MUNICIPAL CORPORATION COMPLAINT MANAGEMENT SYSTEM USING WEB APPLICATION

PRIYADHARSHINI P[1], SUVETHA K[2], VANISRI R[3], VAISHNAVI R[4]
1 ASSISTANT PROFESSOR, 2,3,4 UG STUDENTS
DEPARTMENT OF COMPUTER SCIENCE
MAHENDRA ENGINEERING COLLEGE, TAMILNADU, INDIA

Abstract

This project is mainly based on the domain (Web Application Development). The common people under the jurisdication of municipal corporation have to deliver their grievances about day to day problem in their ward. In India we don't have any direct communication between the government and public in an efficient way for solving the problems. A web application is proposed to overcome their problem by delivering the grievances to the government. It will provide a common man to deliver his complaints and problems to municipal authority as well as let the municipal authorities to address the problem in a short period of time. It act as interface to register one's complained and follow it up and also it provides a complaint module which helps clicking up a picture of any problem that people are facing and upload its image, text information and location along with the complaint. In addition to that it also includes the online discussion forums and feedback forms which will help them to communicate well with the government and then how effectively the funds are utilized for the development purpose can be known by Public.

Keywords: Web Application, Communication & bulk complaints

1. INTRODUCTION

1.1 PURPOSE

The main purpose of the project is to help the public who are facing different problems in the localities by this online application. This project is having that potential to reduce the gap between people and Govt. It can control unethical work of bribe and even it can reduce the processing time. In this project identification and solution for the complaints given by the people, rectifying them is the main concept of the project. A clear report is generated by the system which shows name, complaint type, 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. The main objective of this project 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.

1.2 SCOPE

In this model, it is explained about the working procedure of the system, the roles involved in the system and the activities and responsibilities those users. This paper presents the overview of the analysis and development of the complaint management system of Municipal Corporation. There will be a remarkable result will be obtained by the implementation of this project and also they help in encouraging the development of this type of complaint management systems or more complex systems. Generally the complaints and other types of feedback play an important role in the development of any organization and to interact with the customers in a better way. This website is useful for the consumer to file their complaints online. A complaint message is assumed by consumercomplaint.in to be a description of a situation experienced by a consumer. A complaint is

only a personal opinion by a consumer, a perception of a consumer. That personal perception and/or opinion based on their own personal experience can be powerful, or meaningless, in the opinion of ConsumerComplaints.in, depending upon the context and content of what is written. We're not responsible for the way that information is interpreted by whoever reads it. Which of course varies from person to person, depending on whom they are, their own personal experiences, biases, opinions, etc.

1.3 DESCRIPTION

Our system has been implemented by the idea of the existing models and in addition to that, we have introduced a system. In this system the problem has been identify and rectify them with some grace period. The admin examines weather the problem is rectified or not within the grace period. This project resolves bulk complaints .the person who complaints their problem has a sufficient facility to explain through online instead of visiting the office and complaining through papers, without any further information about their complaints , they doesn‘t knows any acknowledgment for their complaints weather it reaches the admin or not by this system the people who complaints through online can receive an acknowledgment about the registration of the complaint received to the database. The main advantage of the system is the people can attach a image file into their complaint to revel the actual occurrence of their area or a place be recovered. The website have been created .Which can be accessed through every devices like computer, laptop, mobiles and tab

Human error is greatly reduced.
On board development becomes easy.
Everyone can issue their complaints easier
Admin side responses are efficient

2.LITERATURE SURVEY

2.1 SMART COMPLAINT MANAGEMENT SYSTEM

According to this system it saves time of people by directly launching complaint with the help of proposed system. They need not go to the government office for launching the complaints. People can get their problems/issues solved by directly posting it to the proposed system. People can post their suggestions. The proposed system contains the following facilities over the present system:

People can launch their complaints from anywhere with the help of mobiles.

People can capture image or upload videos.

Simple and easy complaint launching page so that even a common layman can also use the system easily.

There are sections that are divided as commissioner, grievance officer, head of the department and employee each have their individual login section. When the user launches complaint, it is forwarded to grievance officer. It‘s the duty of grievance officer to forward the complaint to the respective head of the department if the complaint is genuine. Then the head of the department will view the complaint and forward it to their employee and finally the employee will allot the problem to the co -worker. Co-worker will visit the place and check whether the problem is true or not if true then he will solve the problem. (Devika Radhakrishnan, Nisarg Gandhewar Nov-Dec 2016)

2.2 ELECTRONIC COMPLAINT MANAGEMENT SYSTEM FOR MUNICIPAL CORPORATION

This system basically includes there are several organizations which provide the facility of raising complaints, in which each of the organizations differ from each other in their type of complaint. These organizations define the type of services related to the complaint provided by them for customers. So, we can say that the definition of type of complaint differ as the services provided by various organizations are different . The meaning of customer complaint is nothing but the customer dissatisfaction and this is also considered as

the form of market feedback . On the other hand, customer‘s complaint management is considered the key role for organization‘s success. The complaint management system acts as the survey for the customer‘s feedback about the organization. There are several organizations which consider the customer complaints as opportunities for their organization‘s development. By this method of complaint management, there is possibility for companies to understand the relation between the time taken for solving the complaints and the customer reliability and makes them to concentrate more on the complaints and solve them as soon as possible. Here, there may be effect of these organizations on the other organizations like government or may be any private system. The most important aspect which should be observed here is that the user‘s complaints are considered as the suggestions for improvement of its services. (B.sudhir, B.Rajina, Sajidabanu September 2017)

2.3 INTEGRATED WEB BASED COMPLAINT MANAGEMENT SYSTEM

This basically aims 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:

Complete details regarding the place is displayed.

Registration facility is provided so that officer can solve the problems easily • Can suggest a solution for solving the problems in a better way, This project makes it easy for the citizen to track the progress of its complaint. There is an alarm system on the client as well as the server side to indicate that the complaint is not processed. This project provides a direct communication between the common man and the Municipal corporation . The benefits of the proposed system must also be evaluated. Benefits may be categorized tangible or intangible(Chetan soni, Arthi herne, Pooja gowri MAR 2018).

2.4 ONLINE COMPLAINT MANAGEMENT SYSTEM

The concept of an integrated conflict management system was conceived and developed by Mary Rowe, in numerous articles in the 1980s and 1990s. She saw the need to offer options for complainants and therefore a 7 linked system of choices within an organizational system. The idea of a systems approach has endured well. In recent years however, there has been discussion as to whether conflict should be "managed" 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 "integrating" 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‖(Osman Nasr , Enayat Alkhider JUNE 2016)

2.5 COMPLAINT MANAGEMENT SYSTEM FOR MUNICIPAL CORPORATION

The main purpose of this project is to help the public in knowing their place details and getting their problems solved in online without going to the officer regularly until the problem is solved. By this system the public can save his time and eradicate corruption in government offices. Its main purpose is to provide a smart and easy way through website for Complaint registration and its Tracking and eradicating Bribing system and thus to prevent Corruption. Registration is provided so that officer can solve the problems easily

Complete information regarding the place is displayed.

Can suggest a solution for solving the problems in a better way,

Can comment on the government‘s decision (rupti Bomble, Ritika Raut,Ruchi Kanekar April 2016)

4 PROPOSED SYSTEM

The application is a user friendly one that anyone can access for free of cost.

The basic idea of the project is to reduce the gap between people and government.

Acknowledgment about their complaint has been intimated as successful submission of complaint.

The aim is to overcome all the drawbacks faced in all the existing applications and generate fast and accurate results.

5.SYSTEM ARCHITECTURE DIAGRAM

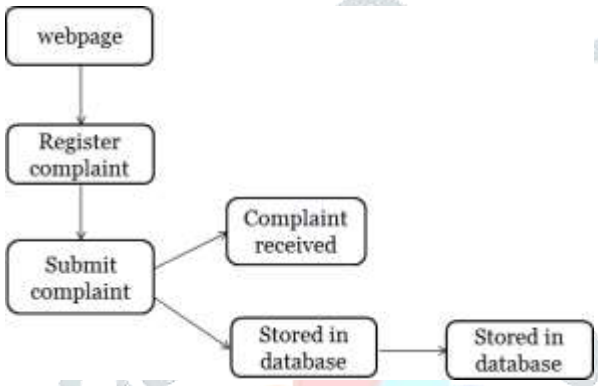

FIG 1- SYSTEM ARCHITECTURE DIAGRAM

5.1 DATA FLOW DIAGRAM

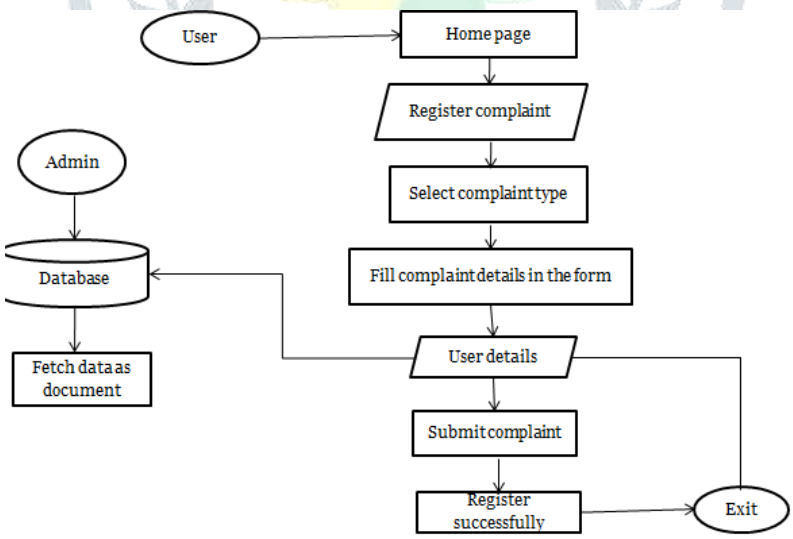

FIG 2 – DATA FLOW DIAGRAM

6 SOFTWARE TESTING AND IMPLEMENTATION

Testing is a process, which reveals errors in the program. It is the major quality measure employed during software development. During testing, the program is executed with a set of test cases and the output of the program for the test cases is evaluated to determine if the program is performing as it is expected to perform testing strategy In order to make sure that the system does not have errors.

6.1 WEB APPLICATION TESTING

Web applications run in a web browser, rather than being installed on a user‘s device. Web applications run on any device that can access the internet which includes desktop computers, tablets, and mobile phones. Web applications are easily scalable, support multiple browsers and devices, platform independent and reduces the cost. By doing web application testing, we can make sure that our web-based application is functioning properly and can be accepted by real-time end users. A web application should go through a series of validations to ensure the functionality, usability, accessibility, compatibility, performance, and security of the application.

6.2 DOCUMENTATION TESTING

Functionality Testing: What the system actually does is functional testing. To verify that each function of the software application behaves as specified in the requirement document. Testing all the functionalities by providing appropriate input to verify whether the actual output is matching the expected output or not. It is used for checking the workflows, all the links of the web pages, form testing, cookie testing, and database connection. Typically, functional testing includes the following tasks:

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6.4 TESTING UI WORKFLOWS

A tester needs to test end to end workflow or business scenarios. Writing test scenarios or test cases would be recommended to cover different scenarios and set pass criteria.

6.5 TESTING HYPERLINKS (LINK TESTING)

A tester needs to ensure all the links on a website are working correctly and make sure there are no broken links. Types of links include Internal links, Outgoing links, Anchor links, etc.,

6.6 FORMS TESTING (INPUT FIELD VALIDATION)

Forms are used to do interactive communication with end users. A tester needs to ensure all the forms are working as expected.

Verify whether the default values are being populated

Verify whether an error message is shown when a user does not fill a mandatory field

Verify whether the form is accepting invalid values or not

Verify whether the forms are optimally formatted for better readability

Verify whether the AJAX fields are populating the values correctly at run time

Verify whether the drop-down lists are loading with options

6.7 VALIDATE HTML AND CSS

A tester needs to test whether a site has clean HTML structure and optimized CSS as per W3C standards. Also to ensure that search engines can crawl the site easily.

Verify HTML syntax errors

Verify color schemas are readable

Verify the sitemap are accurate or not

6.8 DATABASE TESTING

It is AKA back-end testing or data testing.

Database testing involves verifying the integrity of data in the front end with the data present in the back end. It validates the schema, database tables, columns, indexes, stored procedures, triggers, data duplication, orphan records, junk records. It involves updating records in a database and verifying the same on the front end.

6.9 CAPACITY TESTING

Capacity Testing is to determine how many users a system/application can handle successfully before the performance goals become unacceptable. This allows us to avoid the potential problems in the future such as increased user base or increased volume of data. It helps users to identify a scaling strategy in order to determine whether a system should scale up or scale out. It is done majorly for eCommerce and Banking sites. are some examples. This testing is sometimes called Scalability testing.

6.10 SYSTEM IMPLEMENTATION

System implementation is the process of: defining how the information system should be built (i.e., physical system design), ensuring that the information system is operational and also ensures that the information system meets quality standard (i.e., quality assurance). As mentioned in the system testing this application had installed and tested with various android devices. Here, the quality of the information means how the outputs are satisfying the user‘s expectations. Our application can give information for students and faculties with the quality standards of study materials as they expect and the information flow is well defined. Firstly, the information will be updated by the staff as an input. These materials will be uploaded. Then the uploaded information will be accessed by the students in order to reduce their stress and prepare well for the examination.

7. PLATFORM ANALYSIS AND PERFORMANCE AND STUDY

7.1 PHP

PHP is a server side scripting language that is embedded in HTML. It is used to manage dynamic content, databases, session tracking, even build entire e- commerce sites.It is integrated with a number of popular databases, including MySQL, PostgreSQL, Oracle, Sybase, Informix, and Microsoft SQL Server. PHP is pleasingly zippy in its execution, especially when compiled as an Apache module on the Unix side. The MySQL server, once started, executes even very complex queries with huge result sets in record-setting time. PHP supports a large number of major protocols such as POP3, IMAP, and LDAP. PHP4 added support for Java and distributed object architectures (COM and CORBA), making n-tier development a possibility for the first time. PHP is forgiving: PHP language tries to be as forgiving as possible. PHP Syntax is C- Like.

7.2 BOOTSTARP

Bootstrap is a powerful front-end framework for faster and easier web development. It includes HTML and CSS based design templates for creating common user interface components like forms, buttons, navigations, dropdowns, alerts, modals, tabs, accordions, carousels, tooltips, and so on. Bootstrap gives you ability to create flexible and responsive web layouts with much less efforts.

Save lots of time — You can save lots of time and efforts using the Bootstrap predefined design templates and classes and concentrate on other development work.

Responsive features — Using Bootstrap you can easily create responsive websites that appear more appropriately on different devices and screen resolutions without any change in markup.

Consistent design — All Bootstrap components share the same design templates and styles through a central library, so the design and layout of your web pages will be consistent.

Easy to use — Bootstrap is very easy to use. Anybody with the basic working knowledge of HTML, CSS and JavaScript can start development with Bootstrap.

Compatible with browsers — Bootstrap is created with modern web browsers in mind and it is compatible with all modern browsers such as Chrome, Firefox, Safari, Internet Explorer, etc.

Open Source — And the best part is, it is completely free to download and use.

7.3 HTML&CSS

HTML (Hypertext Markup Language) is used to create the actual content of the page, such as written text, and CSS (Cascade Styling Sheets) is responsible for the design or style of the website, including the layout, visual effects and background color. HTML is the language for describing the structure of Web pages. HTML gives authors the means to:

Publish online documents with headings, text, tables, lists, photos, etc.

Retrieve online information via hypertext links, at the click of a button.

Design forms for conducting transactions with remote services, for use in searching for information, making reservations, ordering products, etc.

Include spread-sheets, video clips, sound clips, and other applications directly in their documents.

With HTML, authors describe the structure of pages using markup. The elements of the language label pieces of content such as ―paragraph,‖ ―list,‖ ―table,‖ and so on.

Css is the language for describing the presentation of Web pages, including colors, layout, and fonts. It allows one to adapt the presentation to different types of devices, such as large screens, small screens, or printers. CSS is independent of HTML and can be used with any XML-based markup language. The separation of HTML from CSS makes it easier to maintain sites, share style sheets across pages, and tailor pages to different environments. This is referred to as the separation of structure (or: content) from presentation.

7.4 MYSQL

MySQL is an important component of an open source enterprise stack called LAMP. LAMP is a web development platform that uses Linux as the operating system, Apache as the web server, MySQL as the relational database management system and PHP as the object-oriented scripting language. (Sometimes Perl or Python is used instead of PHP.)

8. CONCLUSION

In this model, it is explained about the working procedure of the system, the roles involved in the system and the activities and responsibilities those users. It presents the overview of the analysis and development of the Municipal Corporation complaint management system. There will be a remarkable result will be obtained by the implementation of this project and also they help in encouraging the development of this type of complaint management systems. Generally the complaints and other types of feedback play an important role in the development of any organization and to interact with the customers in a better way. This system can be taken as initiation for the systems which will be developed even more on future and which are related to complaint management systems.

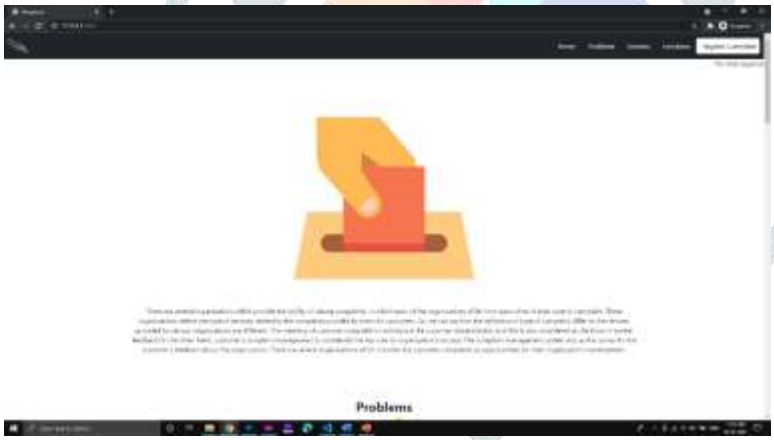
9. RESULTS

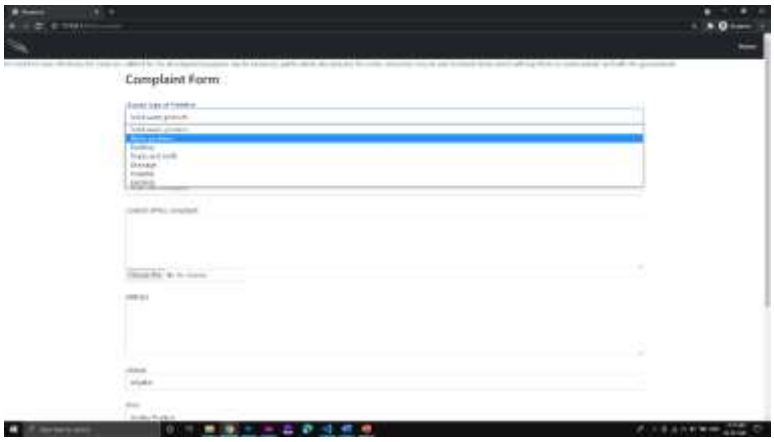
This project provides a direct communication between the citizen and the municipal corporation.

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.

The system has been developed for civic complaints.

10.SCREENSHOTS





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