

Complaint Management System for Municipal Corporation

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Abstract:

The main purpose of this project is to help public in knowing their place details and get their issues solved in online mode without going to the office regularly. By this system public can save their time. This application will provide interface to a common man to deliver his complaint and problem to the municipal authority and let the authorities of municipal to address the problem as early as possible.

Keywords — Application, Municipal, Interface, Complaint, Problem.

I. INTRODUCTION

In Aurangabad city we don't have any direct communication between the government and public in an efficient way for solving the problems i.e. for getting problems solved in our place we have to bribe the officers and get them solved in 2 months which can be solved actually in 1 month of time.

The idea of this system is to help citizens of Aurangabad to register complaints about daily problems in their ward using mobile application.

This application provides interface to register or lodge complaints and follow it to the end. This interface providing a camera which help clicking a picture of any issue that people are watching and upload this photo along with that complaint.

The location of the complaint is tracked by using Global Positioning System (GPS). This module will provide exact location of that particular complaint.

The complaint is once registered, will be send to specific department of Aurangabad Municipal Corporation server site. We are placing complaint by using mobile application. Along with this request we will embed the location from which request is getting placed. This is going to work by

GPS tracking system. This application will make use of Google Maps and API.

II. LITERATURE SURVEY

Municipal Corporation of Aurangabad is a local governing organization which takes control and care of the functioning of Aurangabad city. Among many things one of the main responsibilities of Municipal Corporation includes addressing complaints that residents of the city have. Maintenance of such a large city like Aurangabad requires that Municipal Corporation be aware of any shortcoming either through surveillance (cameras) or by allowing citizens to report it them. The second option is always preferred because there is sense of belonging. A mechanism to accept complaint from citizens would be the expectations from both the citizens. The Aurangabad Municipal Corporation allows its citizens to lodge their complaints using several ways. Using GSM-GPS based system one can register their vehicular related complaint to the government. It uses the android application for lodging the complaint. There is one mobile interface for lodging the citizens complaint it contains the pothole tracking system. It only solves the issue related to roads only. The updated web portal is use for to lodge complaints of citizens in more simple way. For criminal investigation and

identification an application is developed which stores all the data about criminals with GPS system.

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This system will give very efficient and time saving way to lodge the complaint about daily problems in the city. It is also reliable for the BMC authorities to get the exact details of the problem occurred because of photograph. So, they can handle the problem in simple way with needed man power and tools or machineries. Because of the mobile application citizens will not get any problems to lodge their complaints, they do not personally go to the Municipal corporation office and lodge the complaint or on the web portal with many detailed inputs

User can register as a new member using an android application. By using this application, a user can complaint from any area they wish in an easy way. Using smart complaint resolver, user can complaint at a click by reducing their valuable time. The complaint is redirected to the specific department for further processing of complaint. Once the user has registered a complaint, after they can view the status of their complaint; whether it is processed perfectly or not. When the user's complaint is resolved the admin closes the

complaint and updating complaint status and the user is get notified at the time of next login.

Finally, there is process of feedback from the users which is being taken into account for further improvement.

III. PROPOSED SYSTEM

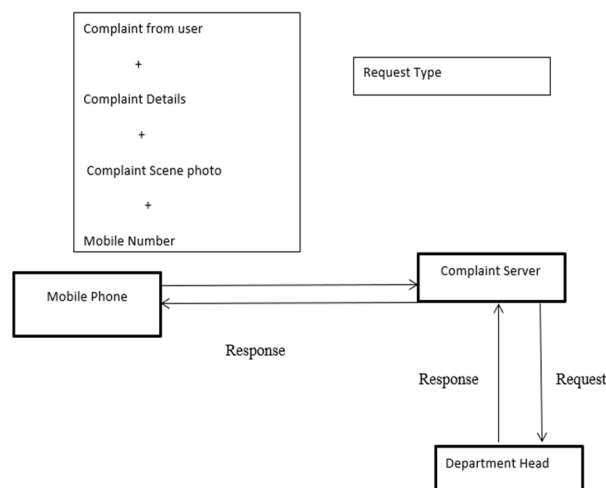


Fig.1 Proposed System

The working of the proposed system is shown in Fig.1. The users have to first download this application onto his mobile phone. Then user has to run the application on his mobile phone to start with a welcome screen. Then he has to lodge complaint with the details like complaint type, name, contact number and photo of that complaint scenario. And click send button to lodge the complaint on the server. After lodging the complaint, the user will get the complaint ID to track the status of the complaint. At the Municipal corporation server side, the complaint is routed to that particular department as per the complaint type and with the location of the complaint.

Then the respect authorized person of that department further handles that complaint with his workers and also notify the user about the status of the complaint. Using GPS, the authorized person will get to that location and solve the issue. After solving it he updates the status of the complaint to that user who had registered the complaint.

The system can also send daily notifications about day-to-day activities of the Municipal Corporation in particular locations in the city in the form of alert. So, citizens can perform any preventive actions related to the alert. It is very helpful for the citizens to getting alert about Municipal corporation activities. And at the server

side there is a part of report generation about the complaints which are lodged into the server.

These reports are created as per department wise or complaint type wise. So, it will get very helpful to the department authorities get to know history about the complaints solved or being solved.

IV. SYSTEM DEVELOPMENT

A. Requirement Specification:

1. User Interface:

- The system first registers user detail in database with user name, address, contact number, Voter id etc. system store this information in database.
- The system contains various type of Complaint with complaint image, text, location
- So, in this application user selects complaint according to his need. If user wants additional image or text for our Complaint.
- After selection of images finalize form will be display in which detail of all selected complaint with voter id.

2. Hardware Interface:

- Intel Pentium 4 (2.8 GHz) Processor and Above
- RAM 1 GB and Above
- System Type 32-bit and above
- HDD 40 GB Hard Disk Space and Above

3. Software Interface:

- Operating System: Android
- Database Server: Microsoft Sqlite Server

B. Theme of the Project:

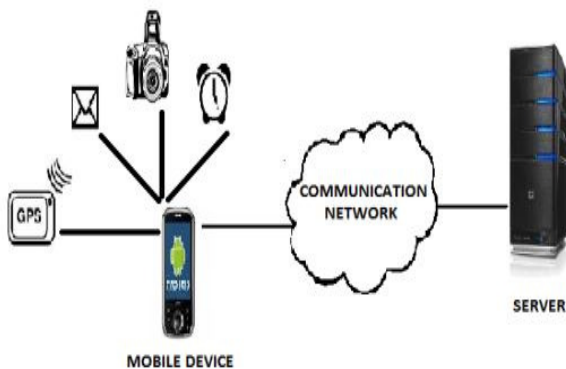


Fig.2 Structure of Municipal Complaint Management System

C. DFD:

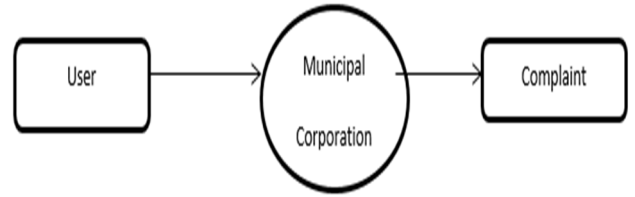


Fig.3 DFD level 0

Municipal Corporation Management System for register the complaint.

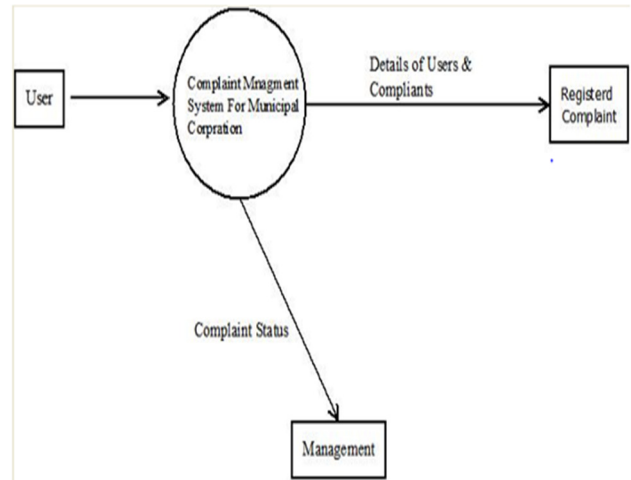


Fig.4 DFD level 1

The system after careful analysis has been identified to be presented with the following modules:

- Registration of user.
- Selection of Complaints.
- Adding Details of user.
- Finalization.

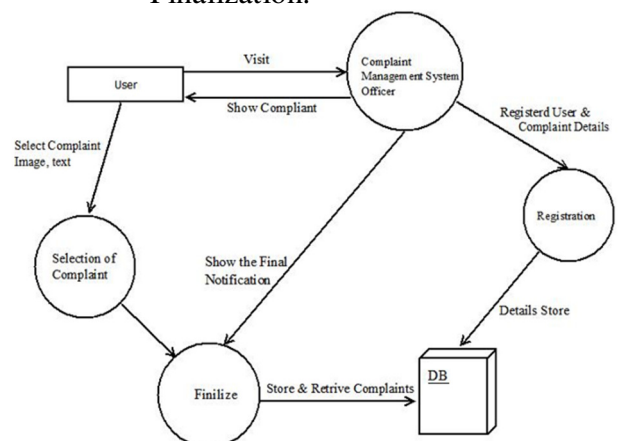


Fig.5 DFD level 2

1. Registration Of User:

The system first registers User detail in database with User name, address, contact number, Voter id Card Details, Complaint

place etc. system store this information in database.

2. Selection Of Complaints:

The system contains various type of Municipal Complaints So, in this stage of application user selects complaints according to his need.

3. Finalization:

After selection of Complaint finalize form will be display in which detail of all selected complaint with user detail. And also display the registrations time and date.

F. ER Diagram:

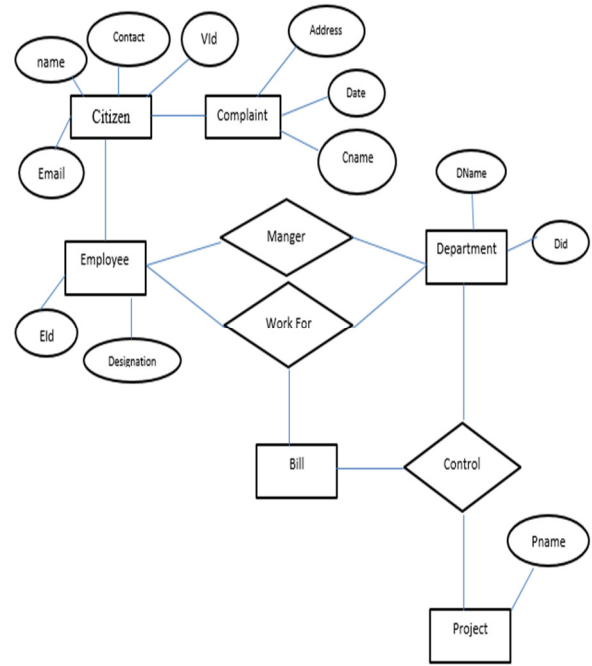


Fig.8 ER Diagram

D. UML Diagram:

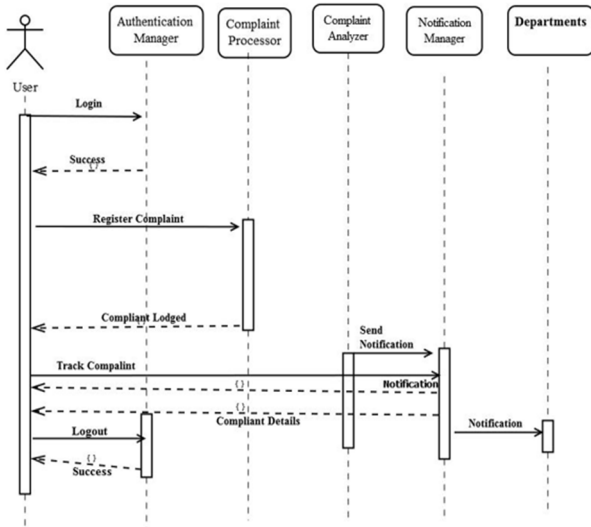


Fig.6 Sequence Diagram

E. Activity Diagram:

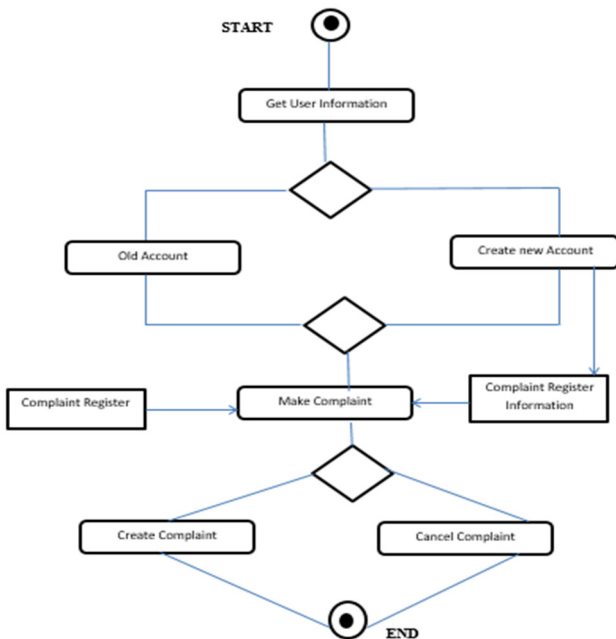


Fig.7 Activity Diagram

G. Output:

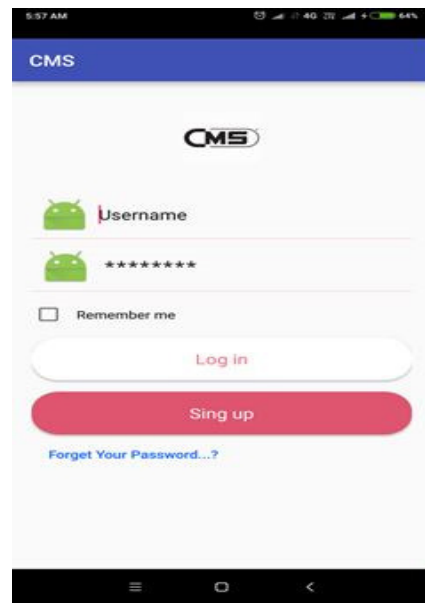


Fig.9 Screen 1 Login Screen

This is the Login page of Complaint Management System for Municipal Corporation. This will contain forget password link sing up link and remember me checkbox.

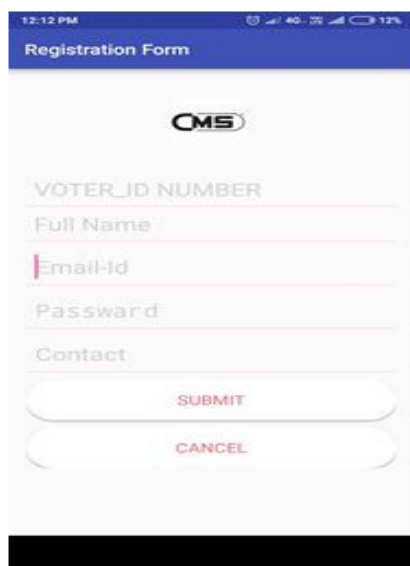


Fig.10 Screen 2 Registration Screen

This is the registration form. In registration form we will take voter Id number, full name of the customer, emailId and password and contact number. In back end we will verify the contact number and voter Id number if that match then detail will be updated in database.

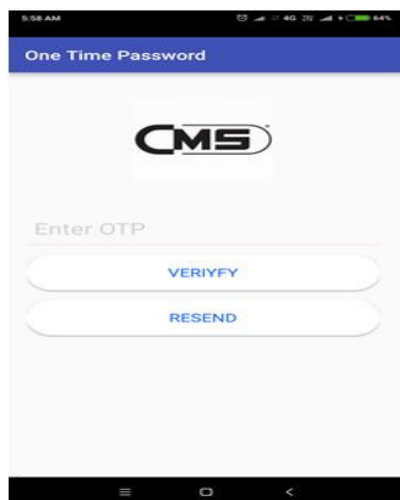


Fig.11 Screen 2 OTP Verification

This is the verification OTP page in that mobile number entered by user is verified by sending OTP on mobile number.

V. CONCLUSIONS

This system will give very efficient and time saving way to lodge the complaint about daily problems in the city. It is also reliable for the BMC authorities to get the exact details of the problem occurred because of photograph. So, they can handle the problem in simple way with needed man

power and tools or machineries. Because of the mobile application citizens will not get any problems to lodge their complaints, they do not personally go to the Municipal corporation office and lodge the complaint or on the web portal with many detailed inputs.

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