

Integrated Web Based Complaint Management System

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Abstract— People's Corner will be a web based application which will help the citizen of a municipal corporation to register their complaints about day to day problems in their ward through a mobile application. People's corner will provide a common man to register his complaints and problems to municipal authority as well as let the municipal authorities to address the issue as soon as possible.

This application provides an interface to register one's complaint and follow it up. This interface provide a camera module which help clicking up a picture of any generalized problem that people are facing and will help in uploading the photo along with the complaint.

This complaint, once registered, will be redirected to specific department of Municipal Corporation for example; a complaint about damaged road will be redirected to Public Work Department. Once the complaint sent to the respective ward the officers can take the necessary actions as soon as possible.

I. INTRODUCTION

In India, the fact is, we don't have any direct communication between the government and public in an efficient way for solving the problems i.e. for getting a problem solved in our place we have to pay off the officials and get them solved in 3 months which can be solved actually in 1 month of time[3] Now-a-days, the scenario has changed. In today's world, more focus is given on the availability of the websites and also the various applications present in the android market we manage our daily work on time, precisely, very fast and with our satisfaction. So we are using various technologies in our life for fulfillment of our daily work. [2] There has been extensive research in the area of e-services for municipal use. The idea is to understand the utility and usability of services that are provided by a Municipal corporation (MC) using newer, better and efficient technologies. There have also been studies which mark the usability perspective of e-services for physically challenged citizen section. While e-services have been in use in Europe for a while, they have been catching up in India in a big way in large cities, only recently.

The MC takes care of the upkeep of the city is one of the more tech savvy MC. There are several departments within the MC to handle different aspects of the city upkeep. It is

important for the MC to comprehend the problems as and when they occur or come into existence in the city, so that the problem areas can be dealt with rapidly and efficiently. For efficient control of managing the city, the city is divided into various wards. [1]

Online Municipal Complaints: As technology is escalating day-by-day the people are becoming smarter. "OMC" aims to help the user to solve various problem related to the MC. We really want to reduce the manually work for that we going to set up Online Municipal Complaints for Municipal Corporation. The public register them self and easily send a petition to the municipal corporation about water connections, sanitation works, garbage collection, electric complaints, education system. MC officer can view the complaints on several problems from different users. Officer can maintain solved problems list and pending problems list. [1]

For example National Informatics Centre has launched a site named Prajavani through which people can post the petitions or complaints in the site and get them solved within a specified time and can also look over the status of the complaint or petition he has lodged at any time .Initially phones were merely used for calling or texting.[2]

II. LITERATURE REVIEW

The concept of an integrated conflict management system was originated and developed by Mary Rowe, in numerous articles in the 1980s and 1990s. She saw the need to offer options for complaints and therefore a linked system of choices within an institution system.

The idea of a systems approach has endured well. In recent years however, there has been discussion as to whether conflict should be "supervised" by the organization—or whether the goal is to understand, deal with and learn from conflict. There is also concern about practical and theoretical issues in "consolidating" a system, with some observers preferring the idea of "coordinating" a conflict system. However 2012 research by David Lipsky et al., suggests that an increasing number of corporations see themselves as having "Integrated Conflict Management systems," (ICMS)

In earlier existing municipal systems, one must visit the office and complaints given through written statement. Based on the priority, the complaint can be relented in drop box or directly to the commissioner or the concerned department, which may take physical effort and time consuming task. Also 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. There is a need for better web based complaint management system that can handle the citizens complaints more efficiently. [5]

In the past few years, smart mobile devices and web sites have grown cheaper and have made their places from the lives of the common people which can form a base for the complain management system. The GPS sensor present in these devices provides a huge extent for location based services. A GPS receiver uses signals transmitted by GPS satellites to calculate the exact location in terms of the latitude, longitude and altitude. The GPS enabled Mobile Application uses GPS technology to obtain the location of the complaint which reduces the fake or recursive complaints and can be diverted to the respective ward without any delay.[3]

III. PROPOSED SYSTEM

The package that we designed can handle the Complaints details without any trouble & with a little bit of attempt. As the work is done manually before, so it will be very time consuming & required a large efforts to maintain the files. By computerizing the system these files can be handled with a small attempt & in less time. The chances of duplicity of complaints are negligible. The Citizens Complaint Report can be initiated easily by getting the information without any problem from all the related files. The package is designed by using GUI concept and it is very user friendly & easy to use.

In the proposed system the citizens do not have to go to the government office for getting his issues solved. He can get his issues solved by posting his problem in this proposed system and he can recommend a possible solution to the problems posted on the system. Our proposed system provides solution to existing system by extending its facilities as follows:

- Registration facility is provided so that officer can solve the problems easily
- Complete details regarding the place is displayed.
- Can suggest a solution for solving the problems in a better way,
- Can comment on the government's decisions. [2]

Compatibility with android:

Generally, new system brings new technology into an organization. The proposed system requires technology and equipment, which is android mobile. Moreover, the maintenance system has a lot of opportunity of being expanded and developed to generate even more better suggestions of places to user. The present technology assures technical guaranty of accuracy, reliability and ease of access.[2]

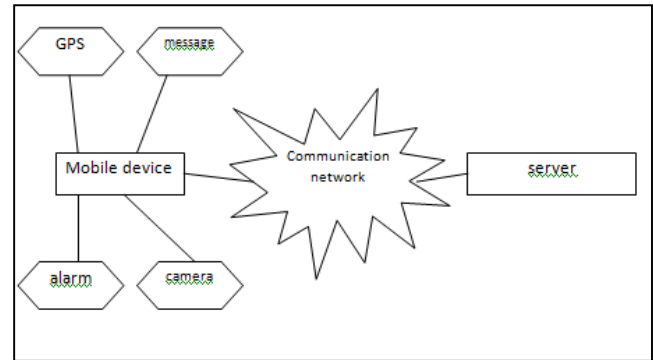


Fig.1 Components of System

1. **COMMUNICATION NETWORK:** Communication network provides connection between:
 - Mobile unit and server by using internet protocols.
 - GPS tracker and Mobile unit
 - Camera module and server
2. **SERVER:** It accepts the complaint request from citizen and processes it. It redirects it to specific departments for processing its request. Received request can contain:
 - Text (mandatory)
 - Image (not mandatory)
 - GPS location (automatically generated)
3. **GLOBAL POSITIONING SYSTEM:** The GPS system is used to track the location of mobile device from which complaint is being scheduled. We are going to place complaint by using mobile application [6]. Along with these request we will embed the location from which request are getting placed. Using GPS tracking system it is going to work. It will make use of Google Maps and API's
4. **CAMERA:** We will connect mobile application with camera module so that one can insert images with the complaints so as give a better idea regarding the complaint registered[7].The user can attach photos regarding the complaint such as the garbage collected in your locality, broken street lights, overflowing ,drainages, etc.
5. **ALARM:** If Complaint is not followed up in the specified period of time then the alarm will buzz on the mobile device in order to inform that the complaint is being registered long back and actions are not taken against it.
6. **E-MAIL GENERATION SYSTEM:** E-mail generation system will generate e-mail when
 - A complaint is registered
 - When a department receives a specific complaint request.
 - If any complaint is not followed up between specific period.

Benefits of the Proposed System:

1. This project makes it easy for the citizen to track the progress of its complaint.
2. There is an alarm system on the client as well as the server side to indicate that the complaint is not processed.
3. This project provides a direct communication between the common man and the Municipal corporation
4. The benefits of the proposed system must also be evaluated. Benefits may be categorized tangible or intangible.
 - Tangible benefits that are measured in money terms consist of the saving of certain operation costs.
 - Intangible benefits are more difficult to estimate and justify .For example these may include –The satisfaction level of the citizen.

IV. METHODOLOGY

In this application, first the citizens register to website with their details. The ward is registered by Admin because all authentications give to admin. The Admin also have use rid and password. For unique identification for example Aadhar number is treated as Use rid for citizen, ward member and admin for login to the website by using use rid and password. If user id and password are invalid then send a message invalid user id & password.

If citizen login to the website then control goes to citizen home page. The citizen home page has different segments. In this home page, citizen can post complaints, queries. If the problem not solved with in time or the ward member not respond properly then citizen also can post a complaint on ward member to the Admin .Citizens also can see solutions for complaints and queries that they post. After this citizen can logout from the website.

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Ward member see complaints and queries send by citizens. Ward member solve complaints and post solutions for that complaints. He can also send answers for queries. Ward member can see how many complaints are pending and how many are solved. By seeing the status of the complaint ward member solves complaints. Once the complaint solved the status change from pending to solved. After finished his work logout from the website. If Admin login to the website then control goes to ward member home page. The Admin home page has different sections. In this page Admin see all citizens and ward members in that municipal. Admin also view the complaints on ward member posted by the citizen. By seeing these complaints admin act in response. Admin has authentication on ward member. The admin then logout from the system.

MOBILE APPLICATION : Citizen will also have a mobile application .She/he can register a complaint related to specific ward where he/she finds a problem once the citizen registers to the application. Citizen can embed an image with the complaint. This application provides a user friendly UI interface .Mobile application contains GPS tracking system too. [4]. If ward member login to the website then control goes to the ward member home page. The ward member home page has different sections. In this page ward members can view citizens in their ward. Ward member see complaints and queries send by citizens. Ward member solve complaints and post solutions for that complaints. He can also send answers for queries. Ward member can see how many complaints are pending and how many are solved. By seeing the status of the complaint ward member solves complaints. Once the complaint solved then status change from pending to solved.

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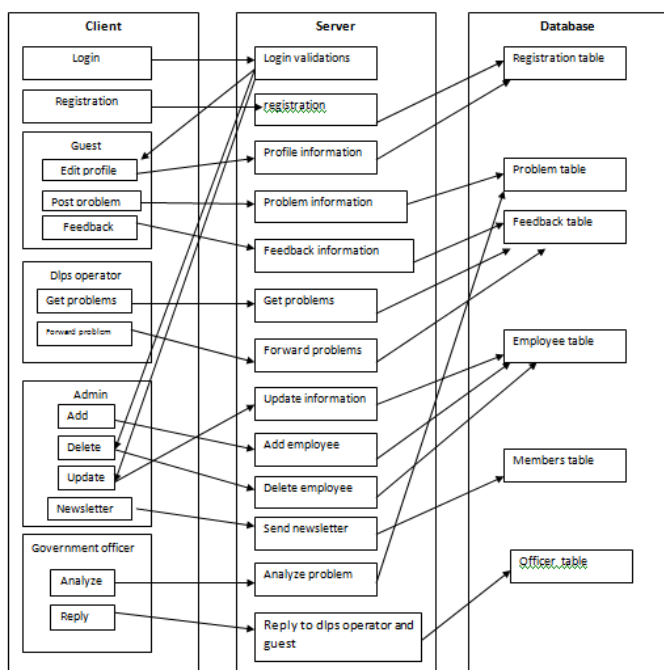


Fig. 2 System Architecture

V. CONCLUSION

This project provides a direct communication between the citizen and the municipal corporation. This will again help in inscribing the problems that one is facing in specific area and by continuously following up them will result in a good, clean and peaceful environment. Citizens can know place profile and information about problems they are facing in their area. Any funds related information, tourism related information in that area, children's charities old age homes. User can know complete information about the government related activities in more detailed form. The system proposed in this paper incorporates GPS functionality into the existing complaint registration systems. The complaint is registered via a mobile application and sent over the internet to a central server. A web interface is used to view and plot the complaints on a map. The system has been developed for civic complaints. It can be extended to include incident reporting to improve the efficiency of emergency services. The mobile application can be enhanced to display the location of the local administrative office, police station and other offices of the area in which the device is located.

VI. FUTURE ENHANCEMENT

By considering the suggestions of the citizens and higher authorities we will develop the project with innovative ideas like database management, applications like image views, interaction with the ruling people like MLA's ,chair person for better solutions. The solutions for complaints are messaged to citizens. Instead of post complaints to ward member, if the complaint is posted by citizen then the complaint go to particular consultant officer. We want make it as IOS application.[4].

VII. REFERENCES:

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