, Kavana J, Mangala Gowri K R, Nischitha K.et.al [2] has proposed this application communicates the user's current location to the predefined registered user. The registered contact and GPS location are updated and saved in a database. Application communicates the user's current location to the predefined registered user's (receiver) contact.

Our Finding: By using a android phone to track the location of the victim and capture the images sent to the predefined Email of the receiver.

[3] Saranya J. and Selvakumar J.et.al [3] has proposed presents to improve anti-theft for android based mobile phones by using different services like MMS instead of SMS. As crime against children is increasing at higher rates, it is high time to offer safety support system for the children going to schools.

Our Finding: The device uses the GPS system to get the device co-ordinates.

[4] Pelekis, N., and Theodoridis.et.al [3] has proposed Easy Tracker, a mobile application developed for the Android O/S that enhe storage, analysis and map visualization of routes of mobile users.

Our Finding: when the human is in danger it can be intimated immediately to the emergency contacts.

3. MODULE DETAILS

1.User Login

New user will have to follow the process of registration. User have to register by filling their full name, valid email id, mobile number, alternate mobile number, gender, address and password. Password should be in sequence like character, number and special symbols. On registering user can login to another device also. Registration of a new user is allowed to login and then can able to press the HELP button successfully. Registered users can not register with the same credentials. User will have to register by using a mobile number along with the alternate number. During registration user will have to mention their gender whether user is male or female and also their address. Without registration user will unable to login the app. Once the registration is done user will be able to use this app in an efficient manner. Registration record will be stored in a database from where user can easily collect their data whenever they required.

2.Registration

New user will have to follow the process of registration. User have to register by filling their full name, valid email id, mobile number, alternate mobile number, gender, address and password. Password should be in sequence like character, number and special symbols. On registering user can login to another device also. Registration of a new user is allowed to login and then can able to press the HELP button successfully. Registered users can not register with the same credentials. User will have to register by using a mobile number along with the alternate number. During registration user will have to mention their gender whether user is male or female and also their address. Without



registration user will unable to login the app. Once the registration is done user will be able to use this app in an efficient manner. Registration record will be stored in a database from where user can easily collect their data whenever they required.

3.OTP:

The Time-based One-time Password Algorithm (TOTP) is an algorithm that computes a onetime password from a shared secret key and the current time. It has been adopted as Internet Engineering Task Force standard RFC 6238, is the cornerstone of Initiative For Open Authentication (OATH), and is used in a number of two-factor authentication systems.

TOTP is an example of a hash-based message authentication code(HMAC). It cartels a secret key with the current timestamp using a cryptographic hash function to generate a onetime password. Because network latency period and out-of-sync clocks can result in the password grosser having to try a range of possible times to authenticate against, the timestamp typically gaining in 30-second intervals, which thus shortened the possible search space. In a typical two-factor hallmark application, user authentication go on as follows: a user enters username and password into a website or other server, bring forth a one-time password for the server using TOTP running topically on a smart phone or other device and types that password into the server as well. The server then also runs TOTP to verify the entered one-time password. For this to work, the clocks of the user's device and the server need to be roughly synchronized (the server will typically accept one-time passwords generated from timestamps that differ by ± 1 time interval from the client's timestamp). A single secret key, to be used for all subsequent authentication sessions, must have been shared between the server and the user's device over a secure channel ahead of time. If some more steps are carried out, the user can also authenticate the server using TOTP.

4. SYSTEM ARCHITECHTURE



Fig2. System architecture of Be Safe With App

6. ADVANTAGES:

1. Flexible one: we can add number of emergency contacts. Removing and editing of contacts is also possible.

2. Low cost: There is no need to purchase this app, we can share from one android phone to other.

3. Easy coding & maintenance: Coding is simple and easy to understand while there is no need of maintenance.

© UNIVERSAL RESEARCH REPORTS | REFEREED | PEER REVIEWED ISSN : 2348 - 5612 | Volume : 05 , Issue : 03 | January – March 2018



4. GPS tracking feature tracks the user lively when you are the move after triggering the emergency button.

5. It is an all-in-one system, hence no need to carry multiple Devices.

7.SCREEN SHORTS



Fig.1 Home Page



Fig.2 Login Form



Fig.3 Create Account



Fig.4 OTP Sending Message



Fig.5 Check Latitude and Longitude

© UNIVERSAL RESEARCH REPORTS | REFEREED | PEER REVIEWED ISSN : 2348 - 5612 | Volume : 05 , Issue : 03 | January – March 2018





Fig.6 Menu Bar



Fig.7 Add Contact Number



Fig.8 Message Sending



Fig.9 Message Sent



Fif.11 Sending customized Message to the registered number





Fig.10 Direction towards victims Location 8. Conclusion

After successful execution of this APP can be used for NAGPUR as well as other cities. This app will definitely help to improve security of human. This app is simultaneously accessed from more than one cell. Simultaneous login from more than one place is tested. This app is user friendly so everyone can use easily. Proper documentation is provided. The end user can easily understand how the whole system is implemented by going through this app. With the help of Idea of this application many similar type of application can be made for social awareness. From this it is observe that system is able to developed the module of human security which is portable and compatible for android mobile phone which we can carry easily everywhere. In this way human can get security at her emergency just by using GPS and Android app+ web portal. GPS is used to capture human location. Thus with the help of this app you can take necessary precautions while moving to a neighbour, city or any other place. With this app, users can easy to intimate their problem of situation during any emergency.

REFERENCES

[1]. Dhruv Chand, Sunil Nayak, Karthik S. Bhat, Shivani Parikh, Yuvraj Singh, AmitaAjithKamath" A Mobile Application for Women's Safety: WoSApp" DOI:978- 1-4799-8641-5, IEEE 2015.

[2]. Remya George, AnjalyCherian.V, Annet Antony, HarshaSebestian, Mishal Antony, Rosemary Babu.T " An Intelligent Security System for Violence against Women in Public Places" International Journal of Engineering and Advanced Technology (IJEAT) ISSN: 2249 - 8958, Volume-3, Issue-4, April 2014.

[3]. BasavarajChougula1 ,ArchanaNaik , Monika Monu , PriyaPatil and Priyanka Das, "Smart Girls Security System" International Journal of Application or Innovation in Engineering & Management (IJAIEM), Volume 3, Issue 4, April 2014.

[4]. B.Vijaylashmi1, Renuka.S, PoojaChennur,

Sharangowda.Patil," Self Defense System For Women Safety With Location Tracking And SMS Alerting Through GSM Network", International Journal of Research in Engineering and Technology, Volume: 04 Special Issue: OS,NCATECS-2015,May-2015.

[5]. BharathSewa.com, 14 March, 2014, ALERT", https://play.google.com/store/app safetyapps/details?id=app.raksha&hl=en.

[6]. Android App Developed by Glympse Corp,28 january,2015 "GLYMPSE – SHARE GPS LOCATIO" https://www.glympse.com

[7]. ABC Mobile Learning 2014,"VANITHAALERT", Communication, 23 January,2014,"VANITHAALERT",

https://play.google.com/store/app a&hl=en s/details?id=org.sravan.ntv.save.vanitha&hl=en.

[8]. Android app developed by Think MPI Consulting Private Limited,29 September ,2014,"SECUREMEBETA",https://play.google.com/s tore/apps/details?id=com.thinkmpi.app.secure me&hl=en.

[9].Glenson Toney, Dr. FathimaJabeen, Puneeth S, "Design and Implementation of Safety Armband for Women and Children using ARMT' 2015 International Conference on Power and Advanced Control Engineering (ICPACE). IEEE 2015.

[10].Suganthi.J,UmareddyN.V,NitinAwasthi,"

Medical Alert Systems with TeleHealth& Telemedicine Monitoring using GSM and GPS Technology, IEEE Conference, Coimbatore, 2012.

[11]. May Z.B, "Real-time alert system for home surveillance", Control System, Computing and Engineering (ICCSCE), 2012 IEEE Conference Penang, IEEE 2012

[12]. Arunaganesan; J. Adhavan; G. Shivakanth Reddy; M. Venkatesan; Data acquisition system based on 8051 microcontroller for cutting tool temperature measurement; Computational Intelligence and Computing Research (ICCIC), 2013 IEEE International Conference; Enathi; 26-28 Dec. 2013;

[13]. Zaid Al-Amir; Firas Abdullah Al-Saidi; Hussein Abdulkadir; Design and implementation of RFID system; Systems, Signals and Devices, 2008. IEEE SSD 2008. 5th International MultiConference; Amman; 20-22 July 2008;

[14].Xiao-dan Wu; Yun-feng Wang; Jun-bo Bai; Haiyan Wang; Chao-Hsien Chu;RFID application challenges and risk analysis; Industrial Engineering and Engineering Management (IE&EM), 2010 IEEE 17Th International Conference; Xiamen; 29-31 Oct. 2010;pp. 1086 – 1090.



[15].Lei Yang; Jiannong Cao; Weiping Zhu; Shaojie Tang; Accurate and Efficient Object Tracking Based on Passive RFID; IEEE Transactions on Mobile Computing; Nov. 1 2015,pp. 2188 – 2200.

[16]. Allison J. Mercer; Ryan K. James; Gisele Bennett; Priyank Patel; Chase Johnston; James Cai;RFID testing and evaluation for an RF-harsh environment; RFID-Technologies and Applications (RFID-TA), 2011 IEEE International Conference ; Sitges; 15-16 Sept. 2011,

[17]. Jian Mi;Bunkyo;Yasutake Takahashi;Low cost design of HFband RFID system for mobile robot selflocalization based on multiple readers and tags, 2015 IEEE International Conference on Robotics and Biometrics (ROBIO), Zhuhai, 6-9 Dec. 2015

[18]. Po Yang; Wenyan Wu; Mansour Moniri; Claude C. Chibelushi; Efficient Object Localization Using Sparsely Distributed Passive RFID Tags, IEEE Transactions on Industrial Electronics; 29 November 2012

[19]. Zeydin Pala; Nihat Inanc; Smart Parking Applications Using RFID Technology; RFID Eurasia, 2007 1st Annual; Istanbul; 5-6 Sept. 2007

[20]. Meenakshi Sharma; Adil Siddiqui; RFID based mobiles: Next generation applications; Information Management and Engineering (ICIME), 2010 The 2nd IEEE International Conference ; Chengdu; 16-18 April 2010,

[21]. Android App Developed by Guar "GUARDLY", <u>https://www.guardly.com</u>

[22]. Android App Developed by Peop "STREET SAFE", <u>https://jezebel</u>

[23].Heena Gupta,Kalpana Gaur, Best Safety Apps for Women India,April04,2016.[

2016.[Online].Available:http://timesofindia.indiatimes .com/tech /7-best-women-safetyapps/photostory/51285625.cms.

[24]. Saranya, J., and Selvakumar, J., "Implementation of Children Tracking System on Android Mobile Terminals", IEEE International Conference on Communications and Signal Processing (ICCSP), pp.961-965, 2013.

[25]. THOOYAVAN V, "ADVANCED SECURITY SYSTEM FOR WOMEN", Department of ECE Vidyaa Vikas College of Engineering and Technology Vasai Thane India, Final year project, Serial number HEM 128 IEEE 2014 Project List under real time target surveillance system, slides share on www.slideshare.net, Jun 24, 2014

[26]. "A Car Test for the Estimation of GPS/INS Alignment Errors"Sinpyo Hong, Man Hyung Lee,

Senior Member, IEEE, Sun Hong Kwon, and Ho Hwan Chun IEEE TRANSACTIONS ON INTELLIGENT TRANSPORTATION SYSTEMS, VOL. 5, NO. 3, SEPTEMBER 2004.

[27].Dantu Sai Prashanth,Gautam Patel,Dr. B.Bharathi , "Research and development of a mobile based women safety application with real-time database and data-stream network"- 7/17/\$31.00 © 2017 IEEE

[28].Ravi Sekhar Yarrabothu,Bramarambika Thota, "ABHAYA: AN ANDROID APP FOR THE SAFETY OF WOMEN",6/15/\$31.00 ©2015 IEEE

[29]. Hock Beng Lim1, Di Ma1, Bang Wang1, Zbigniew Kalbarczyk2, Ravishankar K. Iyer2, "A Soldier Health Monitoring System for Military Applications",-8/10 \$26.00 © 2010 IEEE

[30]. Azeem Ush Shan Khan,Mohammad Naved Qureshi,"Anti-Theft Application for Adroid based Devices", 8/14/\$31.00 c 2014 IEEE

[31]. Jijesh J.J, 2 Suraj S, 3Dileep Reddy Bolla, 4 Sridhar N K, 5Dinesh Prasanna A "A Method For The Personal Safety In Real Scenario",-10226/16/\$31.00 ©2016 IEEE