Waste Management System

INTRODUCTION

As the population grows in rural areas, the volume of waste generated also increases, leading to a greater need for effective waste management. However, the lack of proper waste disposal mechanisms and infrastructure can pose significant challenges for the residents in managing their waste.

To tackle this problem, the local governing body, in this case, the Panchayath of Avoly, has taken the initiative to address the waste management issue. They are actively involved in the process of collecting waste from residential areas within their jurisdiction.

By implementing a systematic approach to waste collection, the Panchayath aims to ensure that waste is collected efficiently and disposed of properly, reducing environmental pollution and promoting a cleaner living environment for the residents.

The Waste Management System could involve various components, such as a centralized online platform for waste scheduling with online payment and coordinating with waste management teams to ensure timely and responsible waste collection.

With such initiatives in place, the Panchayath hopes to foster a culture of responsible waste management among the residents and create a sustainable environment for the future. The successful implementation of this system will not only benefit the communities of Avoly but also serve as a model for other rural areas facing similar waste management challenges.

OBJECTIVE

The Waste Management System aims to streamline and handle all waste collection activities online. This system is being implemented in response to the increasing waste management challenges faced by rural areas such as Avoly in Ernakulam district.

EXISTING SYSTEM

The existing system is considered as a waste management system which provides the ability to report irresponsible waste disposal, connect with waste collection companies, specification of waste disposal areas within a given locality and ability of waste collection companies to connect with recycling companies.

The existing system gives more importance to notify the respective agencies that irresponsible waste disposal has occurred in a specific location rather than preventing such disposal in the first place. This means that the proper management of the waste will only occur if an excess amount of it is reported at any location. This system only acts as a mode of communication between the respective agencies and the user rather than taking any appropriate action by the system itself.

PROPOSED SYSTEM

Our proposed system is more of a waste management handled by the panchayath, where the local body assign agencies for the door-to-door collection of waste from the user who simply uses the system to notify the local body that waste collection services are required.

Advantages of our proposed system:

- Door-to-door waste collection
- Onsite user presence is not required for collection
- Online payment
- Security and reliability
- Enhanced UI

SOFTWARE REQUIREMENT SPECIFICATION (SRS)

Hardware Specifications

Processor	: Intel Core i5 8th gen or higher
Speed	: 1.5GHz or Higher
System bus	: 64 bits
Memory	: 8 GB ram or Higher
Hard Disk	: 256 GB or Higher
Monitor	: 16” LED Monitor
Keyboard	: 104 keys
Pointing Device	: Two or Three Mouse Buttons

Software Specifications

Operating System	: Windows
Front End	: HTML, CSS, JSP
Scripting Language	: Java Script
Back End	: MySQL
Browser	: Google Chrome

MODULE SPECIFICATION

Our system contains 4 modules :

- Admin
- Agency
- User
- Guest

ADMIN

- Login
- Homepage/Dashboard
- Location Specification
- User Registration Rules
- User Verification
- Transaction Module
- Report/Review Validation And Acknowledgement

AGENCY

- Login
- Homepage/Dashboard
- Profile Settings
- Consumer Details
- Weight Specification

USER

- Login
- Homepage/Dashboard
- Profile Setting
- Waste Collection Requirement
- Payment Module
- User Review/Report
- Payment History

GUEST

- New User Registration
- New Agency Registration