



# **CLEANSOCIETY**

## **A PROJECT REPORT**

*Submitted by*

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*In fulfilment of the subject Mini Project - II of*

**B.E. Semester VI**

*In*

**Department of Computer Engineering**

**Sankalchand Patel College of Engineering, Visnagar**

**Sankalchand Patel University, Visnagar**

**April 2025**



## **Sankalchand Patel College of Engineering, Visnagar**

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This is to certify that the project entitled **CLEANSOCIETY** has been carried out by **Dhruv V. Patel (2023095900004485)** under my guidance in fulfilment of the subject Mini Project –II of Bachelor Of Engineering in Computer engineering (Semester VI) of Sankalchand Patel University, Visnagar during the academic year 2024-25

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Head of the Department

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# **ACKNOWLEDGMENT**

## **Acknowledgement**

This project report on **CLEANSOCIETY** beats the important of several person with the properguidance of those persons, this project has been completed.

We extend our sincere and heartfelt thanks to our esteemed guide **Ekta V. Patel** for providing me and my team an opportunity for us to show our hidden talent to you & providing their suggestion for betterment of our program our project would not have been possible without your faith on us.

We would like to extend thanks to our respected Head of the Department, **Dr. Kirit J. Modi** for allowing us to use the facilities available.

Thank You & Regards,

Dhruv V. Patel

Ayush R. Patel

Shivam N. Patel

Krish V. Patel

Harsh M. Modi



## **ABSTRACT**

- Clean Society is an innovative web-based platform designed to address the growing challenge of urban waste management by enabling citizens to report garbage accumulation in public spaces. The platform allows users to file complaints by uploading images of unclean areas, providing the exact location, and submitting relevant details. These complaints are then forwarded to the respective municipal corporation, which responds with an estimated cleanup timeline.
  
- The system features a user-friendly interface with functionalities such as user authentication (login/logout), complaint tracking, and status updates to ensure transparency. Users can monitor the progress of their complaints, receive notifications about actions taken, and provide feedback on the resolution process. The platform also maintains a complaint history, allowing users to review past reports and track municipal performance over time.
  
- Clean Society aims to bridge the gap between citizens and municipal authorities, fostering greater accountability and efficiency in waste management. By leveraging technology, it encourages community participation in environmental cleanliness, promotes civic responsibility, and contributes to a healthier, more sustainable urban ecosystem.

## **Chapter-1**

### **INTRODUCTION**

Waste management is a critical challenge in urban areas, with garbage accumulation in public spaces leading to environmental pollution, health hazards, and decreased quality of life. Despite municipal efforts, inefficient reporting systems and delayed responses often result in unattended waste, negatively impacting communities. Citizens frequently struggle to find an effective way to report unclean areas, and municipal authorities lack a streamlined process to track and address complaints efficiently. There is a pressing need for a structured, technology-driven solution that enables real-time communication between citizens and municipal bodies to ensure timely waste disposal and cleaner surroundings.

Clean Society is a web-based platform designed to bridge this gap by empowering users to report garbage accumulation directly to municipal authorities. Through a simple interface, users can upload images, provide location details, and describe waste-related issues, allowing authorities to assess and respond accordingly. The platform enables complaint tracking, status updates, and estimated cleanup timelines, ensuring transparency and accountability. Additionally, municipal corporations can manage and prioritize complaints using a dedicated dashboard, streamlining their workflow for faster resolution. By leveraging technology, Clean Society enhances public participation in waste management and strengthens municipal efficiency.

The platform integrates modern technologies such as React.js or Vue.js for the frontend, Node.js or Django for backend operations, and Google Maps API for accurate geolocation tracking. With secure authentication, users can log in to track complaints, view complaint histories, and provide feedback on municipal responses. Clean Society not only simplifies the complaint process but also fosters civic responsibility by encouraging active community engagement in maintaining cleanliness. By creating a direct communication channel between the public and municipal bodies, the platform contributes to a more sustainable, hygienic, and organized urban environment.

## **1.1 OVERVIEW OF PROJECT**

Clean Society is a web-based platform designed to streamline urban waste management by enabling citizens to report garbage accumulation in public areas. Users can submit complaints by uploading images, specifying locations, and providing descriptions, ensuring that municipal authorities receive precise and actionable reports.

Each complaint is tracked through a structured system where users can monitor progress, receive real-time updates, and get estimated cleanup timelines. The platform also features user authentication, complaint history, and a feedback system to enhance transparency and accountability in municipal waste management.

To optimize efficiency, Clean Society provides a dedicated dashboard for municipal corporations, allowing them to categorize, assign, and resolve complaints effectively. The platform integrates modern technologies, including HTML, CSS and Jscript for the frontend, JQuery and PHP for the backend, and Google Maps API for geolocation-based reporting. By fostering direct communication between citizens and authorities, Clean Society promotes civic engagement, encourages responsible waste disposal, and contributes to cleaner, healthier urban environments.

## **1.2 OBJECTIVE & SCOPE OF PROJECT**

### **1.2.1 Objectives**

The primary objectives of **Clean Society** are to enhance urban cleanliness, improve waste management efficiency, and promote civic engagement. The platform aims to:

1. **Simplify the Complaint Process** – Provide an intuitive interface for users to easily report garbage-related issues by uploading images, specifying locations, and adding descriptions.
2. **Enhance Transparency and Accountability** – Allow users to track their complaints in real time, receive updates on municipal actions, and ensure authorities are held accountable for timely waste management.

**3. Improve Municipal Response Efficiency** – Offer a structured system for municipal corporations to categorize, assign, and resolve complaints, optimizing resource allocation for waste management.

**4. Promote Sustainable Waste Management Practices** – Raise awareness about responsible waste disposal and encourage cleaner habits within communities.

**5. Leverage Technology for Better Service Delivery** – Utilize modern web technologies such as Google Maps API for location-based reporting, real-time status updates, and data analytics to enhance waste management strategies.

### 1.2.2 Scope

The **scope** of Clean Society extends to multiple stakeholders, including citizens, municipal authorities, and urban planners, ensuring a comprehensive approach to waste management.

- **User Management & Authentication** – Users can register, log in securely, manage their profiles, and track their complaints. Authentication ensures that complaints are legitimate and prevents spam reports.

- **Complaint Reporting System** – Users can submit complaints with images, location details, and descriptions. Each complaint is assigned a unique reference number for tracking.

- **Complaint Tracking & Notifications** – Users receive real-time updates on complaint status, including submission confirmation, processing, and resolution. Notifications ensure users are informed at every stage.

- **Municipal Corporation Dashboard** – A dedicated dashboard allows authorities to view, filter, prioritize, and resolve complaints efficiently. Task assignment and progress tracking streamline the response process.

- **Feedback & Rating System** – Users can provide feedback on municipal responses, rate the efficiency of cleanup efforts, and suggest improvements.

- **Data Analytics & Reporting** – Municipal authorities can analyze complaint trends, identify high-risk areas, and improve waste management strategies based on real-time data.

- **Scalability & Future Expansion** – The system can be expanded to include additional waste management services such as recycling programs, hazardous waste disposal, and integration with smart city initiatives

### **1.3 PROJECT PROFILE**

Project Name: CleanSociety

Submitted To: Sankalchand Patel University, Visnagar

Front End: HTML5, CSS3, Javascript, JQuery, AJAX

Back End: Php, MySQL

Documentation Tool: Microsoft Word

Project Guide: Ekta V. Patel

Team Members: Dhruv V. Patel (2023095900004485)

Ayush R. Patel (2023095900004493)

Shivam N. Patel (2023095900004504)

Krish V. Patel (2022095900023543)

Harsh M. Modi (2022095900026456)

## **Chapter-2**

### **TECHNOLOGY**

#### **2.1 Software Requirements:**

- Front End: HTML5, CSS3, Javascript, JQuery, AJAX
- Back End: Php, MySQL
- Operating System: Windows 7 or higher
- Technology Used: Android 5.0 (Lollipop) or higher
- IDE: VS Code

#### **2.2 Hardware Requirements:**

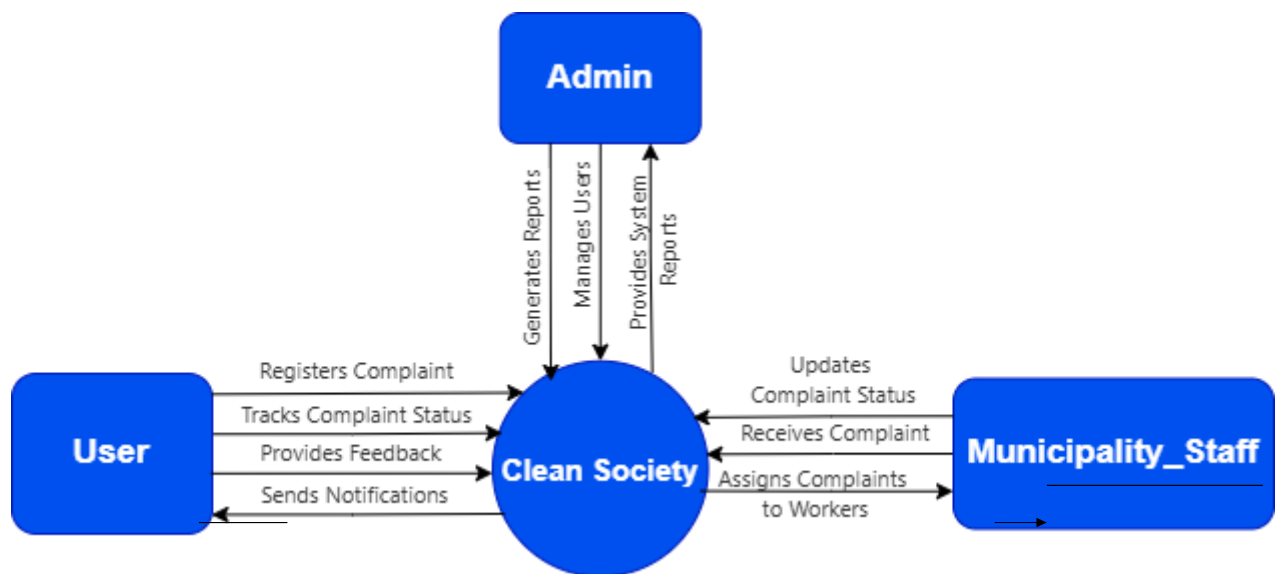
- Processor: 1GHz
- Hard disk: 500 MB or higher.
- RAM: 4 GB or higher

## Chapter-3

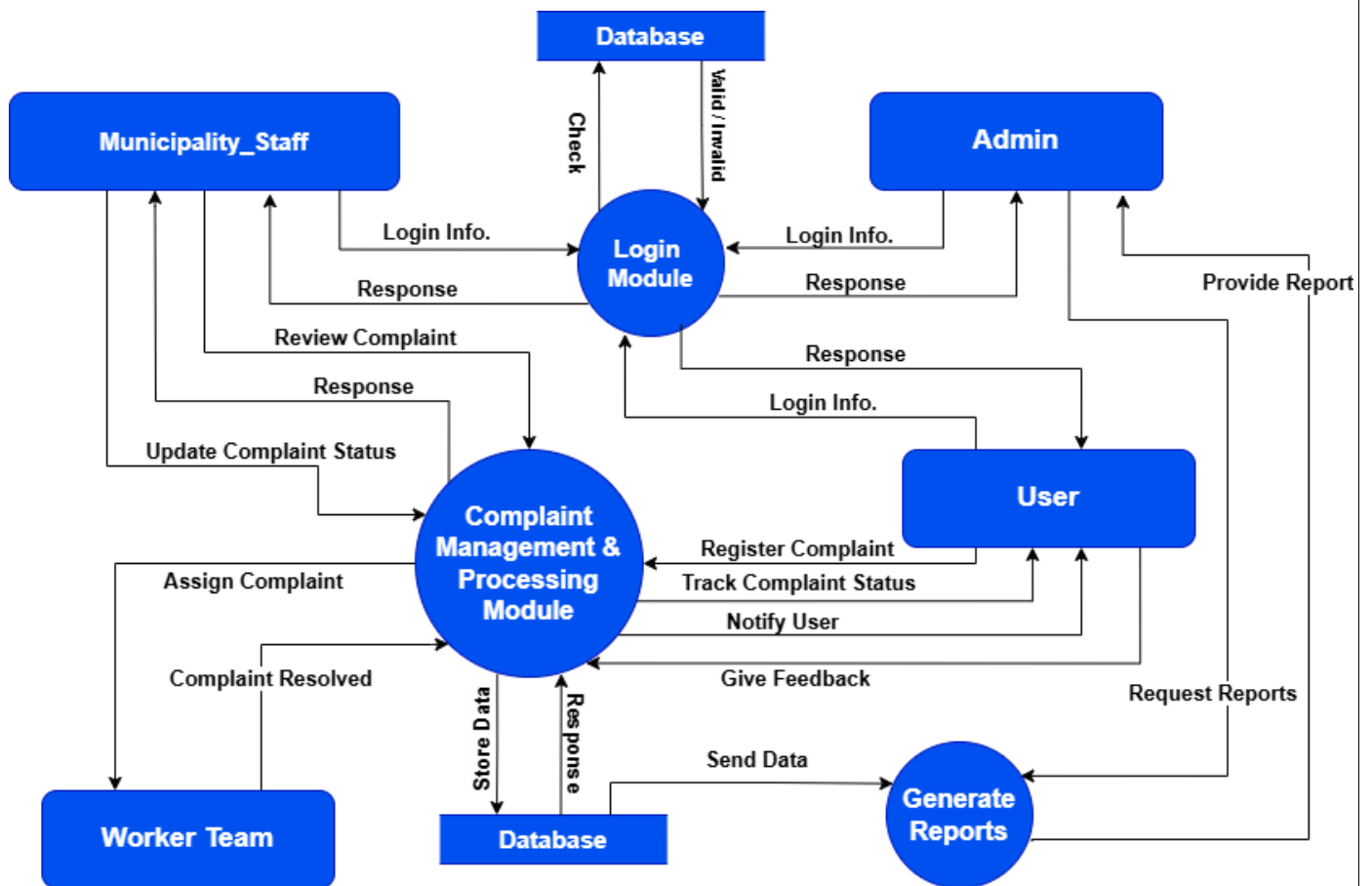
### DATA MODELING DIAGRAM

#### 3.1 DATA FLOW DIAGRAM: -

##### 3.1.1 Context Level DFD

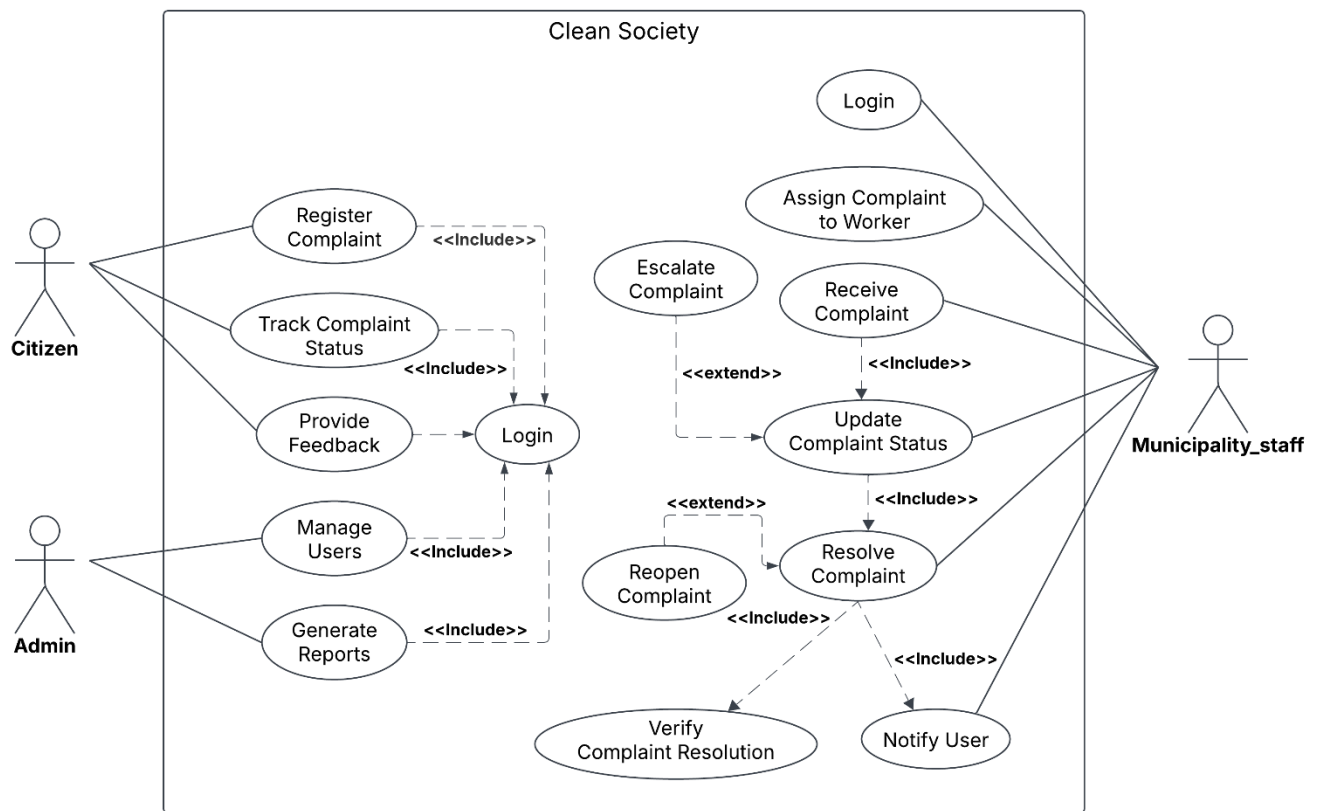


### 3.1.2 1st Level DFD

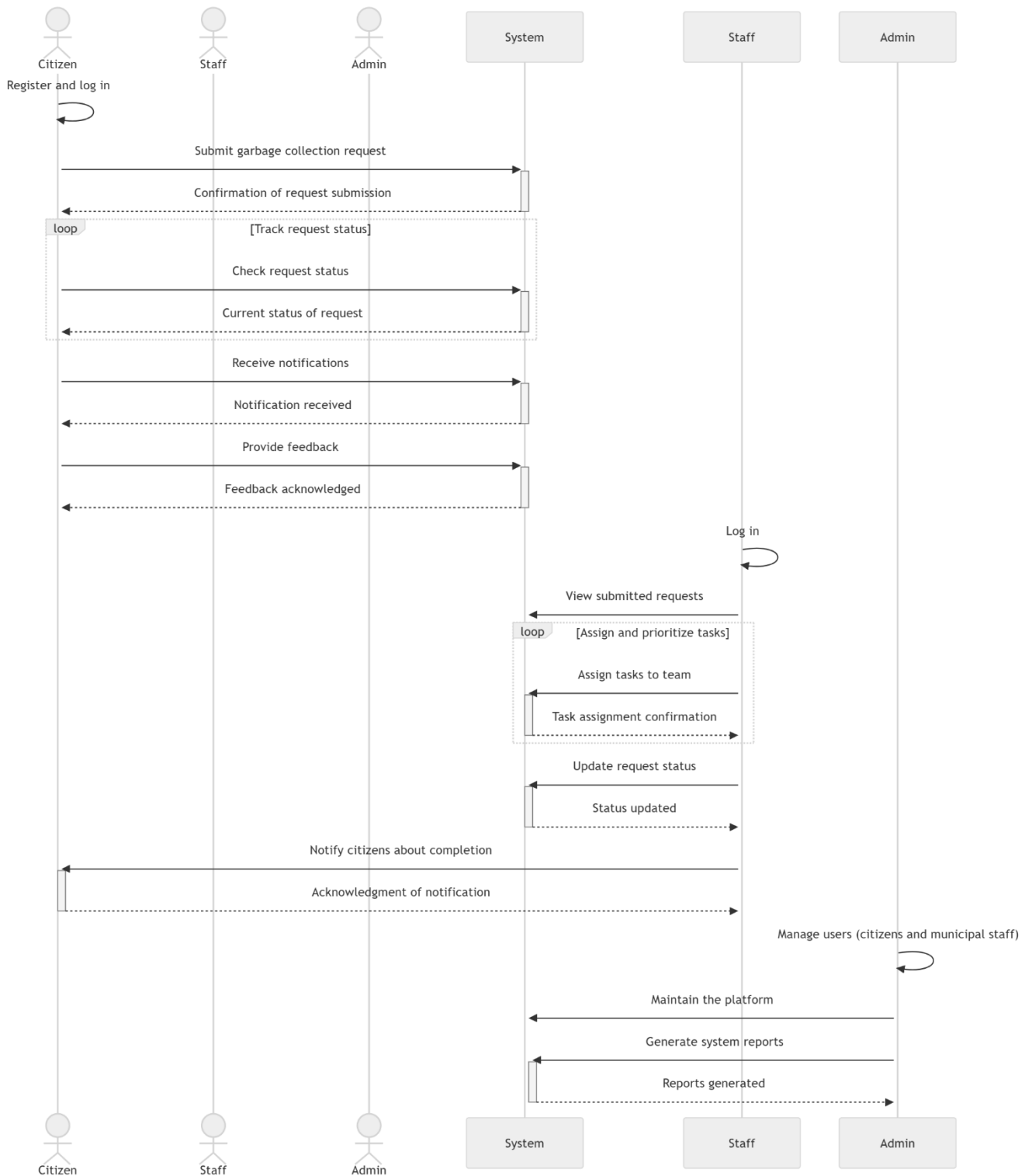




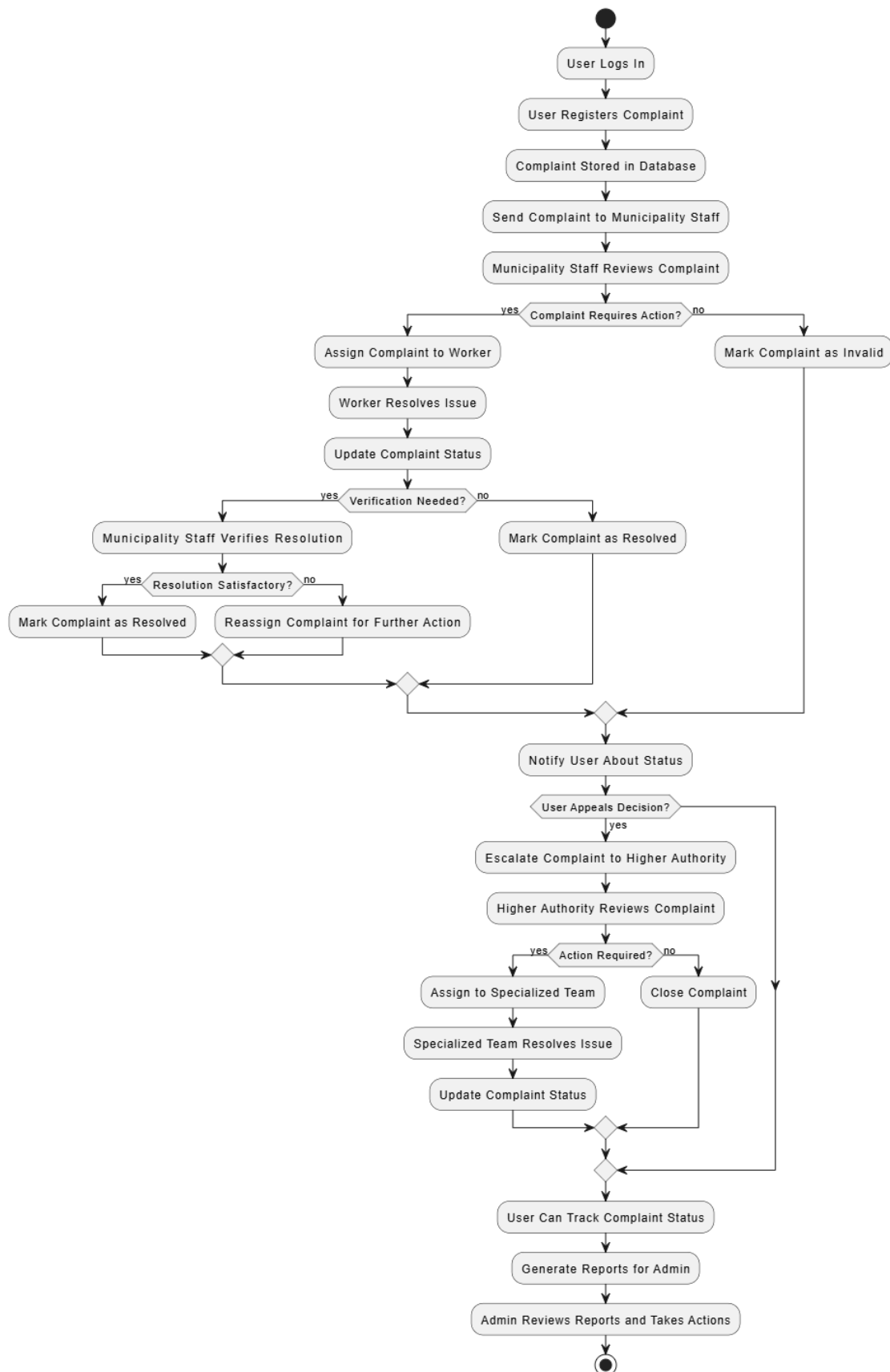
### 3.2 USE CASE DIAGRAM: -



### 3.3 SEQUENCE DIAGRAM: -

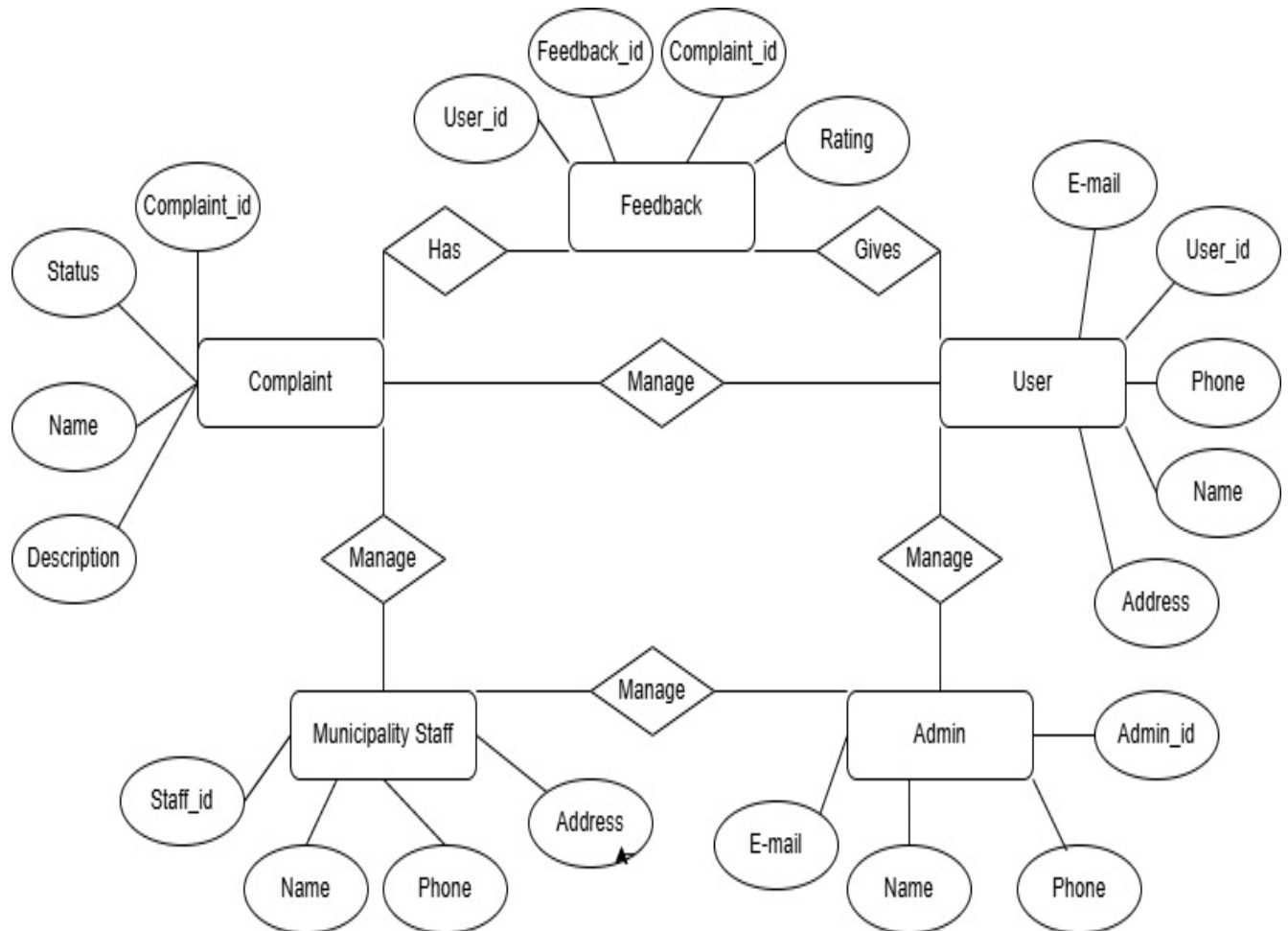


### 3.4 ACTIVITY DIAGRAM: -



### 3.5 E-R DIAGRAM: -

#### Clean Society E-R Diagram



## **Chapter-4**

### **DATA DICTIONARY**

#### **4.1 User Table**

Stores details of users who interact with the system.

Field Name	Data Type	Description	Constraints
user_id	INT (PK)	Unique identifier for the user	Primary Key, Auto Increment
name	VARCHAR(255)	Full name of the user	Not Null
email	VARCHAR(255)	Email address of the user	Unique, Not Null
password	VARCHAR(255)	Encrypted password	Not Null
phone_number	VARCHAR(15)	Contact number	Not Null
address	TEXT	Residential address	Not Null
created_at	TIMESTAMP	Account creation timestamp	Default: CURRENT_TIME STAMP

#### **4.2 Complaint Table**

Stores complaints registered by users.

Field Name	Data Type	Description	Constraints
complaint_id	INT (PK)	Unique identifier for the complaint	Primary Key, Auto Increment
user_id	INT (FK)	User who registered the complaint	Foreign Key (User Table)
user_name	VARCHAR (FK)	User who registered the complaint	Foreign Key (User Table)
Waste_Type	VARCHAR(100)	Type of complaint (Solid, Bio, Mix, etc.)	Not Null
description	TEXT	Detailed description of the complaint	Not Null

status	ENUM('Pending', 'In Progress', 'Resolved', 'Rejected')	Current status of complaint	Default: 'Pending'
assigned_to	INT (FK)	Municipality staff assigned	Foreign Key (User Table)
created_at	TIMESTAMP	Complaint registration timestamp	Default: CURRENT_TIME STAMP

### 4.3 Feedback Table

Stores feedback provided by users regarding complaint resolution.

Field Name	Data Type	Description	Constraints
feedback_id	INT (PK)	Unique identifier for feedback	Primary Key, Auto Increment
user_id	INT (FK)	User providing feedback	Foreign Key (User Table)
complaint_id	INT (FK)	Complaint associated with feedback	Foreign Key (Complaint Table)
rating	INT	Rating provided (1-5)	Not Null, Check (rating between 1-5)
comments	TEXT	Additional comments	Nullable
created_at	TIMESTAMP	Timestamp of feedback submission	Default: CURRENT_TIME STAMP

#### **4.4 Municipality Staff Table**

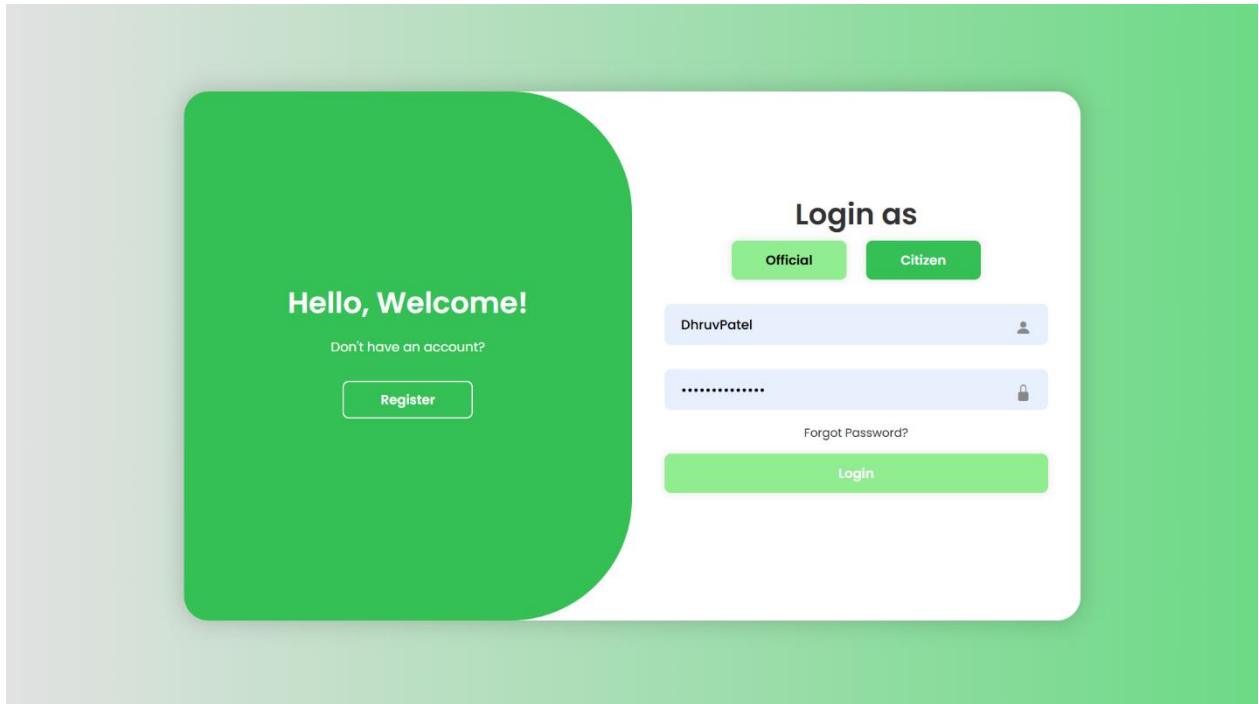
Stores details of municipal staff responsible for complaint resolution.

<b>Field Name</b>	<b>Data Type</b>	<b>Description</b>	<b>Constraints</b>
staff_id	INT (PK)	Unique identifier for the staff	Primary Key, Auto Increment
name	VARCHAR(255)	Full name of the staff	Not Null
email	VARCHAR(255)	Email address of the staff	Unique, Not Null
phone_number	VARCHAR(15)	Contact number	Not Null
address	TEXT	Residential address	Not Null
created_at	TIMESTAMP	Timestamp of staff registration	Default: CURRENT_TIME STAMP

## Chapter-5

### SNAPSHOT

#### 5.1 User Login page



The login page features a green background with a white login card. On the left, a green rounded rectangle contains the text "Hello, Welcome!" and a "Register" button. On the right, the "Login as" section has "Official" and "Citizen" buttons. Below these are input fields for "DhruvPatel" and a masked password "\*\*\*\*\*", each with a user icon. A "Forgot Password?" link is positioned between the password field and a large green "Login" button.

**Hello, Welcome!**

Don't have an account?

[Register](#)

**Login as**

[Official](#) [Citizen](#)

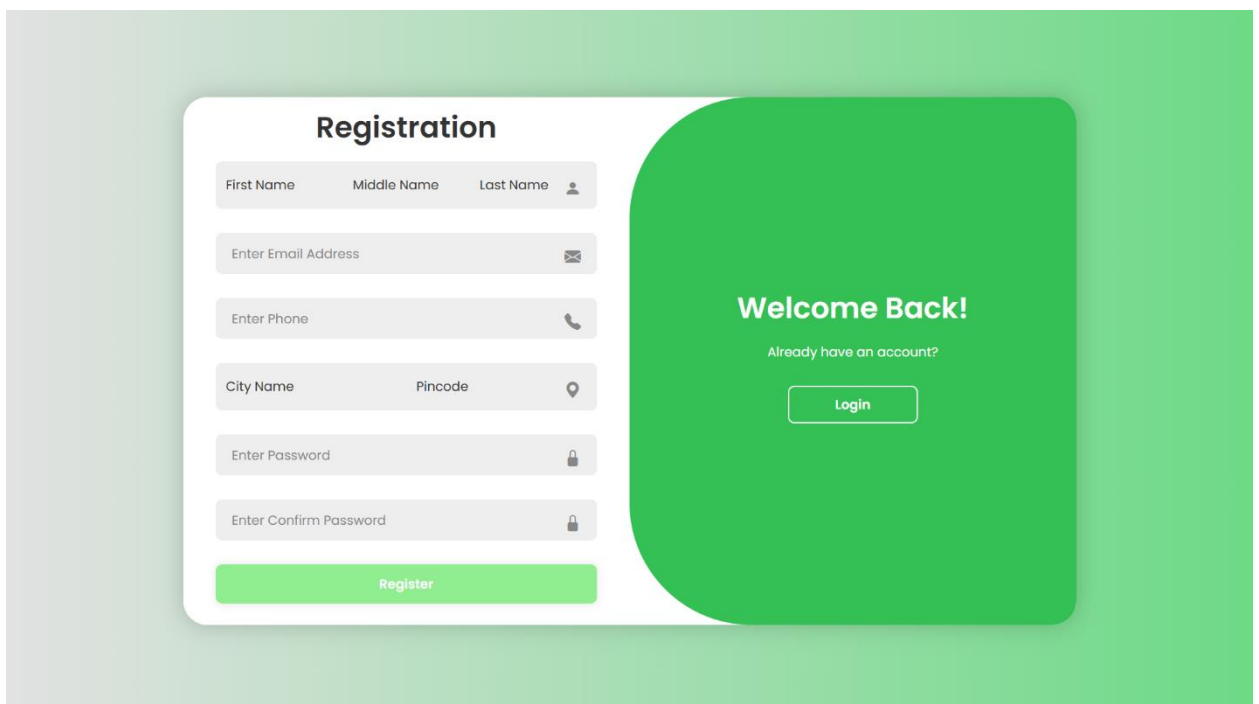
DhruvPatel

\*\*\*\*\*

[Forgot Password?](#)

[Login](#)

#### 5.2 User Registration page



The registration page features a green background with a white registration card. On the left, the "Registration" form includes fields for "First Name", "Middle Name", "Last Name", "Enter Email Address", "Enter Phone", "City Name", "Pincode", "Enter Password", and "Enter Confirm Password", each with a corresponding icon. A large green "Register" button is at the bottom. On the right, a green rounded rectangle contains the text "Welcome Back!" and a "Login" button.

**Registration**

First Name Middle Name Last Name

Enter Email Address

Enter Phone

City Name Pincode

Enter Password

Enter Confirm Password

[Register](#)

**Welcome Back!**

Already have an account?

[Login](#)



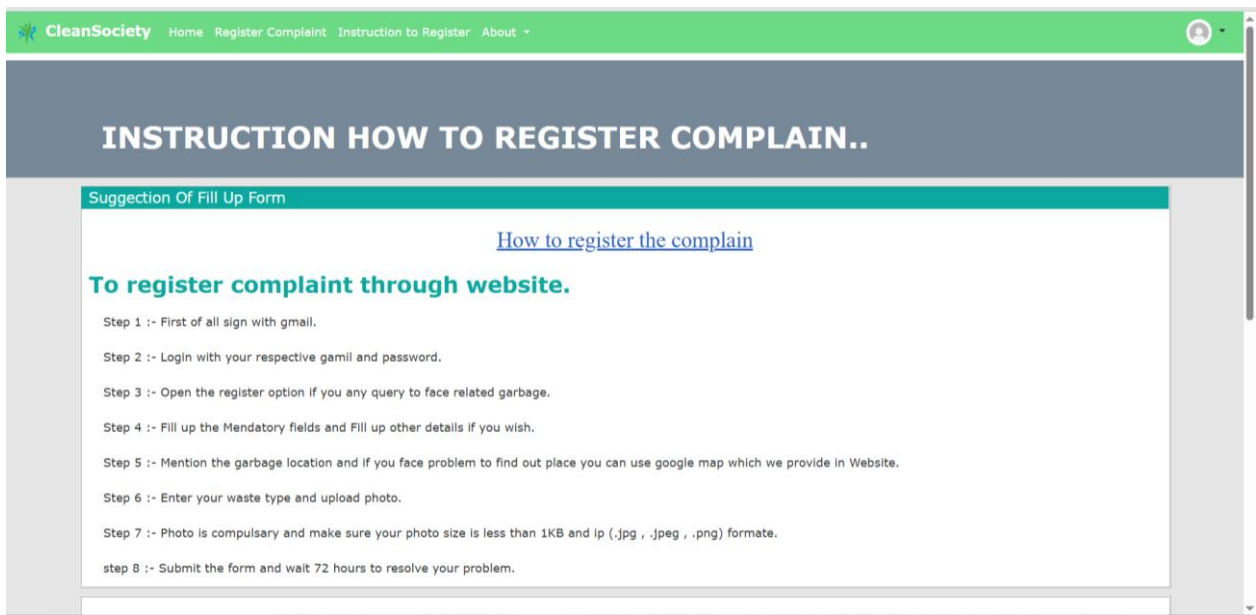
## 5.3 User Home page



## 5.4 User Complaint Register page

The screenshot displays the 'Register Complaint' page of the 'CleanSociety' application. The header is identical to the previous page. The main content area features a form titled 'Register Complaint'. The form has two columns of input fields: 'Name' (filled with 'Dhruv V Patel'), 'Email' (filled with 'dhrupatel@gmail.com'), 'Phone' (filled with '9984512360'), 'Waste Type' (a dropdown menu with '-- Select Waste Type --'), 'Location' (empty), 'City' (empty), 'Pincode' (empty), and 'District' (a dropdown menu with '--Select District--'). Below these fields is a 'Photos' section with the text 'Upload Minimum 2 Photos' and a large blue button labeled 'Choose A Photo'. Below the button, it says 'No Files Chosen'. At the bottom of the form, there are 'Submit' and 'Back' buttons.

## 5.5 Instruction to Register page



The screenshot shows the 'Instruction to Register' page of the CleanSociety website. The header is green with the logo and navigation links: Home, Register Complaint, Instruction to Register, and About. The main heading is 'INSTRUCTION HOW TO REGISTER COMPLAIN..'. Below it, a teal box contains the title 'Suggestion Of Fill Up Form' and a link 'How to register the complain'. The main content area is titled 'To register complaint through website.' and lists eight steps for registration, from signing in to submitting the form.

**CleanSociety** Home Register Complaint Instruction to Register About

### INSTRUCTION HOW TO REGISTER COMPLAIN..

Suggestion Of Fill Up Form

[How to register the complain](#)

**To register complaint through website.**

Step 1 :- First of all sign with gmail.

Step 2 :- Login with your respective gamil and password.

Step 3 :- Open the register option if you any query to face related garbage.

Step 4 :- Fill up the Mendatory fields and Fill up other details if you wish.

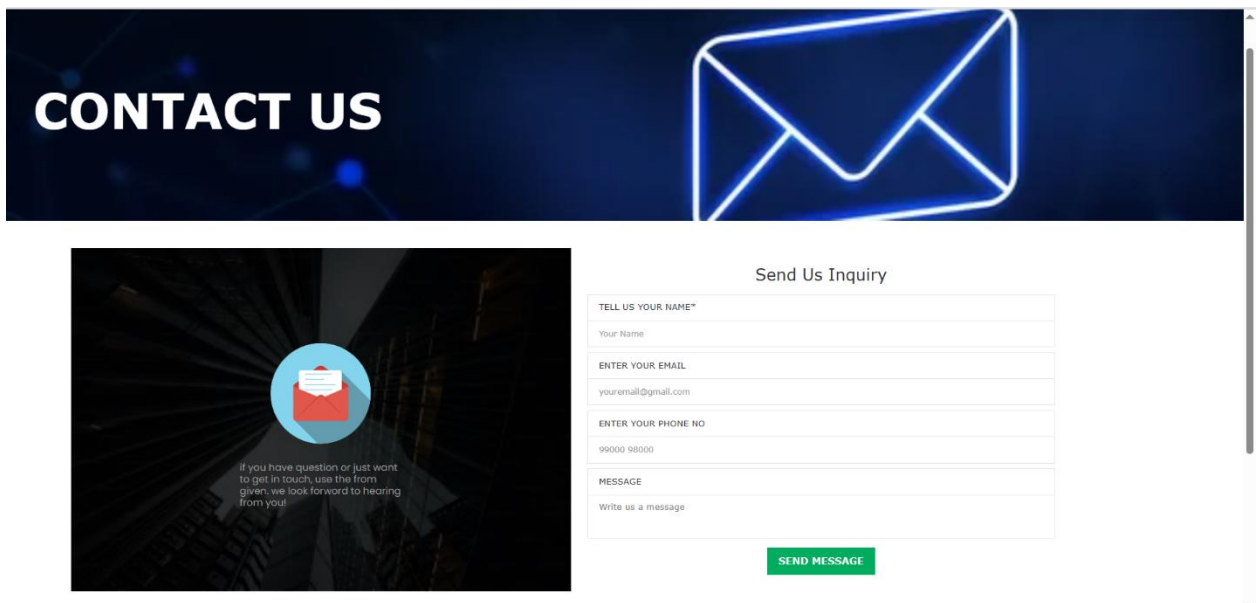
Step 5 :- Mention the garbage location and if you face problem to find out place you can use google map which we provide in Website.

Step 6 :- Enter your waste type and upload photo.

Step 7 :- Photo is compulsary and make sure your photo size is less than 1KB and ip (.jpg , .jpeg , .png) formate.

step 8 :- Submit the form and wait 72 hours to resolve your problem.

## 5.6 Contact US page



The screenshot shows the 'Contact Us' page of the CleanSociety website. The header is dark blue with the text 'CONTACT US' and a glowing envelope icon. Below the header, there is a section titled 'Send Us Inquiry' with a form for user details and a message. To the left of the form is a graphic with a red envelope icon and text encouraging users to get in touch.

## CONTACT US

Send Us Inquiry

TELL US YOUR NAME\*

Your Name

ENTER YOUR EMAIL

youremail@gmail.com

ENTER YOUR PHONE NO

98000 98000


MESSAGE

Write us a message


**SEND MESSAGE**

If you have question or just want to get in touch, use the from given. we look forward to hearing from you!

## 5.7 Track Complaint Status page





 CleanSociety

[Home](#) [Register Complaint](#) [Instruction to Register](#) [About](#)



Complaint Dashboard

[+ Register New Complaint](#)

Complaint ID	Name	Phone	Waste Type	Location	City	Pincode	Photos	Status	Complaint Date
CMTID994226	Dhruv V Patel	9984512360	Solid Waste	Unjha	384170	mehsana	 	In Progress	2025-03-13 18:36:28
CMTID603844	Dhruv V Patel	9984512360	Recyclable Waste	Unjha	384170	mehsana	 	Pending	2025-03-26 22:00:05

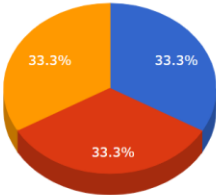
BACK

## 5.8 Officials Dashboard page

Municipal Team Dashboard

Complaints Status

Complaint Status



In Progress


Pending

Resolved

Complaint Overview

Complaint ID	Name	Location	Pincode	Waste Type	Status	Action
CMTID994226	Dhruv V Patel	vadipara chowk	384170	Solid Waste	In Progress	<div><div>In Progress</div><div>Resolved</div><div>Rejected</div></div>
CMTID603844	Dhruv V Patel	80 Feet Ring Road	384170	Recyclable Waste	Pending	<div><div>In Progress</div><div>Resolved</div><div>Rejected</div></div>
CMTID582035	Ayush RPatel	kansa Chokdi	384315	Organic Waste	Resolved	<div><div>In Progress</div><div>Resolved</div><div>Rejected</div></div>

View All Complaints





## 5.9 Manage Complaints page

CleanSociety

HomeManage ComplaintsInstruction to RegisterAbout

Complaint Dashboard

Complaint ID	Name	Phone	Waste Type	Location	City	Photos	Status	Complaint Date	Action
CMTID994226	Dhruv V Patel	9984512360	Solid Waste	vadipara chowk	Unjha		In Progress	2025-03-13 18:36:28	<div>In Progress</div> <div>Resolved</div> <div>Rejected</div>
CMTID603844	Dhruv V Patel	9984512360	Recyclable Waste	80 Feet Ring Road	Unjha		Pending	2025-03-26 22:00:05	<div>In Progress</div> <div>Resolved</div> <div>Rejected</div>

BACK

## 5.10 Manage Users page

CleanSociety

HomeManage ComplaintsInstruction to RegisterAbout

Users Records

Users Records

User ID	First Name	Middle Name	Last Name	Email	Phone	City	Pincode	Action
1	Dhruv	V	Patel	dhruppatel@gmail.com	9984512360	Unjha	384170	<div>Edit</div> <div>Delete</div>
2	Ayush	R	Patel	ayush@gmail.com	7845100250	Visnagar	384315	<div>Edit</div> <div>Delete</div>

Official Records

Official Records

User ID	Email	Phone	City	Pincode	District	Action
UNJ01	unjha@gmail.com	7845120300	Unjha	384170	Mehasana	<div>Edit</div> <div>Delete</div>
ADMIN	admin@gmail.com	9913362680	Unjha	384170	Mehasana	<div>Edit</div> <div>Delete</div>
VIS01	visnagar@gmail.com	7845123005	Visnagar	384315	Mehasana	<div>Edit</div> <div>Delete</div>

## **Chapter-6**

### **Conclusion**

The **CleanSociety** project aims to bridge the gap between citizens and municipal authorities by providing an efficient and transparent platform for reporting and resolving garbage collection issues. By leveraging technology, the system ensures that complaints are registered, tracked, and addressed in a timely manner, leading to cleaner surroundings and improved public health.

With its user-friendly interface and real-time complaint tracking, **CleanSociety** empowers citizens to take an active role in maintaining a clean environment. Additionally, it enhances the efficiency of municipal waste management by streamlining the complaint resolution process.

Going forward, integrating features like automated reminders, complaint analytics, and AI-driven route optimization for waste collection can further enhance the platform's effectiveness. By continuously evolving, **CleanSociety** has the potential to make cities cleaner and more sustainable for future generations.

## **Chapter-7**

### **References**

- A. <https://github.com>
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