International Research Journal of Engineering and Technology (IRJET) e-ISSN: 2395-0056
Volume: 06 Issue: 06 | June 2019 www.irjet.net p-ISSN: 2395-0072

City Complaint Management System

Atit More [1]

Department of Master of Computer Applications, Vivekanand Education Society Institute of Technology, Mumbai University, Mumbai, India, Maharashtra 400074

Abstract - *There are lots of problem in the city. It is been expected that government should solve those problems. But somewhere efforts of government lacks. According to the survey, such system occurs because of a lack of network between government and citizens.*

So, to solve this problem and reduce the gulf between government and citizens we had a solution in the name "City Complaint Management System".

Our application is used to submit the area complaint. This complaint submission will be done by user itself. Then the authorized body will receive the complaint and user will get the notification.

Once the work is done by authorized end user will notified.

It will also be used to measure the performance of government.

***Key Words*: Management, Social Development, Android, Machine Learning, Big Data, Android App, NodeJS, MongoDB**

1. INTRODUCTION

The main objective of our application is to reduce the gulf between the government body and citizens.

The module is totally built at the administrative end and thus only the administrator is guaranteed the access. It also includes the user side of the module where the complaint will be trace and notified to the authorized body.

In today's world, it is highly essential to connect and learn. So, this connection is essential too. This will also help people around the country to display which area is having a problem and who is responsible for it. Plus it will also tell us that how many times the problem is repeating. This will help the user to understand the performance of the government.

The notification between user and authorized body will be helpful to create the transparency.

2. EXPECTATION

The principle target of this paper is to serve beginning period specialists with a helpful prologue to the auxiliary segments of logical papers and the procedures that lead to their distribution. Another procedure of composing this exploration paper is to help the advancement of the general public.

Innovation is developing step by step. Furthermore, today we are in the period of AI and Artificial Intelligence. As we as a whole know innovation alway helped human to change the world. By including innovation like AI and huge information this application can be utilized in a greatly improved manner.

3. EXISTING SYSTEM

In the existing system the people have to go to government office to file the complaint. Another way is to call where the possibility of authorized response in dicey. The users can post their problems but cannot get the details of the problems and some other services. Such system doesn't have much popularity and is not user friendly.

4. ADVANTAGES OVER EXISTING SYSTEM: -

4.1. The Advantages of the proposed system are:

- The proposed system is a completely automated system.
- The customers can easily access their data.
- The email facility provides customer interaction.
- This also provides security for the customer information.
- Most of the complaint management systems are for business use. While this application is for social betterment.

5. TECHNOLOGY ARCHITECTURE: -

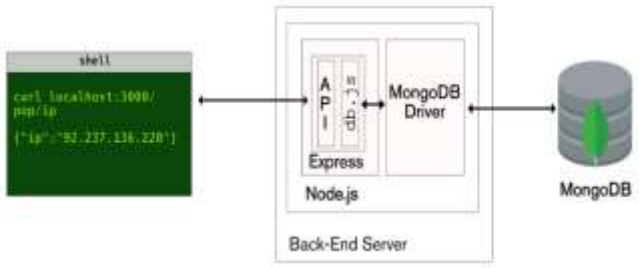

Figure 1 – Application Connectivity with Database

The technologies which we are using are NodeJS, MongoDB, Jquery, Android. We used nodeJS REST API to interconnect with the mobile as well as web application.

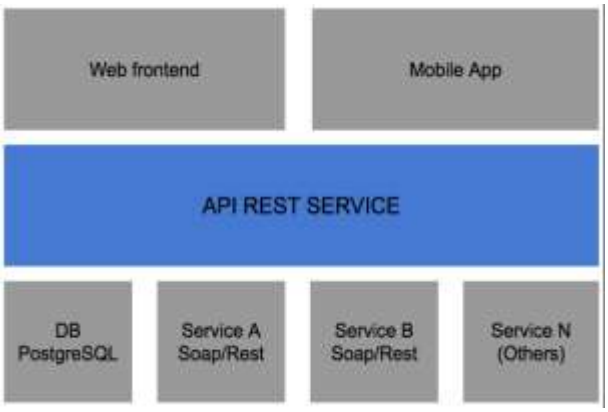

Figure 2 – Architecture Diagram of Application Running

6. MODULES

There will be many modules which will be included in future development. Right now we have some module which can be discussed.

6.1) Mobile user side complaint submission: -

This development is done on the android app. Using API functionality and logic we can provide better flexibility for the user to submit the complaints.

6.2) Admin Page: -

There will be admin page which will be a web-based module. Here there are lots of roles depending on the module and functionality.

6.3) End User Management Page CMS: -

The user management page is another set of the module. Here whole user detail will be included. This also includes there add - edit and listing page.

6.4) Complaint Module CMS: -

Complaint Module is something where all the complaints will be saturated. This also includes there add - edit and listing page.

6.5) Future Module: -

The future module includes various process features. It includes the mobile module, role management, Admin, Integration of AI and machine learning, Hadoop since we will deal with a huge amount of data. And much more module which will help to enhance the application.

7. PROJECT DESIGN AND ARCHITECTURE

7.1 User Module: -

The user module is done on the application. Because thinking in user perspective it can be done via mobile phone.

1) User will open that application first screen which contains login and registration page. If a person is not an existing user then registration is option.

2) The user will get the confirmation mail. After confirming he is good to go with login.

3) The user has to submit it's full name, age, address and Addhar card details.

4) User has one module to post their complaint. They can capture the image and send it to authorized body. The location will be tresses by longitude and latitude.

5) At that point utilizing that protest client can check status

Figure 3 - Working of User Module

7.2 Admin/Authorized Module: -

1) The will be a super admin who will create admin and Authorized person on it.

2) Administrator or Authorized will open the application and pick as power/administrator. They will login with username and password.

3) After login they can see all grievances with respect to their regions. On the off chance that there is an issue with respect to explaining complaints, administrator can make a move dependent on the condition. In the event that the individual is an expert, at that point, he/she can see complaint with respect to their region.

5) At that point, that authority body makes a move against the complaints. After complaint is settle the authorized body will send an update to user.

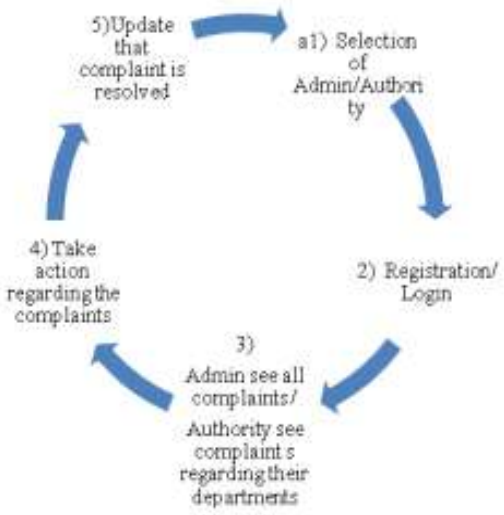

Figure 4 - Working of Admin/Authorized User

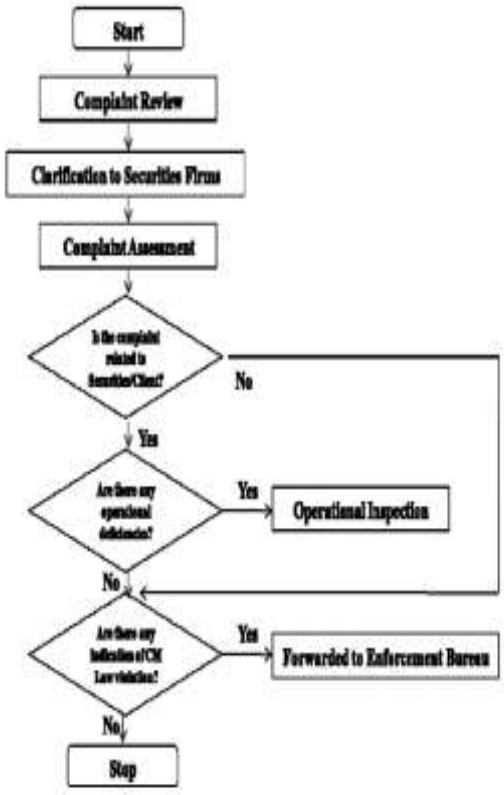

Figure 5 - Process of Handling Complaints

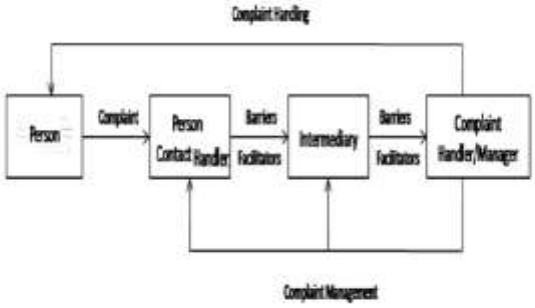

Figure 6 - Information Flows

8. SOME EXAMPLE SCREENSHOT: -

As this project is in the developing phase there few module screenshots which can be helpful for the user to understand in terms of example.

Figure 7 – Mobile Application (User side)

Figure 8

Figure 9 – Admin/ Authorized User side CMS for user management

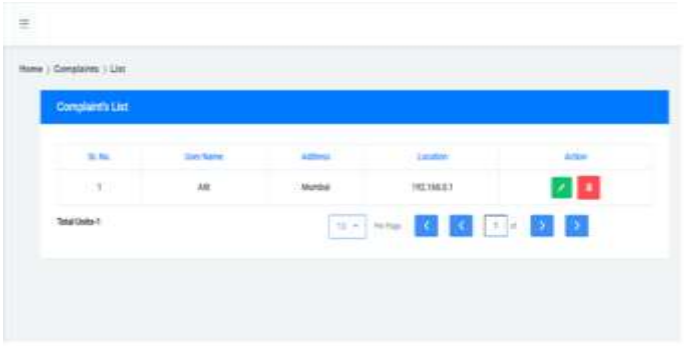

Figure 10 - Admin/ Authorized User side CMS for complaint

Figure 11 - Login Page

Figure 12 - Sign up Form

9. CONCLUSIONS

The system has the benefits of easy access because it is being developed as a platform independent web application as well as Android Application, so the admin can maintain a proper contact with their users, which may be accessed anywhere. The gap between government body and citizens also reduced.

All communications between the client/user and administrator have done through the online, so this communication cost also is reduced.

10. FUTURE ENHANCEMENTS

Future change in the environment or processing can be easily adopted by having a simple change in coding. But if there is any major change (which is expected) our application can be inherited into next level project. We have also optimized the code to better extent.

There are also lots of modules can be added. With the enhancement of technology like machine learning and big data will surely help the application grow and help the people as well as a government body.

It is also very user-friendly, cost-effective, and feature-rich and it provides a very high level of security. It protects unauthorized users. A facility to inform through SMS or Email on the landing of the consignment can be added in future.

10.1 Future Technology: -

10.1.1 Amazon Rekognition: -

Amazon Rekognition makes it simple to add picture and video analysis to your applications. We just have to insert picture and Rekognition API will do its work. This will help admin to distinguish the items, individuals, content, scenes, and exercises, just as identify any improper substance.

Amazon Rekognition likewise gives exceptionally exact facial investigation and facial acknowledgment on pictures and video that you give. We would need this technology as we also want to add the AI system where the upload image of user will be recognized by its by number of people uploaded the same images.

This will also help to survey the maintenance of region area-wise.

10.1.2 Big-Data: -

There are lots of people who will be engaged in application lots of data IO will be included. To handle such data we will be use Big Data Hadoop technology.

ACKNOWLEDGEMENT

It is in good fortune that we find the opportunity to express our deep sense of gratitude to all those people who helped us with their guidance and assistance without which this the research paper would not be possible. The successful completion of any task would be incomplete without the mention of those people whose cooperation made it possible, whose constant guidance and encouragement crown all our efforts with success.

We would like to give our heartiest thanks to our college mentor, Prof. Indira Bhattacharya who had a played a major role by offering us her precious time, incessant encouragement, and for his valuable advice and guidance without which this project would not have seen the light of day.

Besides, we also thank our college Vivekananda Education Society Institute Of Technology, Chembur who supported us for this research paper by offering us the special platform to work on this project. We also have huge gratitude towards our Prof. Nishi Tikku whom the Head Of Department of Master In Computer Application for the great support provided to us.

We also thank our group members, colleagues, staff member and professor who has helped in the successful completion of this Research Paper. And last but not least, we would like to thank all those who contributed to this project either morally or materially.

BIOGRAPHICAL NOTES:

Atit More is a student and researcher at the Master Of Computer Application Department of Vivekanand Education Society Institute Of Technology, Mumbai.

He is tech and internet enthusiastic. Who is working as a Software Developer is an IT firm.

REFERENCES

[1] Economic Times, COMPLAINT MANAGEMENT SYSTEM S. Anjali, M.Dharshna, K.Gowthami, Mrs.Deviselvam, Boshoff, C. and J. Allen (2000).

[2] "The Influence of Selected Antecedents on Frontline Staff 's Perceptions of Service Recovery Performance." International Journal of Service Industry Management 11(1): 63-90.

[3] Web Application for Complaint Tracking and Resolving pp:1397-1398 - Ms. Sneha Alve 1, Ms. Vishakha Babardesai 2, Ms. Sneha Bhosale 3, Ms. Siddhi Kapadi 4, Prof. Atul. B. Yadav

[4] Smart Complaint Management System - 1Devika Radhakrishnan, 2Nisarg Gandhewar, 3Ruchita Narnaware, 4 Prayas Pagade, 5Arpan Tiwari and 6 Pooja Vijaywargi

[5] C. Chiao-Chen and C. Yang-Chieh, "Comparing consumer complaint responses to online and offline environment," Internet Research, vol. 21,

[6] R. Johnston, "Linking complaint management to profit," International Journal of Service Industry Management, vol. 12, pp. 60-69, 2001.

[7] Julia Meik, Markus Blut and Christian Brock, "Complaining Customers as Innovation Contributors", SRII Global Conference.

[8] Trupti Bomble, Ritika Raut, Ruchi Kanekar, Prof.Shekh, AhmadHusen - Android Based Complaint Management System For Municipal Corporation, vol. 5, Issue 4, (Part - 3)

[9] Osman Nasr, Enayat Alkhider - Online Complaint Management Syste - Vol. 2 Issue 6, June 2015.

[10] https://tympanus.net/