



iJRASET

International Journal For Research in
Applied Science and Engineering Technology



INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 6 Issue: 1 Month of publication: January 2018

DOI: <http://doi.org/10.22214/ijraset.2018.1419>

www.ijraset.com

Call:  08813907089

E-mail ID: ijraset@gmail.com

An Effectual Progression of Smart Municipality in Cloud

V.M. Prabhakaran¹, R. Gayathri², S. Priyadharshini³, T. Kathiravan⁴, S. Subbulakshmi⁵

¹Assistant Professor, Department of Computer Science and Engineering, KIT-Kalaignar Karunanidhi Institute of Technology, Coimbatore, Tamilnadu, India

^{2,3,4} CSE Department, KIT-Kalaignar Karunanidhi Institute of Technology, Coimbatore, Tamilnadu, India

⁵Senior Process Executive, Pradot Technologies, Coimbatore, Tamilnadu, India

Abstract: Information and communication technologies (ICTs) promise to upsurge government transparency, accountability and civic engagement by providing information about government activities. It reduces the bridge between people and government. Main focuses on sanitation and development of a municipal corporation. To make it possible, the people who belong to the municipal corporation are provided with an opportunity of raising complaints regarding any issue that take place in their locality such as un-cleaned and dirty things in our place. These issues are delivered to higher Authority of corporation (Admin) by people. The Twitter algorithm is used where the most tweets appear at the top of timeline. Cloud computing provides a framework and analytical tool that could enlighten Smart Municipality Concern.

Keywords: Information and communication technologies (ICTs), Twitter algorithm, Cloud computing, Smart Municipality

I. INTRODUCTION

In a developing country, there is no direct communication between people government. Lack of communication between people and government create a way for inducement. Still if unethical ways are followed there is no grantee that the desired work can be finished or not within given time. It is very costly thing to sacrifice a leave to lodge a complaint in person to the municipal corporation. The main purpose is to help the public who are facing different problems in the localities by online application. It can control unethical work of bribe and even it can reduce the processing time. Here the identification and solution for the complaints given by the people, rectifying them within the system generated time limit is the main concept of the project. A clear report is generated by the system which shows assignee name, complaint type/ department, etc. All the above attributes help while viewing the report of complaints. The admin examines weather the problem is rectified or not within the grace period. If it is not solved, then the report is automatically forwarded to the higher authorities so that it maintains an effective problem solving solution. It may include Garbage management, Water supply, Electricity management, Animal threatening and Road repairs.

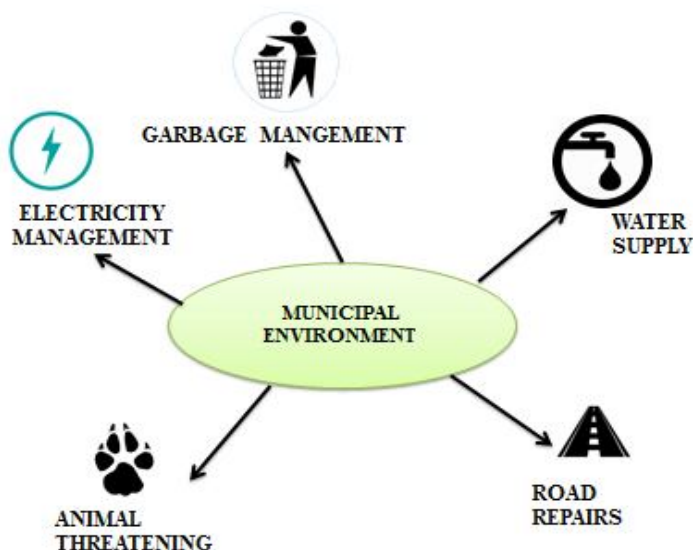


Fig 1. Smart Municipality Progress

II. LITERATURE SURVEY

| Paper Title | Authors | Problem Identification and Measures |
|---|--------------------------------------|---|
| Turning brownfields into safe, attractive and lively urban districts by means of integrated planning. | Dr. Stephan Bartke | Cleaning up and redeveloping brownfields. Inefficient management of various demands and needs of people involved. |
| Rules versus home role local government responses to negative revenue shocks. | Daniel shoangcody, Tuttle stan veuga | The gradual disappearance of brick and mortar retail stores raises concerns about the financing of wide range of services provided by local government which often rely heavily on sales tax income.. |
| Online census based information sharing for delivery of e-government services. | Ajay Dutta, M. Syamala, Manish arora | Census is the citizen's socio economic data collection process for the preparation of the citizen database stored in National population register(NPR). |
| A citizen centric integrated information system roadmap for municipalities. | Meltem oztwan, Serkan alacam | To analyze e-government implementation and effectiveness at the municipal level in the vision of information system(IS). |
| Digitalizing the municipality and factor affecting the acceptance of e-municipality an empirical analysis. | Ikram Dastan | Over the years, rapid developments in information and communication technologies have brought about an increase in the amount of time user spent online. |
| E-governance for smart cities. | T.M.Vinod kumar | Authored by domain species related to the city. Emerging e-governance for smart city on urban development, planning climate change, carbon accounting , water governance , energy governance. |
| Effective mechanism in monitoring and management of e-government. | R Alguliyev Farhad yusifav | Formation and management of e-government are analyzed, Used by web analytics application. |
| E-democracy and E- participation in Slovenian local self-government. | Simuna Kavovic | This paper originates from the theory of e- democracy in connection with information and communication technology. |
| Development smart grid concepts architectures and technological demonstration world wide. | M. Harshmi, S.Hannien Kurimaki | Recently developed various smart grid concepts architectures and demonstration. |
| The role of technology organization and context factors in the development of e-government services : An empirical analysis on Italian local public administration. | David Arduini, Mario Denni | This paper studies how technology , organizational and contextual factors are correlated to the development of e-government , as a case of new technology "enactment". |
| Public relations in strategic management the case of metropolitan Municipalities in turkey. | Hazon, Gullupunar | In the study , the place of public relations in strategic management of municipalities is handled in terms of strategic plans prepared by metropolitan municipalities. |
| E-janRaj-smart governance at municipal level. | R Jain T Shimali | High lights shake holders of the municipalities and user model survey. |
| Enabling democratic local governance through rural E-municipalities in Kyrgyzstan. | Zamira Dzhusupeva | Case study on rural e-municipalities in Kyrgyzstan as an enabling tool for functionality and supporting democratic local governance. |
| Services quality in urban local body E-government. | Sanjay chaudary | Option better understanding of the extent to which services delivered by e-government. |
| Waste management as an IOT-enabled services in smart citizens. | Alexey Medvedev | Intelligent transportation system enables between two smart cities, Waste collection and Surveillance cameras are incorporated for capturing the problematic areas. |

III. PROCESSING TERMINOLOGY

A. Architecture Representation

Module entails of admin login, name, and password that are stored in database. If admin entered incorrect name or password an error message will display in that page. In this module admin can view, add category, area, authorities like Name, Mail id, Mobile number etc. User can add their personal details like Name , Gender, Password, Mail id, Area Location according to admin registered

area and location, can't be add their personal wish. User can change password with the help of Java Object API and update profile, share and view post. SMS will be sent finally in sort of their queries. Cloud computing framework helps in configuring and adjusting the size of storage volumes. It automates the integration, testing and deployment of application components. It work at the level of servers, storage, networks and operate at higher level of platforms.

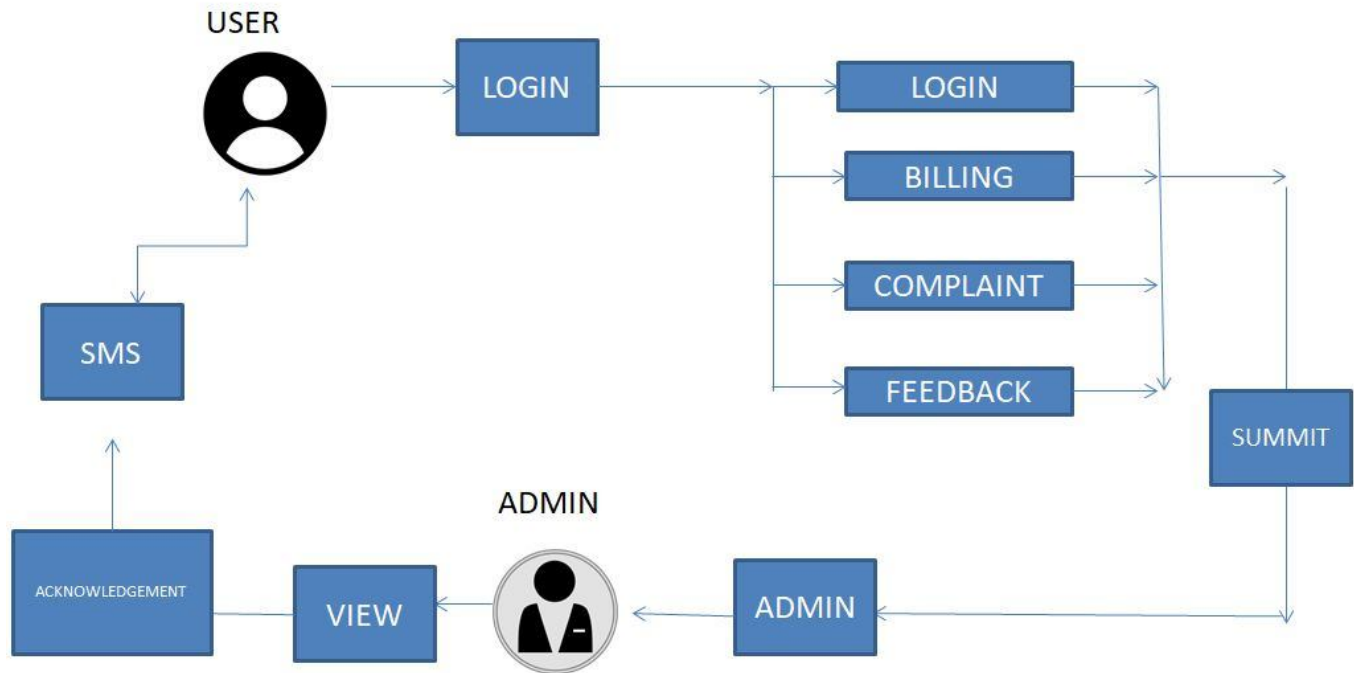


Fig 2. Architecture Representation

B. Admin module

Two Modules is defined to process, Administrator module and User module. Administrator is responsible for creating Login details, View registered User details, Add category, Add area, Add authority. Admin name and password will store in database. If admin entered incorrect name and password means error message will display in that page. Admin can all the Registered User details. Admin can add category like Irrigation Water supply department and EB department, Sewage water control Board, etc., admin can add area and authorities for corresponding categories. Finally it furnishes the details of the Name, mail id and mobile number.

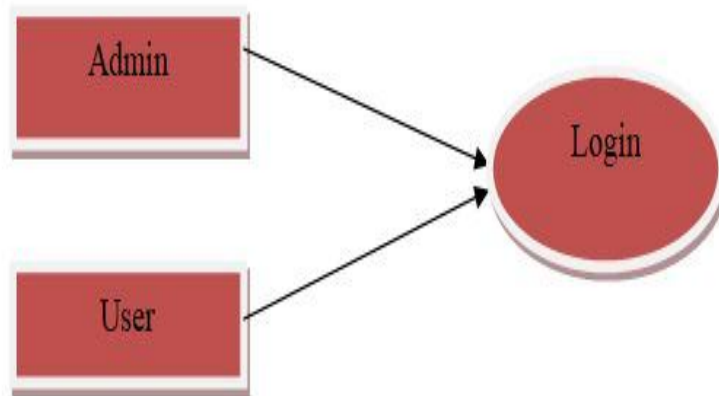


Fig 3. Login Process

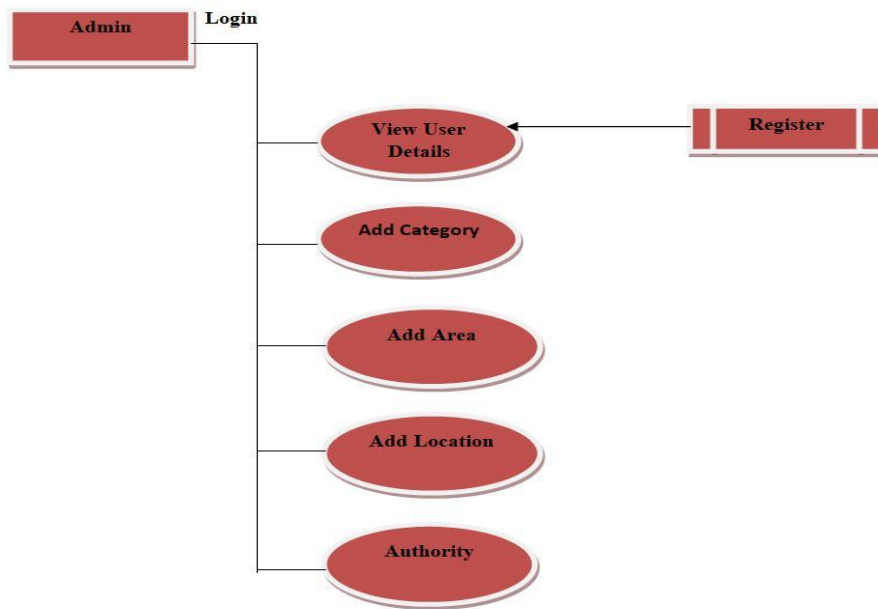


Fig 4. Progression of Administrator

C. User Module

User can add their personal details like full name, name, and gender, and password, mobile, email and user can add their area and location according to admin registered area and location. User can login with registered name and password if user entered wrong name and password login session won't work. User can change password with help of Java Object API. User should enter registered mobile number and he/she will get Reset code for changing their Password. If user enter wrong code error message display in that page. Updating and Viewing of personal details is applicable. Through Share Post functionality user can feed in tweet box, photo uploading option, category, area, location and so user can text municipal related problem in that tweet box and corresponding photo, area and location. User can do rating for posts if rate score above 3, it will forward for corresponding authorities with help of Java Mail API.

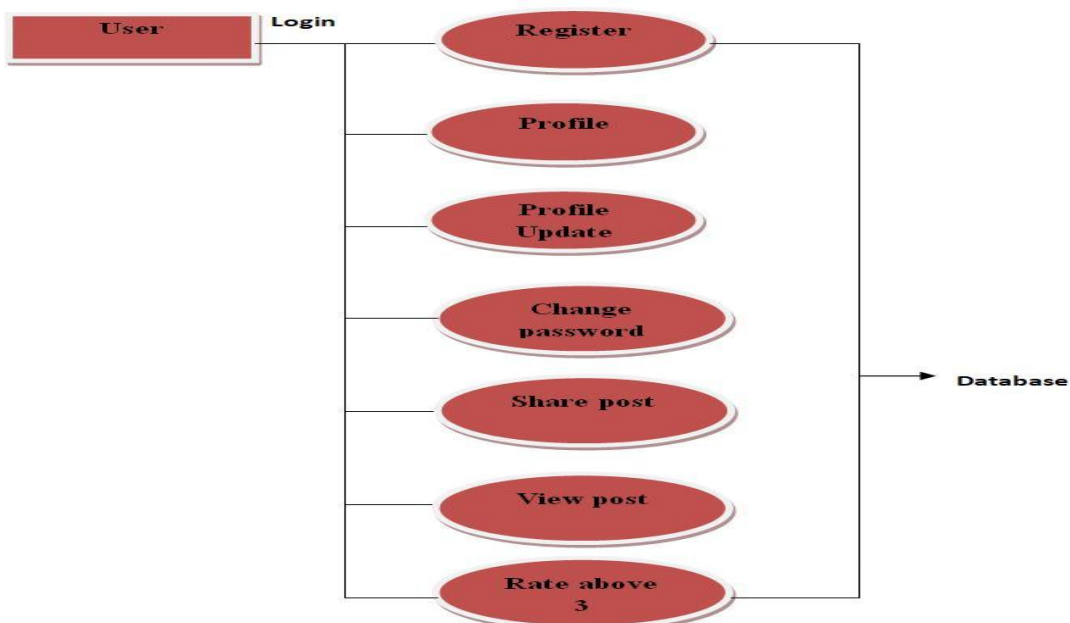


Fig 5. Progression of User

IV. ADVANTAGES

In earlier existing systems, one must visit the office and complaints given through written statement. Based on the priority, the complaint can be submitted in drop box or directly to the commissioner or the concerned department, which may take physical effort and time consuming task. In this existing system, one cannot get any acknowledgement that the complaint has been received. Guarantee for problem solution is given through verbal communication. Hence, it is not meant for problem solution. The main disadvantage of existing system is book reference for all the complaints given by the customers. Hence, it is paper consuming task. There is no complaint acknowledgement given for the user, which is used for future references. People don't get time period for problem recovery.

The main objective is to make easy the process of complaint reporting with very simplified and effective way. This project involves major problem solving modules where these acts as best solution for incoming bulk complaints. For every submission of complaint, the user gets complaint acknowledgement. All these type of acknowledgement is generated by the computer, the solution of time may differ from the type of the complaint and category. To make any complaint, it is made mandatory for the user to mention his contact details, so that it does not receive any anonymous complaint details.

V. CONCLUSION

It's a step towards the smart cities. Using this online application each and every person in the municipality could able to function properly with the help of cloud framework. Effectual Twitter analysis is done to identify the process in minute level. Finally it will help to reduce the bridge between people and government.

VI. ACKNOWLEDGMENT

V.M. Prabhakaran, R. Gayathri, S. Priyadharshini, T.Kathiravan and S. Subbulakshmi wishes to thank the Management, the Director, the Principal, of their institute, KIT-Kalaignarkarananidhi Institute of Technology, for providing all the necessary facilities and never ending support for the work. We wish to thank their Department Head, Prof. Dr. R. Sukumar for the freedom to pursue research and excellent research ambience provided by him. Our special thanks go to, Prof. Dr. R. Nedunchezian, Prof. Dr.S. Balamurugan and Prof. Dr. P. Raviraj Pandian for sowing the seeds of thinking big in research, their expert guidance and continuous motivation.

REFERENCES

- [1]. Calabrese, F., Colonna, M., Lovisolo, P., Parata, D., & Ratti, C. (2011). E. Baralis, L. Cagliero, T. Cerquitelli, P. Garza, and M. Marchetti, "Cas-mine: providing personalized services in context-aware applications by means of generalized rules", Knowledge and information systems, vol. 28, no. 2, pp. 283–310, 2011. Real-time urban monitor using cell phones: A case study in Rome. Intelligent Transportation Systems 12(1), 141–151.
- [2]. S. Pandey, W. Voorsluys, S. Niu, A. Khandoker, and R. Buyya, "An autonomic cloud environment for hosting ecg data analysis services", Future Generation Computer Systems, vol. 28, no. 1, pp. 147–154, 2012.
- [3]. Laursen, K., & Salter, A. J. (2014). A. Ibaida, D. Al-Shammary, and I. Khalil, "Cloud enabled fractal based ecg compression in wireless body sensor networks", Future Generation Computer Systems, vol. 35, pp. 91–101, 2014.
- [4]. Dameri, R.P.: Comparing smart and digital city: initiatives and strategies in Amsterdam and Genoa. Are they digital and/or smart? In: Dameri, R.P., Rosenthal-Sabroux, C. (eds.) SmartCity. How to Create Public and Economic Value with High Technology in Urban Space, pp. 45–88. Springer, Heidelberg (2014).
- [5]. Sankaranarayanan S. Balamurugan, Dr. P. Visalakshi, V. M. Prabhakaran, S. Charanya Strategies for Solving the NP-Hard Workflow Scheduling Problems in Cloud Computing Environments. Australian Journal of Basic and Applied Sciences (2014).
- [6]. V.M. Prabhakaran, Prof. S. Balamurugan, A. Brindha, S. Gayathri, Dr. Gokul Kruba Shanker, Duruvak kumar V.S NGCC: Certain Investigations on Next Generation 2020 Cloud Computing-Issues, Challenges and Open Problems Australian Journal of Basic and Applied Sciences (2015)
- [7]. V.M. Prabhakaran and Dr. Gokul Kruba Shanker S. Balamurugan, R.P. Shermey Internet of Ambience: An IoT Based Context Aware Monitoring Strategy for Ambient Assisted Living. International Research Journal Of Engineering and Technology (2016)
- [8]. Bencardino, M., Greco, I.: Smart communities. Social innovation at the service of the smart cities. TeMA. J. Land Use Mob. Environ. (2014)
- [9]. Alexopoulos, C., Zuidervijk, A., Charapabidis, Y., Loukis, E., & Janssen, M. (2014). P. Neirotti; A. De Marco; A.C. Cagliano; G. Mangano; F. Scorrano (2014). Current trends in Smart City initiatives Designing a second generation of open data platforms: integrating open data and social media. Electronic Government (pp. 230–241). Berlin Heidelberg: Springer.
- [10]. Mariotti, I., Beria, P., Laurino, A.: Car sharing peer to peer: un'analisi empirica sulla città di Milano. Rivista di Economia e Politica dei Trasporti 3, 1–16 (2013)
- [11]. Caragliu, A., Del Bo, C., & Nijkamp, P. (2011). Smart cities in Europe. Journal of Urban Technology, 18(2), 65–82.
- [12]. Sciullo, A., Occelli, S.: Collecting distributed knowledge for community's smart changes. TeMA. J. Land Use Mob. Environ. 6(3), 293–309 (2013).
- [12]. Arena, M., Cheli, F., Zaninelli, D., Capasso, A., Lamedica, R., Piccolo, A.: Smart mobility for sustainability. In: AEIT Annual Conference 2013: Innovation and Scientific and Technical Culture for Development, AEIT (2013).



10.22214/IJRASET



45.98



IMPACT FACTOR:
7.129



IMPACT FACTOR:
7.429



INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089  (24*7 Support on Whatsapp)