

# Identifying the unauthorized user in e-government compliant system using valid proofs

Mekala T. <sup>1\*</sup>, Devakar B. <sup>1</sup>, Govindhasamy P. <sup>1</sup>, Nishkal Kanna B. <sup>1</sup>

<sup>1</sup> Assistant Professor/CSE1M.Kumarasamy College of Engineering, Karur

\*Corresponding author E-mail: mekalat.cse@mkce.ac.in

## Abstract

Citizens of our country face municipal complications like Street damage, Street cleaning, Garbage bin overflowing, light post damage, water outage etc. They started to register their complaints with advanced technologies. The complaint registration has many ways to file their complaints, it makes easier to register the complaint and saves our time. To solve these types of complications, we are going to implement a web application that helps the people to intimate about their issues directly to the government officer. So when the people identify any complications in the city's environment then, the government officer will solve the complications through his web portal. This will minimize time as well as money to go to an office for complaint registration. If the problem solved by those subjective then user will get the problem solved message. Otherwise, the problem will be again send to higher authorities to take action about it. The message alert will happen repeatedly until the problem gets solve. Only the authorized persons have the rights to create the account by using aadhar card etc.

**Keywords:** Street Damage; Street Cleaning; Garbage Bin Overflowing; Light Post Damage; Water Outage and Traffic; Web Application; Message Alert; Web Portal.

## 1. Introduction

In developing countries India is one of the country because of technology development. There is no direct communication between people to government. In India have lack of communication between people and government create a way for bribery. All the people are the complaint as a paper with their proof submit like a document. so document maintenance and storage are need a lot.

In olden days people are given their complaints as just a paper given authorized persons. so that documents are must be secured and stored in an individual storage area is needed. Any government employee are not yet to come and ask their complaint what they needed to changes need in their place. People are go and given their complaints to the authorized person. At that time also they would not be taken any action. Some authorized persons are not do their work in proper manner. Then documents are stored in a computer. so that all the complaints taken to store in a computer. Now a days in India all the works are done as a digitalized. But complaint system are does not makes any change. But if they have modern complaint system but they are not use their system [19-29].

The complaint was valuable feedback for improvement the infrastructure of the city and village. The people have complaint and opinion about the environment and infrastructure of the city. Nowadays the people want to give the complaint the follow so much of rule and regulation and it undergo lengthy process like the people going to the government office, stand in queue and waste so much of valuable time and effort. Now days many of the use the mobile and computers. So our project is provide the online approach to give their complaint to municipality officer. So the project is provide the better

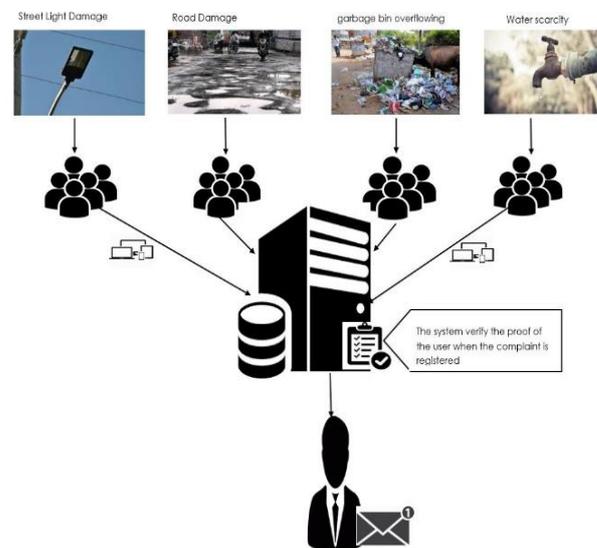


Fig. 1: System Architecture.

Communication with officers. In our system, we are going to implement the give the complaint without the paper document. The complaint was fully digitalized and documents are used as softcopy. So we are going to implement as a web application because the web application is used all the systems and mobiles. In this online complaint portal, the people give the complaint about the issues like street damage, water scarcity, street light damage and etc. When the complaint registered is this portal the complaint was sent to particular officer mail ID and notification with the complaint address. So the complaint is easily seen by officer. The complaint not solved in

particular time the complaint if forwarded to higher officer. The officer update the status of the complaint after solved.

## 2. Literature review

Grievance Registration on Mobile Application under Smart City Project

In our country, [2] citizens are facing so many social complication like street damage, street cleaning, garbage bin overflowing, light post damage, water outage and traffic etc. There are several ways to file the complaints with the help of advanced technologies. In this paper, it presents the construction of a GPS based Complaint Redressed System. The complaint can be registered through the Android mobile application. GPS sensor in smart mobiles is used to determine the exact location of the complaint as a visual proof like photo, video. The visual proof of problematic place, take as photo use by the camera and submitted to with the complaint. The advantage of this application is getting the correct information and from the user. It also detects the location and complication place that can be send to the government officer. In the existing system, the government officer can receive the complaint from any unauthorized areas. In the proposed system, he can get complaints from only the authorized areas and it is very easy for the government officer to solve the problem quickly

E-Complaint Manager for Smart City

A complaint [3] system is a set of procedures used in organizations to address the complaints and resolve the problems. E-Complain manager for smart city is completely based on web portal for managing users complain. This complaint system is specifically designed for smart cities to register the user's complaint. By using this application users can easily fill the complaint form in few seconds. In the existing system, citizens of the city has to visit the municipal office to register their complaints. For registering their complaints they need to stand in the queue so, it takes lot of time to register the complaint. This process takes a large amount of time and finally it will reach the higher authority. The current process is very slow in access and the customers need to visit the office. In the proposed system, the complaint can be registered quickly and the customer have the direct interaction with the higher official. The complaints can be easily registered by the customer from any place. Customers can give their complaints through the respective officer's e-mail.

Mobile Application Interface to Register Citizen Complaint

In our country, [1] the daily operations and functioning of the city is taken care by the municipal authorities with the help of government. The government should take the responsibilities to manage and solve the complaints which are given by the peoples. Every city has some problems, that problems can be solved by the respective government authorities. For the large city, the government needs to be aware of any problem and it can be identified by using sensors/CCTV cameras. Another way to register their complaint is visiting the municipal officer directly and the giving the complaint to him. Then, he will listen to your complaint and asks some more information and finally he fill the complaint in an electric form. There are many ways to register the complaints, by contacting through a call center or by filling the complaint registration form through the web portal. In this paper we are going to purpose an Android Application Mobile interface that can be used to register the complaints. The main purpose is to provide an easy, cheap and quick mode of complaint registration. In the proposed system, it will help the citizens of the city people to register their complaints anytime, and in any places.

Online complaints using Android application

Our citizens [5] are having day to day social problems in the cities like Street damage, Water scarcity, and some other problems. To solve the problems the peoples have to register their complaints to the municipal officer. Then the municipal officer will take necessary steps to solve the problem which is occurred in the city. In this system the daily problems can be registered as a complaint by using mobile application. The mobile application helps the citizens to register their complaints as soon as possible. This interface provides a

camera which helps to click a picture of that issue and they can upload that photo along with that complaint. The location of complaint is tracked by using the Global Positioning System (GPS). This process provides the exact location of the particular complaint. The author had designed this Android application mainly to file the complaints and take actions quickly. By using this system the citizens work time can be saved and the municipal authorities can easily identify the problems to solve [11-18].

Online Complaint Management System

Online [6] Complaint Management System provides an online way of solving the problems which is faced by the peoples to save their time and eradicate corruption. By using this system peoples can easily able to register their complaints through online. The main objective of the complaint management system is to make the complaints easier to co-ordinate, monitor, and track and then it can be resolved. In this system the peoples can register their complaints through online and not go to the municipal office. The municipal authorities regularly check the online complaints which are filed by peoples. Then they take the actions for those problems in the city. The author says that by using this system the public can save their time and eradicate corruption in government offices. The citizens need not go to the municipal office for getting his problem solved. People can get his problem solved by posting it through online. The Online Complaint Management System helps the peoples to file their complaints directly through the higher officials and solve their problems.

## 3. Algorithm

```

Function main ()
Get the value to select the user;
If user == employee
Login (employee);
Else if user == people
Login (people);
Else
Register ();
End if-else;
End main;
Function login (value)
Get the userid;
Get the password;
For i = 0 to n
If userid == data1 and password, == data2
front_page_user ();
Return;
Else
Print, "the password or username is incorrect";
End if-else;
End for loop;
End function;
Function user ()
Get the value;
Data <- add_the_compliant;
data1 <-see_the_status_compliant;
If value == data
add_the_compliant ();
Else if value == data1
status_compliant ();
End if-else;
End user;
Function employee ()
Get the value;
If value == data
see_compliant ();
Else if value == data1
update_status_compliant ();
End if-else;
End employee;

```

## 4. Research evolution

For example, we served for both x city and y city. In the x city we served about the problems like Water scarcity, street cleaning, pothole, and street light damages. We focused six months survey for identifying these problems. Citizens gave the complaints about these social problems to the municipal officer. If a citizen gives a complaint about the water scarcity problem then the government take lots of time to resolve the problem. It takes four months to resolve the water scarcity problem. Normally, for the water scarcity problem it takes more time to solve because, the municipal officer needs to contact his higher official for that he need to get the appointment from him. He/she need to purchase the requirements like bore well, pipes. So for this only it takes more time to finish the work. For every decision, the municipal officer needs to contact his higher official. When we implement in our project the manpower and time will be reduced. If there is a problem about street cleaning it takes two days to solve the problem. For a pothole problem, it takes one to two weeks to solve the problem. If there is a problem about street light damage then it takes one week to resolve the problem.



Fig. 2..Before Implementation.

In the y city we have taken a survey about the problems like garbage bin Overflowing, pothole, Street light damages. If a citizen gives a complaint about garbage bin overflowing it takes some time to solve the problem. Because people needs to give the complaint to the village panchayat and then, the panchayat officer gives order to his/her employee to complete the work. If a pothole in the road, then that damage takes some amount of time to finish the work. After real-time execute our project we have seen lots of improvement in solving and approaching the complaints. We have reduced the manpower in both sides with the help of online system. Peoples can register their complaints from home, computer center, or through mobiles. This process takes less amount of time compared to previous system and peoples can easily register their complaints. The government employee can receive the complaints easily throughout the mobile phones and email. If we need to get an approval from his/her higher, official he/she can send the documents through our system or email.

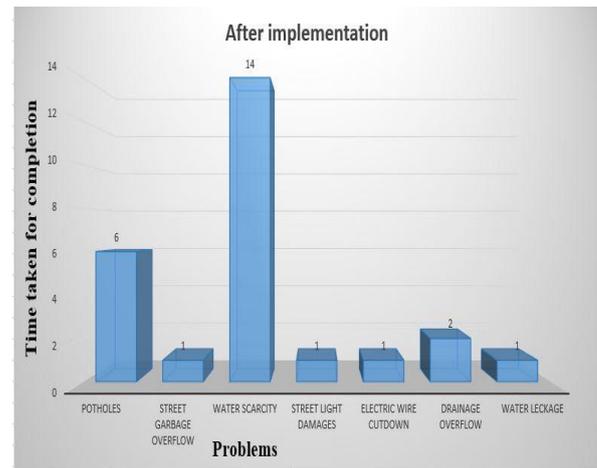


Fig. 3..After Implementation.

Therefore, this will also reduce the manpower and time in employee side.

We have real-time execute our project in x and y city. In x city there is a water scarcity problem, a citizen of x city had registered the complaint in our system. When the complaint registered in our system, the information about the complaint has been sent to the particular government employee. The government employee verifies about the complaint and analyzes the needs for that complaint and then he will submit the details about the complaint to the higher official for approval and money needed for that complaint. It takes some amount of time to complete the field work. So, the complaint can be resolved within one and half or two months. The remaining problems of x and y cities took less time to complete when compared to the time period before implementation of our project.

In other complaint system not have valid user verification system but in our complaint system we used valid user verification. If the complaints has been solved employee will notify the user and send a proof of photo copy of the complaint. By user verification adhere card is used to locate the location of the user and send a proof of photo copy of the complaint. By user verification adhere card is used to locate the location of the user and

## 5. Conclusion

In our project, there are many advantages to register the complaints easily. We can reduce the manpower and time in both the people side and employee side. So, it can save their time and solve the problem quickly. The government proofs only accepted for registering the complaints. Therefore, the duplicate complaints cannot be registered. In the future, we are going to work on the process of Google speech and voice recognition for blind people.

## References

- [1] DhavalGherwada, Vipul Shah, Deep Shah, Prof. Harsh N. Bhor "Mobile Application Interface to Register Citizen Complaint" KJSIEIT, Sion, Mumbai, Maharashtra, India- 2015.
- [2] TejaswitaBadhe, Madhuri Birajdar, SuchetaMapari Prof. P. P. Jorvekar "Grievance Registration on Mobile Application under Smart City Project" Department of Computer Engineering, NBN Sinhgad School Of Engineering (NBNSSOE), Pune,imperial journal of interdisciplinary research vol-3 issue-1,2017.
- [3] Gaurav Gawde , SharvilSarfare, ShreyashNaik, Vishal Mistry, HarshalPatil "Mobile Application for Resolving Citizens Complaints Department of Information Technology" Theem College of Engineering, Boisar University of Mumbai Maharashtra – India- International Journal of Advanced Research in Computer Engineering&Technology, volume 5 Issue 3 2016.
- [4] DevikaRadhakrishnan, NisargGandhewar, RuchitaNarnaware, 4Prayas Pagade, Arpan Tiwari and 6Pooja Vijaywargi, "Smart Complaint Management System", Department of Computer Science and Engineering, S. B. Jain Institute of Technology, Management and

- Research, Nagpur, Maharashtra, India, International Journal of Trend in Research and Development volume 3(6)-2015.
- [5] Trupti Bomble, Ritika Raut, Ruchi Kanekar, Prof. Shekh Ahmad Husen "Android Based Complaint Management System for Municipal Corporation" Department of Information Technology, Mumbai University Trupti Bomble et al. Int. Journal of Engineering Research and Applications vol. 5 Issue 4 (part -3)-2015.
  - [6] Satish Kumar Prasad, Ritesh Patil, Sagar Beldare, Prof. Anita Shinde "Civic Complaint Application under Smart City Project" Department of Computer Engineering, Mitra Mandal's College of Engineering (MMCOE), Pune International of Computer Science Information Technologies vol.7 2016.
  - [7] Vishesh K. Kandhari, Keertika D. Mohinani "GPS based Complaint Redressal System Computer Science" and Engineering Nirma University Ahmedabad, India- volume 4 Issue 3(2)-2014.
  - [8] Aditi Mhapsekar, Uma Nagarseka, Priyanka Kulkarni and Dhananjay R. Kalbande. "Voice enabled Android application for vehicular complaint system using GPS and GSM-SMS technology," in World Congress on Information and Communication Technologies, 2012, pp. 520-524.
  - [9] Kim Nee Goh, Yin Ping Ng, Kamaruzaman Jusoff, Yoke Yie Chen and Yoon Yeh Tan. "Architecture of a GPS-Based Road Management System," World Applied Sciences Journal 12 (Special Issue on Computer Applications and Knowledge Management), pp. 26-31, 2011.
  - [10] Umar Farooq, Tanveerul Haq, Muhammad Amar, Muhammad Usman Asad and Asim Iqbal. "GPS-GSM Integration for Enhancing Public-volume 5 Issue 3-2015.
  - [11] R Gomathi, N Mahendran, "An efficient data packet scheduling schemes in wireless sensor networks", in Proceeding 2015 IEEE international Conference on Electronics and Communication Systems (ICECS'15), ISBN: 978-1-4799-7225-8, PP:542-547, 2015. DOI: 10.1109/ECS.2015.7124966.
  - [12] S Vanithamani, N Mahendran, "Performance analysis of queue based scheduling schemes in wireless sensor networks", in proceeding 2014 IEEE international Conference on Electronics and Communication Systems (ICECS'14), ISBN: 978-1-4799-2320-5, PP: 1-6, 2014. DOI: 10.1109/ECS.2014.6892593.
  - [13] N. Mahendran, Dr. S. Shankar and T. Deepika, "A Survey on Swarm Intelligence Based Optimization Algorithms in Wireless Sensor Networks" International Journal of Applied Engineering Research, ISSN 0973-4562 Vol. 10 No.2 (2015).
  - [14] P Kalaiselvi, N Mahendran, "An efficient resource sharing and multicast scheduling for video over wireless networks", in proceeding 2013 IEEE international Conference on Emerging Trends in Computing, Communication and Nanotechnology (ICECCN'13), ISBN: 978-1-4673-5036-5, PP:378-383, 2013. DoI: 10.1109/ICECCN.2013.6528527.
  - [15] R Nithya, N Mahendran, "A SURVEY: Duty cycle based routing and scheduling in wireless sensor networks", in proceeding 2015 IEEE international Conference on Electronics and Communication Systems (ICECS'15), ISBN: 978-1-4799-7225-8 PP-813-817, DOI: 10.1109/ECS.2015.7125025
  - [16] T Mekala, N Madhu Suganya, "Secure transaction using dynamic session key" International Journal of Science and Modern Engineering, volume 1, issue four, pp- 2319-6386.
  - [17] N Mahendran, T Mekala, "A Survey: Sentiment Analysis Using Machine Learning Techniques for Social Media Analytics", International Journal of Pure and Applied Mathematics, Volume 118 No. 8 2018, PP: 419-423.
  - [18] T Mekala, N Mahendran, "Improved Security in Adaptive Steganography Using Game Theory, International Journal of Pure and Applied Mathematics, Volume 118 No. 8 2018, PP: 111-116.
  - [19] Mekala, T., Natarajan, M. "Secured crypto-biometric system based on session key navigation" Proceedings of ICCCS 2014 - IEEE International Conference on Computer Communication and Systems 2014.
  - [20] S. Thilagamani, N. Shanthi, "Object Recognition Based on Image Segmentation and Clustering", Journal of Computer Science, Vol. 7, No. 11, pp. 1741-1748, 2011.
  - [21] S. Thilagamani, N. Shanthi, "Gaussian and gabor filter approach for object segmentation", Journal of Computing and Information Science in Engineering, Vol. 14, Issue 2, pp. 021006, 2014
  - [22] Dr. P. Santhi, S. Kiruthika, "Lung Based Disease prediction Using Lobe Segmentation Based on Neural Networks", International Journal of Pure and Applied Mathematics", Vol. 118, No. 8, PP. 499-504, 2018.
  - [23] P. Santhi, R. Vikram, "Implementation Of Classification System Using Density Clustering Based Gray Level Co Occurrence Matrix (DGLCM) For Green Bio Technology", International Journal of Pure and Applied Mathematics", Vol. 118, No. 8, PP. 191-195, 2018.
  - [24] S. Thilagamani, V. Manochitra, "An Intelligent Region-Based Method for Detecting Objects from Natural Images", International Journal of Pure and Applied Mathematics", Vol. 118, No. 8, PP. 473-478, 2018.
  - [25] S. Thilagamani, N. Shanthi, "A Novel Recursive Clustering Algorithm for Image Oversegmentation", European Journal of Scientific Research, Vol. 52, No. 3, pp. 430-436, 2011.
  - [26] S. Thilagamani and S. Uma Mageshwari, "Risk appraisal for cardiovascular disease among selected young adult women in Coimbatore, India", Indian Journal of Science and Technology, Vol. 3, No. 6, PP. 672-675, 2010
  - [27] T. Mekala, P. Nandhini, "Modified Agglomerative Clustering for Web Users Navigation Behavior", International Journal of Advanced Networking and Applications, Vol. 05, Issue: 01, PP. 1842-1846, 2013.
  - [28] S Saravanan, V Venkatachalam, "Advance Map Reduce Task Scheduling algorithm using mobile cloud multimedia services architecture" IEEE Digital Explore, pp. 21-25, 2014.
  - [29] S. Thilagamani, N. Shanthi, "Literature survey on enhancing cluster quality", International Journal on Computer Science and Engineering Vol. 02, No. 06, pp. 1999-2002, 2010.
  - [30] K. Deepa, Y. Naveen Raj, "Enhancing the Performance in WSN using Distributed Tracking Algorithm", International Journal of Pure and Applied Mathematics Vol. 118, No. 9 2018, 717-722.
  - [31] Hema. C. R., Paulraj. M. P. & Ramkumar. S, "Classification of Eye Movements Using Electrooculography and Neural Networks", International Journal of Human Computer Interaction, Vol. 5 (4), pp. 51-63, 2014.
  - [32] Hema, C. R., Ramkumar, S., & Paulraj, M. P., "Identifying Eye Movements using Neural Networks for Human Computer Interaction", International Journal of Computer Applications, 105(8), pp 18-26, 2014.
  - [33] S. Ramkumar, K. Sathesh Kumar, G. Emayavaramban, "EOG Signal Classification Using Neural Network for Human Computer Interaction", International Journal of Computer Theory and Applications, Vol. 9 (24), pp. 223-231, 2016.
  - [34] Ramkumar, Dr. K. Sathesh Kumar and G. Emayavaramban "Nine States HCI using Electrooculogram and Neural Networks", IJET, Vol. 8(6), pp. 3056-3064, Jan 2017.
  - [35] S. Ramkumar, K. Sathesh Kumar G. Emayavaramban, "A Feasibility Study on Eye Movements Using Electrooculogram Based HCI" IEEE- International Conference on Intelligent Sustainable Systems, pp. 384-388, Dec-2017.
  - [36] G. Emayavaramban, S. Ramkumar, A. Amudha and K. Sathesh Kumar "Classification Of Hand Gestures Using FFNN And TDNN Networks", International Journal of Pure And Applied Mathematics, Vol. 118 (8) Pp. 27-32, Jan 2018.
  - [37] S. Ramkumar, K. Sathesh Kumar, T. Dhiliphan Rajkumar, M. Ilayaraja, K. Shankar, "A review-classification of electrooculogram based human computer interfaces", Biomedical Research, 29(6), Pp. 1078-1084, April 2018.
  - [38] G. Ranjith, M. Vinoth, "A Unified Approach for Effective Use of Cloud Metering Service", International Journal of Pure and Applied Mathematics Vol. 118, No. 9 2018, 801-806.
  - [39] Dr. P. Santhi, K. Deepa, Classification System for Identifying the chemical Structure Using the Support Vector Machine. Vol. 03, No. 1, June (2017). 2349-7866.