

PROJECT REPORT



CLEAN SOCIETY
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A PROJECT REPORT
ON
“ONLINE GARBAGE COLLECTION SYSTEM”
(CLEAN SOCIETY)

VERSION 1.0

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PROJECT GUIDE

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Certificate

This is to certify that the project report entitled **CLEAN SOCIETY** being submitted by MEER D. PATEL (206310307103), HARSHIL A. PATEL (206310307104), JAY A. PATEL (206310307105), in partial fulfillment for the award of the 5th semester in Diploma in Computer Engineering to the Gujarat Technological University is a record of bona fide work carried out by her under my guidance and supervision

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Faithfully,

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ABSTRACT

Today garbage collection and cleaning issue is the major and relevant issue in India. Also, in this hectic Era everyone not have enough time to solve their cleaning issue and garbage collecting issue also in India your garbage collection is follow their traditional way like fill up the form and sign your respective authorities and submit in the municipal corporation And waitfor minimum 7 to 8 day. Now we solve this to help of CLEAN SOCIETY web application. You can just a pin location and send two or more photo and may have possible to send a 360-degree view solve your problem within 48 hours. Also, you can save your time which spent on physical way like fill form and submit and solve your problem fast as soon as possible rather than physical way. Simply send your garbage issue location and which we send a government authority and they accept your problem and send a worker to solve your problem as much faster than traditional way.

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1. INTRODUCTION

CHARACTERISTICS OF EXISTING SYSTEM

First of all, in India, everyone today faces garbage collecting and proper management issue. Garbage collection issue is directly impact on human health. Our government and municipal corporation both try to solve this problem but their solving problem working method is too much complex and time consuming and follow physical way like fill up details and of complaint latter and submit with respectively authorities sign and wait for minimum 7-8 solve for solving problem. Also, they launch a website to cleaning but it doesn't work with smoothly and most of time user face a under construction website page. Also, it doesn't work in poor and village area.

Government garbage collecting website is not work with all area it's only work in city area and developed area. Also, website is almost under construction and sometime face a lagging and out of server problem. It doesn't give commitment to complainer to prevention your problem in how much time? Sometime it takes maximum 10-15 day for solving and collecting your problem. That might result in severe health complications to the inhabitants of the areas where garbage

OVERVIEW OF PROPOSED SYSTEM WITH ADVANTAGE

In this system, we have designed a web page for solving your cleaning issue and the users can also get the exact time to solve this problem.

This web application will also provide the Contact details of government authority for the contact.

Our system is committed to complainer to solve their problem within 48 hours and after solving complaint, complainer gives a feedback and rating to us regarding their Complaint.

Advantages:

- Saves time of user.
- It allows users to modify their personal information for edit profile.
- It gives prevention to your complaint within 48 hours
- We can get information about near government office.
- Provide better service to the client rather than physical garbage collection issue.
- Complainer solves their problem without any trouble which they face in physical way.

SCOPE (LIST OF MODULES AND THEIR FUNCTIONS)

- Their web application has the following modules:
 1. Admin
 2. User

- Modules with their functions:
 1. Admin
 - Analysis of users.
 - Remove junk profiles and data.
 - Manage the complaint
 - He has access to accept the complaint or decline
 - He has access person details
 - Database management.

 2. User
 - Registration
 - Login/Logout
 - Edit personal level information
 - Put photo and register complaint.
 - Request to getting a new dustbin.
 - Forgot/Reset Password

PROCESS MODEL

In this project we have used iterative waterfall model. The diagram is shown in below:

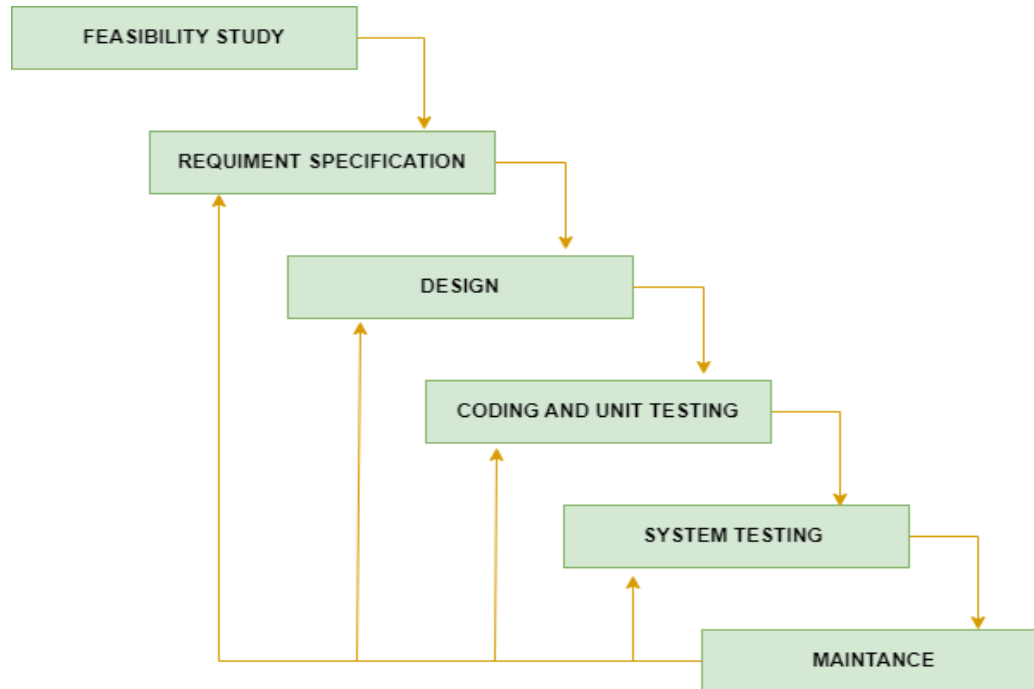


Figure 1. Iterative waterfall Model

The reason that we choose this model is: -

- It is simple and easy to understand and use.
- Mainly, our project is dividing into 3 parts so after using this process model we can connect each phase and make a successful project.
- We can typically check our past work and easily back tracking solve your mistake as in a build phase
- Using this process model we can simply track our work and solve problem at a time rather than other model
- After using this model our project complex work is divide in small a further task so we can simply create it.
- It is highly cost-effective to change the plan or requirements in the model.
- In this model, less time is consumed on documenting and the team can spend more time on development and designing.

2.SYSTEM REQUIREMENT SPECIFICATION

USER CHARACTERISTICS

User characteristics show the different types of users with specific role:

➤ **User**

- There are main two users: -
 1. Admin
 2. User

➤ **Admin: -**

- Admin can login the system with his user name and password.
- Admin can change password.
- He can manage the overall system.
- Admin can manage all complaint and take some action to prevention system.
- He can maintain information & details to the client such as client name, address, contact no, complaint number etc. Only Admin can manage customer record.
- He can manage complaint details such as complaint no, complaint type, time, how many time, prevention date, etc. for the customer.

➤ **User:-**

- They can apply garbage issue complaint using the system.
- User can register with the basic information like User name, Mobile no, email etc.
- User can login the system with his username and Password.
- They can view their information & details such as user name, address, contact no, email id, etc.
- They can view loan their past complaint and also they can edit their current complaints.

FUNCTIONAL REQUIREMENTS

Functional requirements define what a software product must do: its features and functions.

The different modules and their functionalities are described below:-

1. Admin Module

The admin is the person who will manage the system. Admin will manage the database operation.

- Functionalities:-

1. Overall analysis of users

- This functionality describes that admin has access for analysis of the user interaction.
- Admin can manage the entire database system.

2. Remove solved complaints

- This functionality describes that admin has access to remove solved complaints.

3. Overall Database Management

- This functionality describes that admin manage the entire database system.

4. Overall Manage all complaints

- This functionality describes that admin will maintain the complaint records of every user on a regular basis.

5. feedback and review

- If your problem is done then you send a review and feedback to admin regarding solution of problem.

Functionalities :-

6. Register

- The user has to first register them for accessing the website.
- In the register page the user has to enter their Full name, email, password, mobile number, confirm password & other things.

7. Login/Logout

- The user has to login after successfully registered.
- In the login page the user has to enter user id or email and password.
- The users can logout if they want.

8. Forgot/Reset Password

- The user can reset/change their password in case if the user forgot it.

9. Edit Profile

- The user changes their account/profile details.

10. For complaint

- If user want to complaint a government authority for garbage collecting issue then they must to add minimum 2 photo and may be possible to add 360 degree view and fill up a form and mention to mandatory time and time.

11. Enquiry

- In this section, user can write and read queries.

NON-FUNCTIONAL REQUIREMENTS

The non-functional requirements define constraints which affect how the system should do it.

The non-functional requirements are described below,

1. Scalability

- This website will be able to have more than 10,000 users at the same time. Therefore, its server won't be down.

2. Reliability

- The user data won't be able to accessed by the third-party organization. And the data will be secured therefore it is reliable.

3. Maintainability

- If ay service is not available for a while therefore it will be under maintenance for some time and the users won't be able to access that service i.e. Edit profile, register etc.

4. Security

- The user data will be stored in the encrypted form in the servers so, it can't be accessed by the other organization person.

5. Data Integrity

- The user data is encrypted so the chance of misplace /change is very low. So the data integrity isachieved.

6. Availability

- The system will be available 24/7 and the maintenance phase for a very short period. So the users have not to wait too long.

7. Usability

- This web application has a simple GUI (Graphical User Interface) therefore it will be easy for the user to learn about the website.

8. Capacity

- Up to 500 users can make a registration in the website and up to 1,00,000 registered details can be stored in the database.

9. Portability

- As the web application platform independent therefore it can be available for every single operating system.

10. Performance

- This web app will be available for 10,000 users at the same time so users will not have any interruption while using the web app. The web page will available in 2 seconds for the users.

3. SYSTEM ANALYSIS MODELING - USER-BASED

FEASIBILITY STUDY OF THE NEW SYSTEM

Feasibility study in Software Engineering is a study to evaluate feasibility of proposed project or system. The objective of the feasibility study is to determine the problem and quickly to solve the problem.

There are three feasibility were tested in this web application,

1. Technical Feasibility

The garbage collection system is built using php as back-end and bootstrap, CSS and html as the front-end technology.

This web site is client server architecture and it is platform dependent. This web application has some predefined functions therefore this web app is technically feasible.

2. Time Feasibility

Since the members of the development team are skillful and have the knowledge about the technology used in the development so the project will be done in the decided timeline therefore this web app is feasible in time.

3. Cost Feasibility

Since the cost o resources for development of the web application satisfies the organization therefore this web app is cost feasible.

USER-BASED MODELING

Use Case Diagram

Figure 3.1. use case diagram customer & visitor side in Garbage Collection system

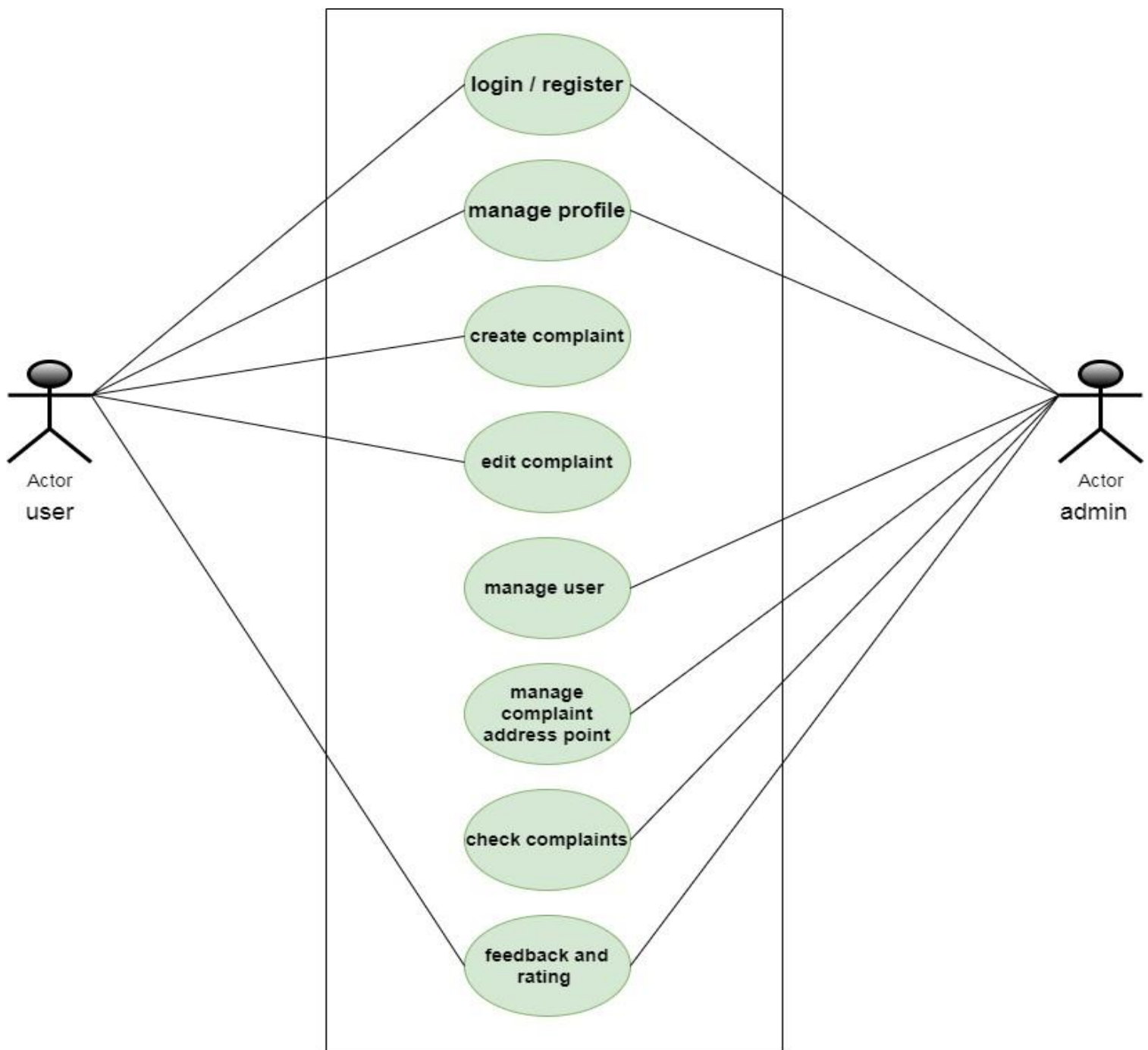
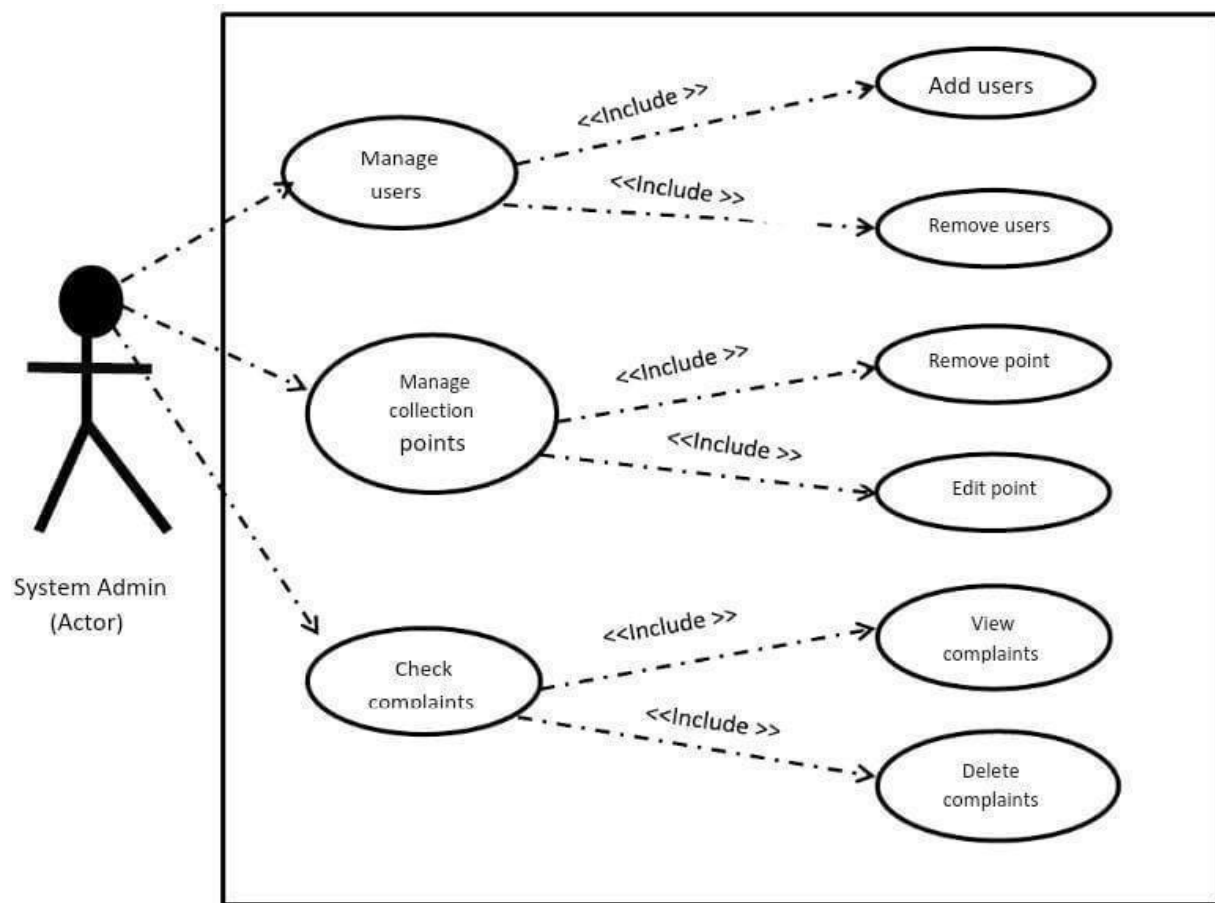


Figure 3.2. Use case diagram Admin side in garbage collection system



4. SYSTEM ANALYSIS AND DESIGN-DATA-BASED

4.1 Data Modeling

4.1.1 Data Dictionary (List of Database Tables included in the system)

User:-

| Column name | Data type | size | Remark |
|--------------|-----------|------|-------------|
| Frist_name | Varchar | 40 | Not Null |
| Lst_name | Varchar | 40 | Not null |
| Phone_number | Number | 10 | Unique |
| Address | varchar | 50 | Not null |
| Pincode | number | 8 | Not null |
| User_id | varchar | 15 | Unique |
| User_pass | Varchar | 10 | Not null |
| Com_location | varchar | 50 | Primary key |
| Email_id | varchar | 20 | Unique |
| User_state | varchar | 20 | Primary key |

Table 4.1 Government Authorities

Government authorities:-

| Column name | Data type | size | Remark |
|----------------|-----------|------|-------------|
| Admin_id | varchar | 15 | Unique |
| Admin_pass | varchar | 10 | Not null |
| Pincode | number | 8 | Not null |
| Email_id | varhcar | 20 | unique |
| Location | varchar | 50 | unique |
| Com_location | varchar | 50 | Foreign key |
| User_state | varchar | 30 | Foreign key |
| Nearest_office | varchar | 30 | Not null |

Table 4.2 Government Authorities

4.1. E-R (Entity-Relationship) Diagram

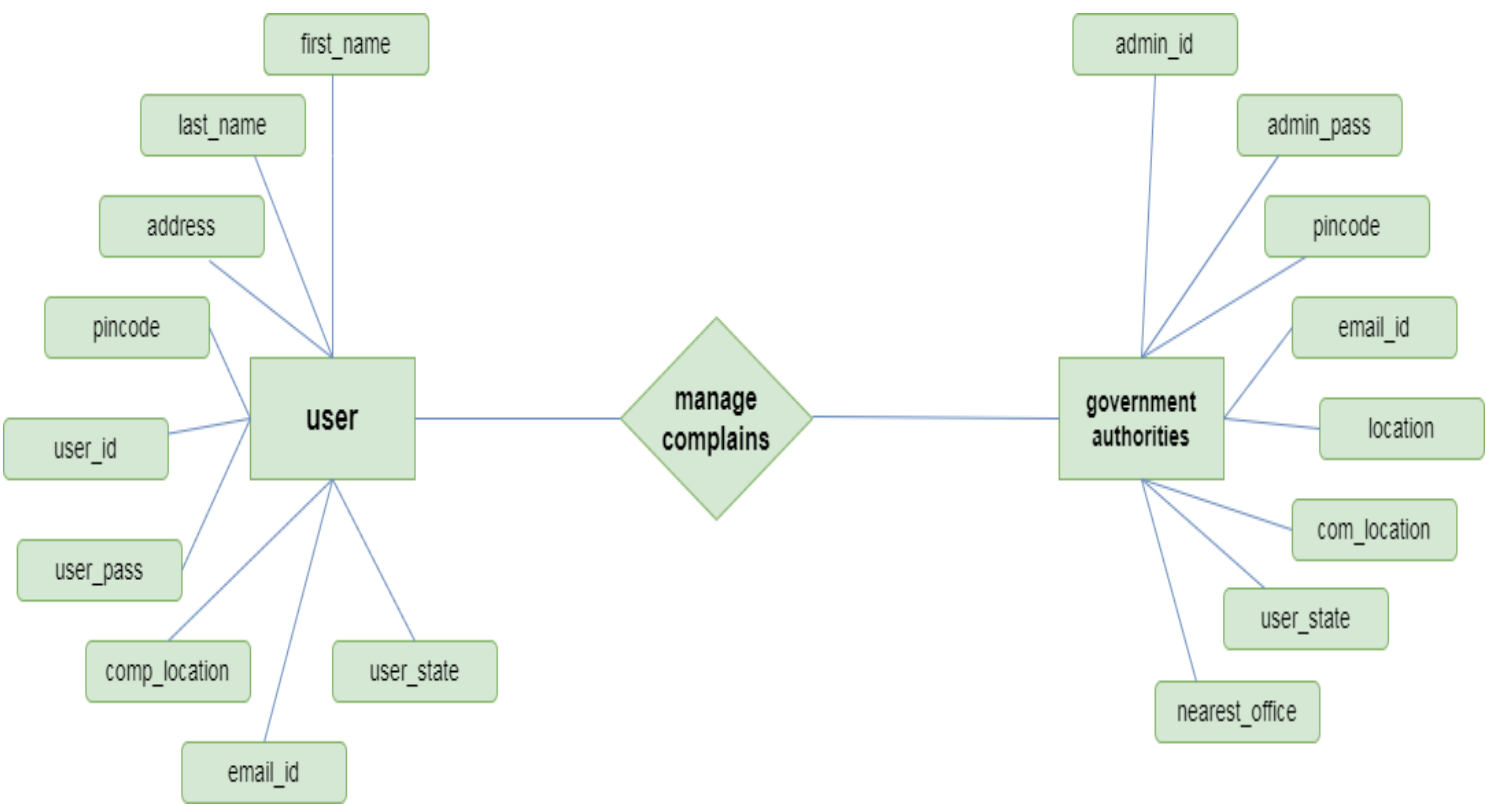


Figure 4.1. e-r-diagram

4.2 Behavioral Modeling

4.2.1 Data Flow Diagram

4.2 Context Level Diagram (Level 0)

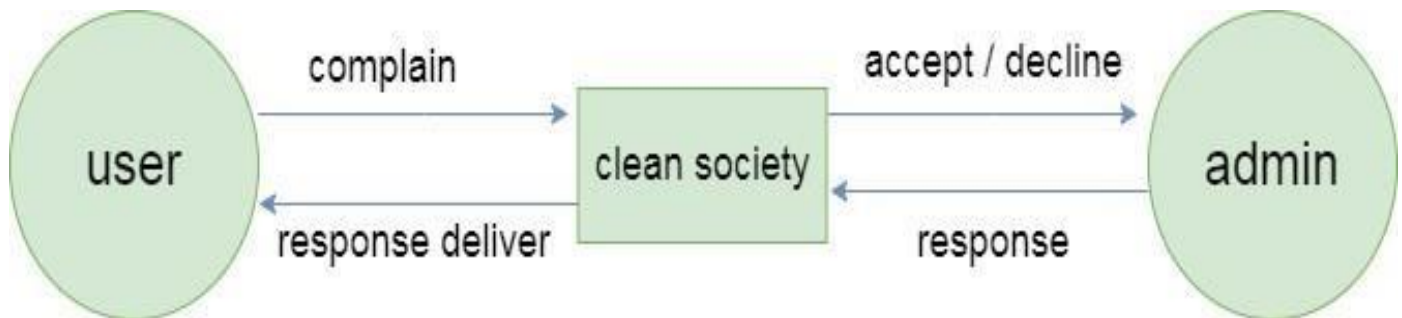


Figure 4.2 DFD (level 0)

4.2.1.2 DFD – Level 1

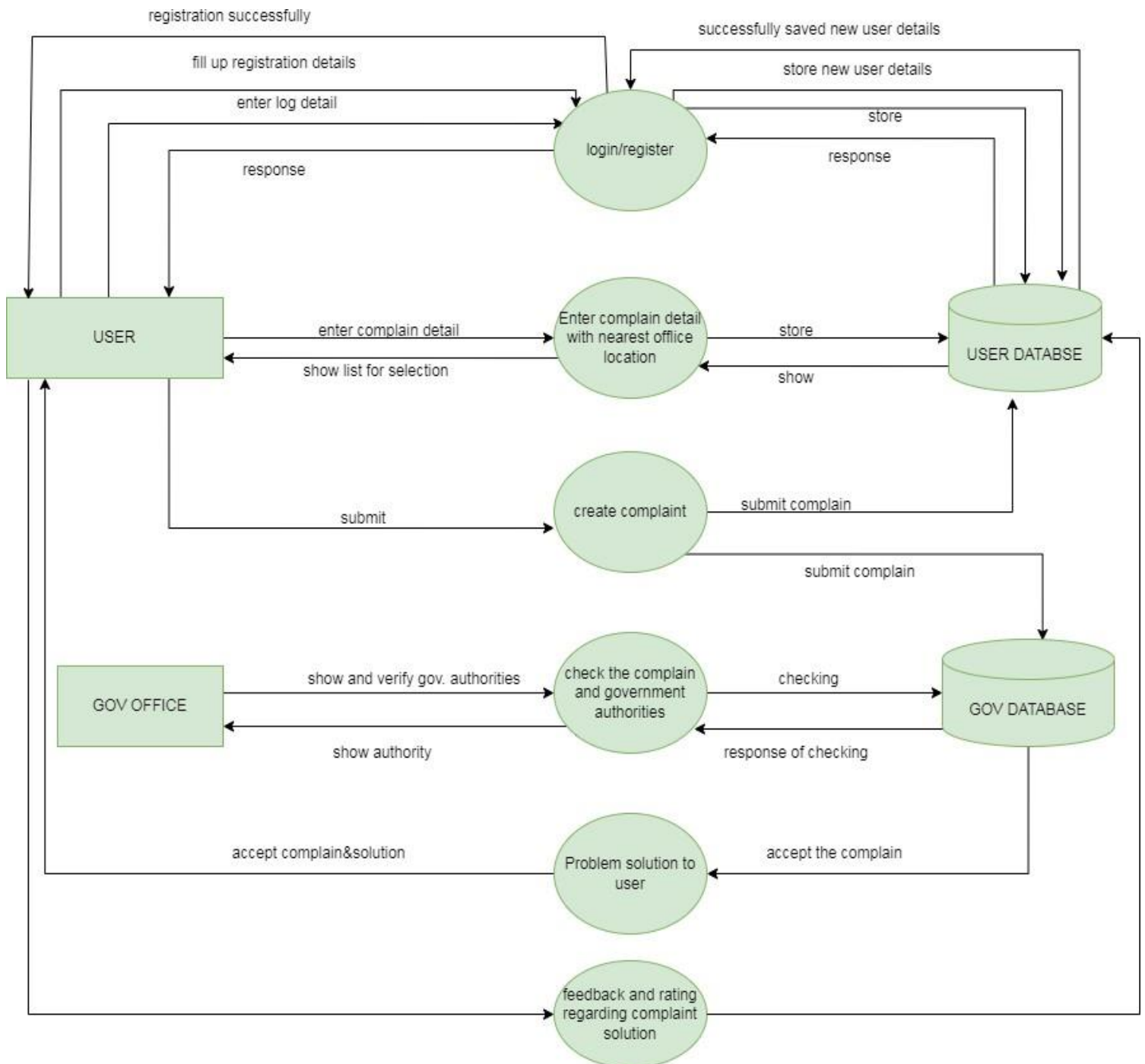


Figure4.3 Context Level DFD Diagram (Level 1)

5. SYSTEM DESIGN- UML

5.1 Sequence Diagrams

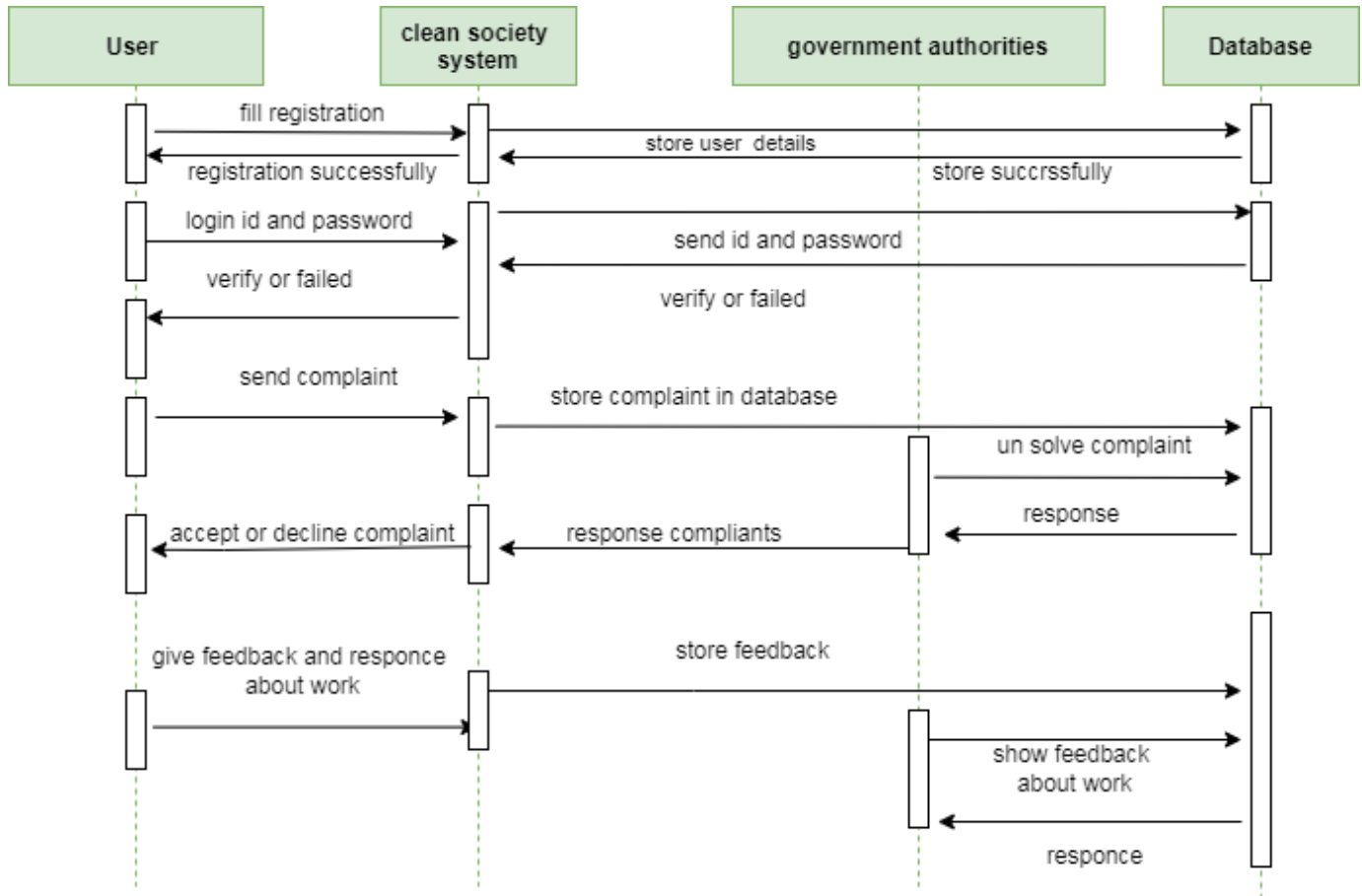


Figure 5.1 Sequence Diagram

5.2 Activity Diagrams

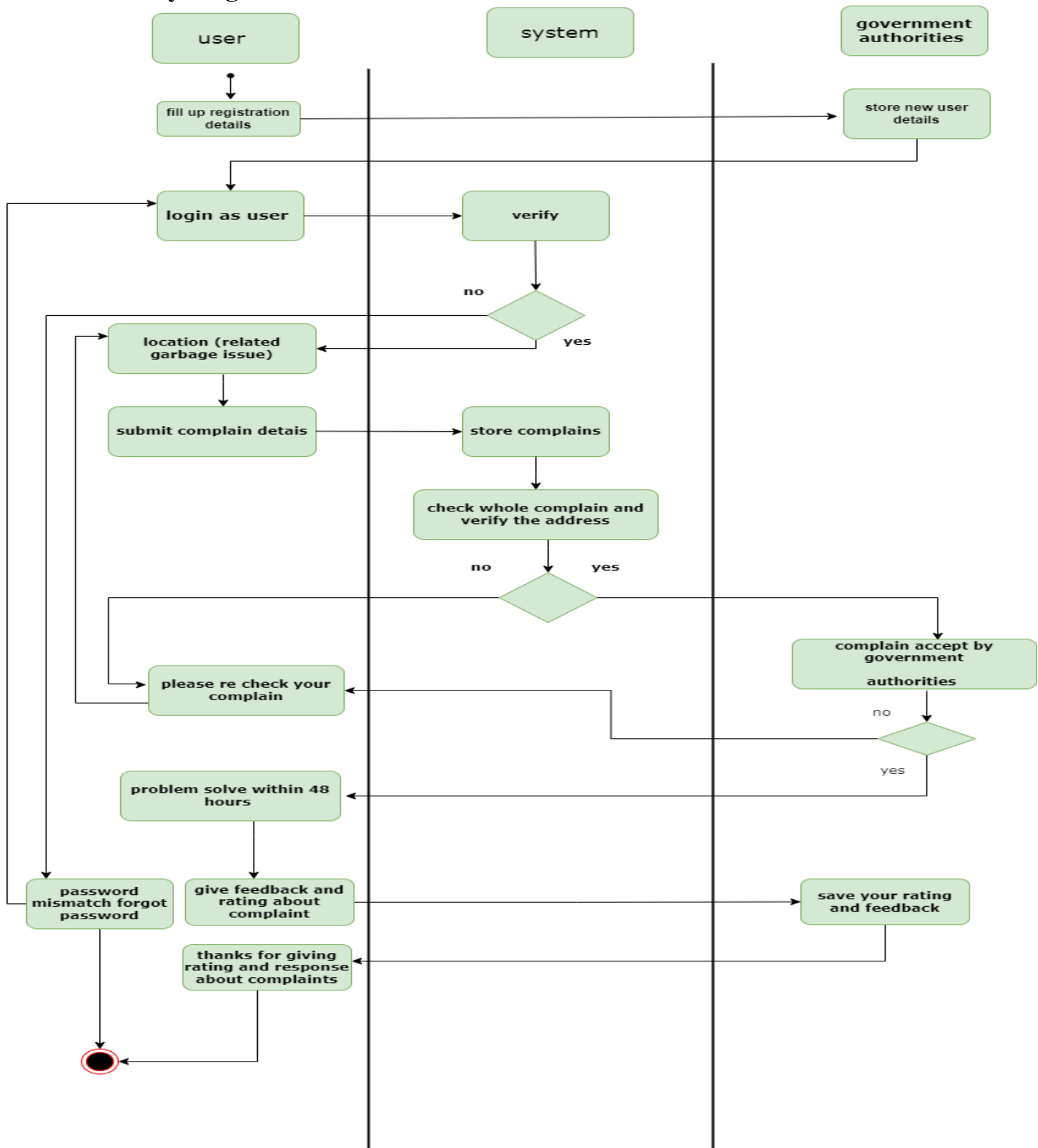


Figure 5.2 Activity Diagram

6. SYSTEM INTERFACE DESIGN

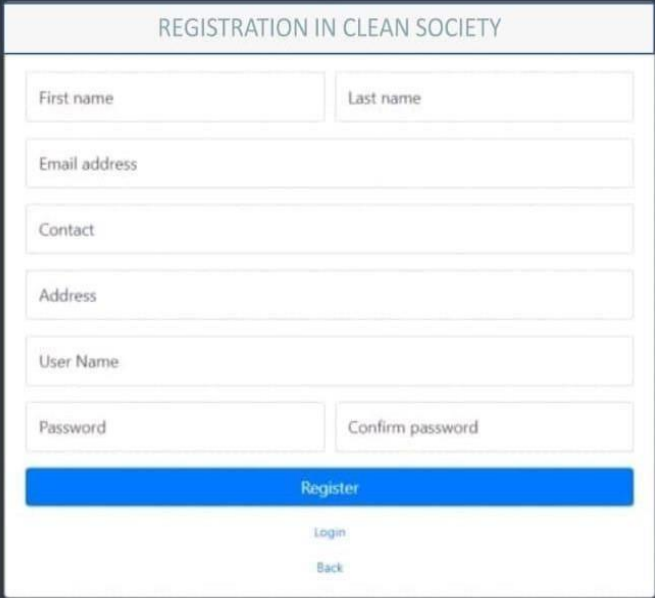
GRAPHICAL USER INTERFACE DESIGN

- SIGN UP PAGE



Figure 6.1 **SIGN UP PAGE**

- REGISTRATION PAGE



The image shows a registration form titled "REGISTRATION IN CLEAN SOCIETY". The form is set against a dark blue background. It contains several input fields: "First name", "Last name", "Email address", "Contact", "Address", "User Name", "Password", and "Confirm password". Below these fields is a prominent blue "Register" button. At the bottom of the form, there are two links: "Login" and "Back".

Figure 6.2 REGISTRATION PAGE

7. REFERENCE

REFERENCE

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- (https://www.tutorialspoint.com/python/python_networking.htm)
- (<https://www.javatpoint.com/>)
- FOR DIAGRAM: - (<https://app.diagrams.net/>)
- FOR SEQUENCE DIAGRAM :(www.slideshare.net/AbhishekChawda2/project-58799505)

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- The complete reference from HTML, CSS for creating page.
- We use PHP, MYSQL for creating database and backend.
- We use a word for creating a project file.
- System analysis and Design diagram creating from – Lucidchart & draw.io.