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# Municipal Corporation Complaint Management System in Online Platform

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**Abstract** 

Municipal Corporation Complaint Management System is an online platform designed to provide an efficient and effective way for citizens to report complaints related to municipal services. This system allows citizens to submit complaints via an online portal, which is then forwarded to the relevant department for resolution. The system provides real-time updates on the status of complaints and allows citizens to track the progress of their complaints. Overall, the Municipal Corporation Complaint Management System aims to improve the quality of municipal services and enhance citizen satisfaction by providing a streamlined and transparent complaint resolution process.

**Keywords:** Automatic tracking Online services, PHP, My SQL,MCCMS.

1. Introduction

Municipal corporation complaint management system in small points. Here are some key points for an introduction to a municipal corporation complaint management system. The municipal corporation complaint management system is a platform designed to help citizens submit complaints related to municipal services, such as garbage collection, road maintenance,

water supply, and other public infrastructure. The system may have features such as a web portal, mobile app, or dedicated phone line for complaint submission, automatic complaint tracking and resolution, and a feedback mechanism to ensure citizens are informed about the status of their complaint. By providing a streamlined and efficient way for citizens to submit complaints, the system helps the municipal corporation improve its services and address issues more quickly. It also enhances transparency and accountability, as citizens can track the progress of their complaints and hold officials accountable for timely resolution.

The municipal corporation complaint management system can be implemented with the help of technology partners, who can provide the necessary software and hardware infrastructure. Training and capacity building for officials and citizens may also be required to ensure the system is used effectively. A well-functioning municipal corporation complaint management system can improve the quality of life for citizens by addressing their concerns and improving municipal services. It can also enhance the reputation of the municipal corporation and build trust between citizens and officials.

### 2. Our Contribution

Issues faced in your municipality such as potholes, broken streetlights, or overflowing garbage bins, report them promptly to the municipal corporation. This will help the authorities to take action quickly and resolve the issue. When reporting an issue, make sure to provide accurate information about the location, nature, and severity of the problem. This will help the authorities to assess the situation and take appropriate action. Follow up on complaints: If you have filed a complaint with the municipal corporation, follow up regularly to check the status of your complaint. This will help to ensure that the authorities are taking the necessary steps to resolve the issue. Participate in community initiatives: Many municipalities have community initiatives aimed at improving the overall quality of life in the area. Participate in these

initiatives, such as cleanliness drives or tree planting campaigns, to contribute to the betterment of your municipality. Spread awareness among your friends, family, and neighbours about the importance of reporting issues to the municipal corporation. Encourage them to take an active role in keeping the municipality clean and well-maintained.

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#### 3. System Background

### 3.1. PHP (Hypertext Pre-Processor)

PHP (Hypertext Pre-processor) is a server-side scripting language used for developing web applications and websites. It is an open-source, free, and widely used programming language that is compatible with most web servers.PHP is especially well-suited for building dynamic web pages that can interact with databases and other server-side technologies. It is often used in conjunction with databases like MySQL to build powerful web applications.

PHP can run on different platforms such as Windows, Linux, macOS, and many others.PHP syntax is easy to understand and learn, especially for those who have experience in programming languages like C, Java, or JavaScript.PHP is an open-source language, which means that developers can use, modify, and distribute the language for free.PHP scripts execute quickly and efficiently, making it a popular choice for building high-traffic websites and web applications.PHP has a large community of developers who contribute to the language's development, provide support, and share knowledge and resources.Overall, PHP is a versatile and powerful language that is widely used in web development. It continues to evolve with new features and updates, making it an excellent choice for building robust web applications and websites.

# **3.2.** MYSQL-(Structured Query Language)

MySQL is used by many popular websites and web applications, such as Facebook, Twitter, and YouTube. MySQL is scalable, which means it can handle large amounts of data and is Page | 297 capable of supporting multiple users simultaneously. MySQL provides a range of security features, such as encryption, user authentication, and access control, to ensure the safety and integrity of data stored in the database. MySQL is designed to perform well under high load conditions, making it an excellent choice for websites and web applications that require high levels of performance. MySQL is compatible with many different operating systems and programming languages, making it easy to integrate with existing software systems.

MySQL is an open-source database system, which means that it is free to use and can be modified and distributed without any licensing fees. Overall, MySQL is a powerful and versatile database management system that is widely used for web applications and other types of software. Its scalability, security, and performance make it an excellent choice for developers and businesses looking for a reliable database solution.

#### 4. React JS

React, sometimes referred to as a frontend JavaScript framework, is a JavaScript library created by Facebook.React is a tool for building UI components.

#### 5. Methodology

The Municipal Corporation Complaint Management System (MCCMS) is a project aimed at improving the process of handling complaints and requests from citizens to the local municipal corporation.

# **5.1. Project Initiation**

Define project scope, objectives, and deliverables form a project team comprising stakeholders, project managers, and technical experts. Develop a project plan with timelines and milestone.s

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#### 5.2. Requirements Gathering

Identify and gather the requirements for the MCCMS system from stakeholders and citizens

Analyse the requirements and prioritize them based on their importance and feasibility.

### **5.3. Design and Development**

Develop a functional design for the MCCMS system based on the requirements gathered a technical design including database design, system architecture, and interface design and also develop the MCCMS system using appropriate software tools and programming languages.

### 5.4. Testing and Quality Assurance

Conduct testing of the MCCMS system to ensure that it meets the requirements and is errorfree .Conduct a user acceptance test to ensure that the system meets the needs of citizens and municipal corporation staff and also conduct a security and data privacy audit to ensure that the system is secure and compliant with relevant regulations.

#### 5.5. Implementation and Deployment

Install the MCCMS system in the municipal corporation's IT infrastructure. Train the municipal corporation staff on how to use the MCCMS system. Launch the MCCMS system and communicate its availability to citizens.

### **5.6.** Maintenance and Support

Provide ongoing support and maintenance for the MCCMS system to ensure its optimal performance. Continuously monitor the MCCMS system to detect and resolve any issues or bugs. Collect feedback from citizens and municipal corporation staff to identify areas for improvement and incorporate them into future versions of the MCCMS system.

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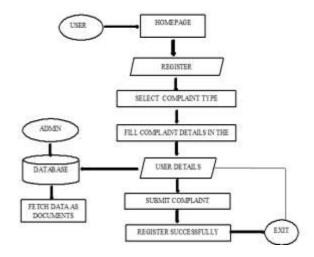


Figure 1. MCCMS monitoring process

#### **6. Conclusion**

To overcome the drawback of the existing system of grievance redressal, this paper proposes a new web application using blockchain technology. A framework that gives an answer for the absence of an easy specialized strategy to advise the authority about the public grievance, which lessens the complex methodology to be followed in the grievance enlistment process. The created versatile application brings all the divisions under the equivalent and the user can hold up their grievances in the individual sectors. The client who is dwelling the protest will be checked as a genuine user and the data will be put away at the blockchain. Likewise, the grievance structure with its sort and pictures will be sent to the IPFS. The location will assist with following to the area and the user would have an affirmation of the enrolled grievance. It makes the complaint redressal systems more transparent and accountable. This application

improves the people's trust in the government. As each user keeps their copy of data with themselves, a middle man cannot modify or tamper the data.

#### REFERENCES

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- [1]. Shubham Patil, Shreekant Khadsan, Saurabh Virkar, Kartik Dhankude,Mr Ramdas Jare, "Integrated Municipal Service Application," in International Journal of Advanced Research in Computer and CommunicationEngineering.
- [2]. Ma, Ying & Sun, Yu & Lei, Yunjie & Qin, Nan & Lu, Junwen. (2019), "A survey of blockchain technology on security, privacy, and trust incrowdsourcing services". World Wide Web. 10.1007/s11280-019-00735-4.
- [3]. Yinsheng Li, "Emerging blockchain-based applications and techniques", SOCA 13, 279–285 (2019).
- [4]. Tsung-Ting Kuo, Hyeon-Eui Kim, and Lucila Ohno-Machado, "Blockchain distributed ledger technologies for biomedical and healthcare applications" in Journal of the American Medical Informatics association, 08 September 2017.
- [5]. Chatterjee, Krishnendu & Goharshady, Amir & Velner, Yaron. (2018), "Quantitative Analysis of Smart Contracts". 10.1007/978 3 319 –89884 126.
- [6]. Patsakis, Constantinos & Casino, Fran, (2019) "Hydras and IPFS:A Decentralised Playground for Malware" in International Journal ofInformation Security. 10.1007/s10207-019-00443-0
- [7]. Steichen, M., Fiz, B., Norvill, R., Shbair, W., & State, R. (2018), "Blockchain-Based, Decentralized Access Control for IPFS" in 2018IEEE Confs on Internet of Things, Green Computing and Communications, Cyber, Physical and Social Computing, Smart Data, Blockchain, Computer and Information Technology, Congress on Cybermatics.
- [8]. Kumar Bhosale, Kadaya Akbarabbas, Jadhav Deepak, Awani Sankhe, "Blockchain based Secure Data Storage" in International Research Journal of Engineering and Technology p-ISSN: 2395-0072 Volume:06 Issue: 03 Mar 2019.