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Smart Women Protection System Using IOT

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Abstract: Everyday every female irrespective of their age face lot of security issues while stepping out of the houses, in today's world women's safety has become one of the major problem Women have alwaysbeen vulnerable. Even with technology advancements, women are still unsafe anywhere. There are many places where they are vulnerable -including lonelyroads and abandoned places. In light of the current crime situation with women, a smart safety app based on the Internet of Things was suggested An IoT smart device that incorporates GPS, a panic button, a watch me button, and a web interface is used to provide the victim with her current location upon pressing a button.

I. INTRODUCTION

Currently, women are keeping up with men in every aspect of their life, but at the price of being abused, harassed, and brutalized by both men and women in public and in private. They cannot leave their homes at any time of the day, they cannot dress according to their own preferences. Due to the aforementioned factors, it is quite obvious that women in the country face a specific kind of stigma that not only erodes their sense of freedom, but also undermines their trust and dreams.

Although technological advancement has reached almost all facets of society, its benefits can now be utilized to address societal concerns by intelligently implementing current technology. In order to combat this fear-filled lifestyle, the Internet of Things (IoT) is being used as a tool to eliminate external objects that can be viewed online. An ever-growing network of physical objects with internet connectivity IP addresses, as well as their interactions with other internet-enabled devices and systems, is called the internet of things.

A typical Internet of Things (IoT) solution will offer advanced computer, network, and service connectivity that goes beyond machine-to-machine (M2M) communication and can address many different protocols, domains, and applications. By connecting embedded devices (including smart objects), automation can be implemented in almost all areas; advanced technologies, such as smart grids, can also be used to develop smart cities IoT (internet of things) is a relatively new phenomenon and it is in the process of rapidly evolving.

Traditionally, automation engineering has been understood as a field of control engineering dealing with a number of electronic and electrical components. In our day-to-day lives, wireless based industrial automation is a major concern. Applications can be built to collect and transmit data through a modem to a server. The process automation sector predicts that wireless technology will grow at a high pace. Instruments such as these are used for several things, including monitoring, controlling, supervising, and managing operation.

II. PROBLEM STATEMENT

Women are the subject of exploitation inside and outside the home say whether on roads, trains, cabs, schools etc.

Women occupy almost half the globe. But their survival has always been a question, when it comes to existence with honour and dignity. Women's empowerment in the country can be brought once their safety and security is ensuring, either it may be at home, publics places or during travelling.

III. RELATED WORK

B.Vijayalakshmi in [1] proposed a scheme to improve the women safety by using GPS and gsm model.A small device with a buzzer and microcontroller is designed, and it can be placed on band or watch. When any insecure situation, the woman can make use of this device to send alert SMS by pressing this buzzer to predefined numbers(5 members). But this scheme cannot generate automatic alert SMS. Instead, it requires the human interaction during a panic situation.

Rameshkumar.P in [2] described a scheme to identify the location of the individuals by using image metadata.A device GPS mapper is used to identify the location of a person using image and video by utilizing background metadata. With the help of GPS mapper, it can identify the altitude, longitude and position of a person who ha uploaded their images to social media. But this scheme cannot generate the image of a person who has not uploaded the image in the social media.

Charranzhou in [3] proposed a mechanism to find the trip ends while travelling or not - travelling by using the smartphones based on GPS tracking system. The author modelled a device using PR (Promoted Recall)technology and data-driven machine language to find the speed, distance, heading direction. These features are used to characterize the smart phone holders and identify the travel point identification. The author has tested PR technology in the random forest and accurately tracked the distance of trip ends This scheme will take many days to find the location of trip ends.

Jakuryamaekawa in [4] proposed a scheme to determine user's current location preference using user's coordinate point, user's location information is disclosed to external providers even if this is not user's wish. A local Wi-Fi network is used to detect a user's location privacy preference.This enables to save energy and protect a user's private location.The disadvantage is Wi-Fi won't be available at everywhere and will be limited in space.

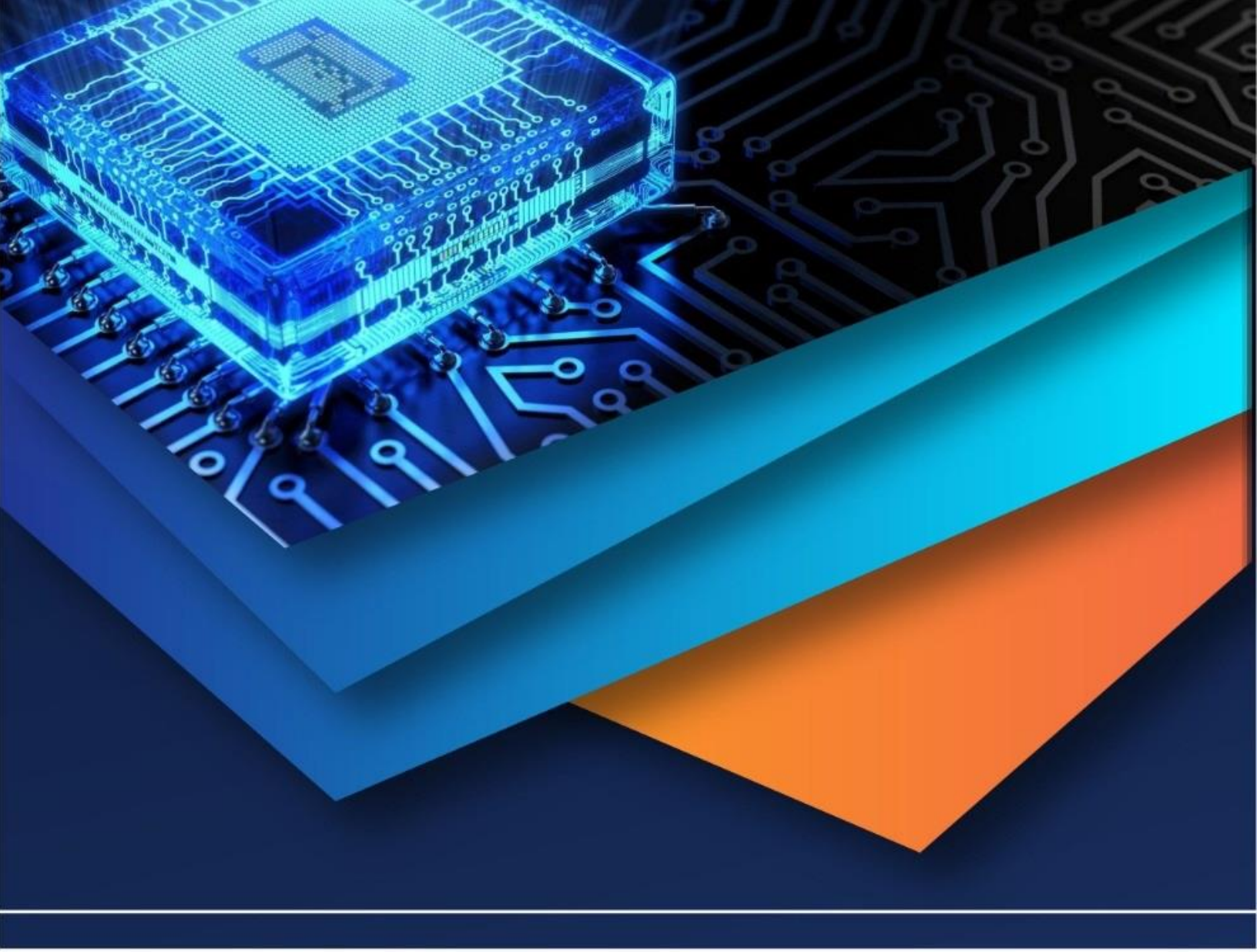
IV. CONCLUSION

The proposed design will deal with critical issues faced by women and will help to solve them with technologically sound equipment and ideas. The merit of this work is it not only provides safety and it also provides security by means of self-defense mechanism. The crime against the women can be now brought to an end with the help of real system implementation of the proposed model.

REFERENCES

[1] A.Priyadarshini, R.Thiyagarajan, V.Kumar, T.Radhu, "Women Empowerment towards developing India",IEEE Conference in Humanitarian Technology Conference,21-23 Dec 2016,Agra,India
[2] SomayyaMadakam,R. Ramaswamy,SiddharthTripathi,"Internet of Things(IoT): A Literature Review",Journal of Computer and Communications,Vol: 3,pp. 164-173,May 2015,Vihar Lake, Mumbai,India
[3] ShayanNalbandian,"A survey on Internet of Things:Applications and Challenges",International Congress on Technology,Communication and Knowledge(ICTCK),11- 12 Nov 2015,Masshad,Iran
[4] Raguvaran.K,J.Thiyagarajan,"Raspberry Pi based Global Industrial Process Monitoring through Wireless Communication",International Conference on Robotics,Automation,Control and Embedded Systems(RACE),18-20 Feb 2015,Chennai,India
[5] J.K.Thavil, V.P.Dhurdawale,P.S.Elake,"Study on Smart Security Technology for Women based on IoT",International Research Journal of Engineering and Technology(IRJET),Vol: 4, Issue: 02,Feb 2017
[6] GeethaPratyushaMiriyala,P.V.V.N.D.P.Sunil,RamyaSreeY allapalli,Vasantha Rama Lakshmi Pasam,TejaswiKondapalli,AnushaMiriyala,"Smart Intelligent Security Sytem for Women", International Journal of Electronics and Communication Engineering & Technology(IJECET),Vol: 7, Issue 2, March-April 2016, pp. 41–46,Andhra Pradesh,India
[7] A.Helen,M.FathimaFathila,R.Rijwana,Kalaiselvi V.K.G,"A Smart Watch for Women Security based on IoT Concept",2nd International Conference on Computing and Communications Technologies(ICCCT),23-24 Feb 2017,Chennai,India
[8] M.Thiyagarajan,ChaitanyaRavendra,"Integration in the Physical World in IoT using Android Mobile Application", International Conference on Green Computing and Internet of Things(ICGCIoT),8-10 Oct,2015
[9] NishantBhardwaj,NitishAggarwal,"Design and Development of "Suraksha"-A Women Safety Device,International Journal of Information & Computation Technology,Volume: 4,pp. 787-792
[10] AkashMoodbidri,HamidShahnasser,"Child Safety Wearable Device",International Conference on Information Networking(ICOIN),11-13 Jan,2017,Da Nang,Vietnam
[11] Saad Ahmed Akash, Md. Al-Zihad,TamalAdhikary, Md. AbdurRazzaque,ArifaSharmin,"HearMe: A Smart Mobile Application for Mitigating Women Harassment",International WIE Conference on Electrical and Computer Engineering(WIECON-ECE),19-21 Dec,2016,Pune,India
[12] D.G.Monisha,M.Monisha,G.Pavithra,R.Subhashini,"Women Safety Device and Application-FEMME",Indian Journal of Science and Technology,Vol 9(10),March 2016,Tamil Nadu,India
[13] Ravi SekharYarrabothu,BramarambikaThota,"Abhaya: An Android App for the Safety of Women",India Conference(INDICON),17-20 Dec 2015,New Delhi,India
[14] TakuKomura,RynsonW.H.Lan,MingC.Lin,AditiMajumde r,DineshManocha,Wei Wei Xu,"Virtual Reality Software and Technology",IEEE Computer Graphics and Applications,Volume: 35, Issue: 5, Sept.-Oct. 2015 Alam T., Tajammul M., Gupta R. (2022) Towards the Sustainable Development of Smart Cities Through Cloud Computing. In: Piuri V., Shaw R.N., Ghosh A., Islam R. (eds) AI and IoT for Smart City Applications. Studies in Computational Intelligence, vol 1002.
[15] Tajammul, M., Shaw R.N., Ghosh A., Parveen R. (2021) Error Detection Algorithm for Cloud Outsourced Big Data. In: Bansal J.C., Fung L.C.C., Simic M., Ghosh A. (eds) Advances in Applications of Data-Driven Computing. Advances in Intelligent Systems and Computing, vol 1319.
[16] Tajammul, M, Parveen, R., "Cloud Storage in Context of Amazon Web Services", International Journal of All Research Education and Scientific Methods, vol. 10, issue 01, pp. 442-446, 2021.
[17] Tajammul, M., Parveen, R., "Auto Encryption Algorithm for Uploading Data on Cloud Storage", BIJIT - BVICAM's International Journal of Information Technology, vol. 12, Issue 3, pp. 831-837, 2020.
[18] Tajammul, M., Parveen, R., "Key Generation Algorithm Coupled with DES for Securing Cloud Storage," International Journal of Engineering and Advanced Technology (IJEAT) ISSN: 2249-8958, Volume-8 Issue-5, June 2019 no. 5, pp. 1452–1458, 2019.
[19] Tajammul M., Parveen R., "Two Pass Multidimensional Key Generation and Encryption Algorithm for Data Storage Security in Cloud Computing", International Journal of Recent Technology in Engineering, Vol. 8, Issue-2, pp. 4152–4158, 2019.

[20] Tajammul M., Parveen R., “Algorithm for Document Integrity Testing Pre-Upload and Post- Download from Cloud Storage”, International Journal of Recent Technology in Engineering, Vol. 8, Issue-2S6, pp. 973–979, 2019.
[21] Tajammul, M., Parveen, R., “Auto Encryption Algorithm for Uploading Data on Cloud Storage”, BIJIT - BVICAM’s International Journal of Information Technology, vol. 12, Issue 3, pp. 831-837, 2020.
[22] Tajammul, M., Parveen, R., and M. Shahnawaz, “Cloud Computing Security Issues and Methods to Resolve: Review,” Journal of Basic Applied Engineering and Research, vol. 5, no. 7, pp. 545–550, 2018.
[23] Tajammul, M., Parveen, R., Delhi, N. (2018). Comparative Study of Big Ten Information Security Management System Standards, International Journal of Engineering Research in Computer Science and Engineering (IJERCSE) Vol 5, Issue 2, pp. 5-14, 2018.
[24] M. Tajammul, R. Parveen, N. K. Gaur and S. D, "Data Sensitive Algorithm Integrated with Compression Technique for Secured and Efficient Utilization of Cloud Storage," 2021 IEEE 4th International Conference on Computing, Power and Communication Technologies (GUCON), 2021, pp. 1-9, doi: 10.1109/GUCON50781.2021.9573648.
[25] Tajammul, M., Parveen, R., (2017). Comparative Analysis of Big Ten ISMS Standards and Their Effect on Cloud Computing, 978-1-5386-0627 8/17/31:00c2017IEEE; 9001; 362367.
[26] Tajammul, M., and R. Parveen, "To Carve out Private Cloud with Total Functionality," 2020 2nd International Conference on Advances in Computing, Communication Control and Networking (ICACCCN), 2020, pp. 831-835, doi: 10.1109/ICACCCN51052.2020.9362826.



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