



PROJECT NAME: Municipal Corporation Complain Management

BY

Md. Mahidul Islam

ID: 171-35-219

SUPERVISED BY

S A M Matiur Rahman

Associate Professor and Associate Head

DEPARTMENT OF SOFTWARE ENGINEERING

DAFFODIL INTERNATIONAL UNIVERSITY

A Project Submitted in Partial Fulfillment of the Requirement for the
Degree of Bachelor of Science in Software Engineering

Spring 2020

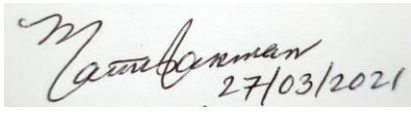
DEPARTMENT OF SOFTWARE ENGINEERING

DAFFODIL INTERNATIONAL UNIVERSITY

APPROVAL

“Municipal Corporation Complain Management System”, is a final year project which is submitted by Name: Md. Mahidul Islam, ID:171-35-219 to the Department of Software Engineering, Daffodil International University has been accepted as satisfactory for the accomplishment of the requirements for the degree of Bachelor of Science in Software Engineering and approval.

Certified by:



S A M Matiur Rahman
27/03/2021

S A M Matiur Rahman

Associate Professor & Associate Head

Department of Software Engineering

Faculty of Science & Information Technology

Daffodil International University

DECLARATION

This project was completed by me under the excellent supervision of S A M Matiur Rahman, Associate Head, Daffodil International University's Department of Software Engineering.

It also states that no component of this project, or any element of it, has been submitted to any other university for a degree.

Name: Md. Mahidul Islam

ID: 171-35-219

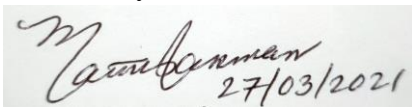
Batch: 22nd

Department of Software Engineering

Faculty of Science & Information Technology

Daffodil International University

Certified by:



S A M Matiur Rahman
27/03/2021

S A M Matiur Rahman

Associate Professor & Associate Head

Department of Software Engineering

Faculty of Science & Information Technology

Daffodil International University

ACKNOWLEDGMENT

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EXCLUSIVE SUMMERY

Municipal Corporation Complaint Management System This program will allow ordinary citizens under the jurisdiction of a municipal corporation to use a web application to submit their issues regarding day-to-day problems in their ward. It will allow a common man to report his complaints and difficulties to municipal officials, as well as allow municipal officials to resolve the issue in a timely manner.

To put it another way, we have to bribe authorities in order to get problems fixed in two months when they could be done in one month.

To achieve the goal of a Digital Bangladesh, we will create a system that will be able to give the public with complete information about problems at any moment. What they're up against right now and what they're going to do about it.

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CHAPTER 01: INTRODUCTION

In today's world, technology has come to our hand and letting us do so many things which the aged people never even thought about. It is not a buffer today that world has come to our home. We can do anything from our home. Shopping, study, communication and everything can be gotten in setting in our relaxing chair. In past eras, communication was too tough. People had to send written letters to their relatives and friends. The letters arrived after so many days, sometimes it did not send to the destination. And if it was about complaining a problem that suffered a lot. Right now by this project, technology helps us to do communication/complain at its fastest level. We can now communicate with municipal authority anytime if we want. For this anyone needs to login (if he/she is already registered) than go to complain form and complain a municipal related complain by mentioning department. Not only that user can also check the status of the complaint. If the complaint is already existing than no need to create that once again. Just push the Mark as Agree button and will be count automatic. From admin part admin and privileged user can control the complaint system as well as user control access. Not only that admin/privileged user can also download the complaint as pdf form if needs and use it as per purpose.

1.1 Project Overview

The challenge that the general public is facing. In Bangladesh, there is no effective direct connection between the government and the general populace for the purpose of solving problems. In order to fix a problem in our town, we have to bribe officials and give them more time than they deserve. Finding all problems in the city corporation for governance in a short period of time is quite challenging. As a result, they put off fixing the problems. The number of problems is growing by the day. As a result, human life is becoming increasingly insecure in their surroundings.

1.2 Project Purpose

The objective of the project targets is-

- ✓ To create an online based project that will help a common people and staffs to communicate with municipal authority.
- ✓ Let the authority for knowing the problem faster and solve it as fast as they can.
- ✓ To get the fastest SOS support.
- ✓ To make environment suitable for human use.

1.2.1 Background

Our country has a large number of municipalities. Many people live in these locations of the municipality. In Bangladesh, there is no effective direct connection between the government and the general populace for the purpose of solving problems. To put it another way, in our town, we have to bribe officials to get problems fixed in two months when they could be done in one month. To achieve the goal of Digital Bangladesh, we will create a system that will be able to give the public with complete information about problems at any moment.

1.2.2 Benefits & Beneficiaries

If user sees the benefits of using the application, only then they will use it. The benefits of using **MCCMS** is given bellow.

- i. Time saving
- ii. Secure to use
- iii. Fastest way to communicate with authorities
- iv. Can give complain within the restriction
- v. Report Facility
- vi. Trusted news options from municipality
- vii. Addiction free

1.2.3 Goals

The major goal of this initiative is to assist the general population in learning more about their local area. We were expected to complete our daily tasks on time, accurately, quickly, and to our pleasure.

1.3 Stakeholders

There are three types of stakeholders.

- i. Owner (Myself)
- ii. Development Team
- iii. Employees
- iv. General Users
- v. Privileged User
- vi. Authorized User (administrative)

1.4 Project Schedule

1.4.1 Gantt Chart

For completing the project, I have taken some steps and created a Gantt chart. I am giving the chart below.

Weeks Works	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Analysis Phase	■																	
Feasibility Study		■																
Project Proposal			■															
Project UI			■	■	■	■	■											
Mid-Term Defense								■	■									
Implementation of the Project				■	■	■	■	■	■	■	■	■	■	■	■	■		
Testing									■								■	■
Documentation of the Project																■	■	■
Final Defense																		■

Figure 01: Gantt Chart

1.4.2 Release Plan

I have the plan to release the application in web within this month. Before releasing the full version, I have to complete some steps.

- i. Investor finding: 10th June 2021
- ii. Beta release: 21th June 2021
- iii. Advertisement: 21th July 2021
- iv. Final release: 29th July 2021

CHAPTER 2: SOFTWARE REQUIREMENT SPECIFICATION

2.1 Functional Requirements

The functional requirements of the project are given below,

SI	Name of the requirements	Priority level
01	Login/Signup	High
02	See complain	High
03	Submit complain	High
04	Update complain	Low
05	Agree sign for existing complain	High
06	Upload Attachment with complain	High
07	Update Profile	Medium
08	See notice from Municipal Authority	High
09	Search User	Low

Table 01: Functional Requirements

2.2 Performance Requirements

Performance requirements are one of the most important thing for an application. If the performance is well, then the software will be more useable.

2.2.1 Speed and Latency Requirements

Speed: The system will run in a high speed in a lower configured device.

Latency: The latency will be also user friendly. User will not feel boring at all

2.2.2 Capacity Requirements

User capacity: About 10000 people can access the website at a time. The capacity will be increased according to the users.

Development tools and languages:

Markup Language: HTML, CSS, Bootstrap

Programming language: JavaScript, Python.

Framework: Reactjs, Django, Django Rest Framework , GraphQL

Server: npm server for client side, Django web server for server site

Packages: axios, react-router-dom, react-bootstrap, djangorestframework, cors-headers, jwt authentication

Database: postgresql/ mysql.

Ide: visual studio code

Server Details:

Hosting: 25GB Cloud Storage (AWS)

CHAPTER 3: SYSTEM ANALYSIS

3.1 Use Case Diagram

The use case diagram is a diagram to visualize the study of the software. My use case diagram of the project is given below,

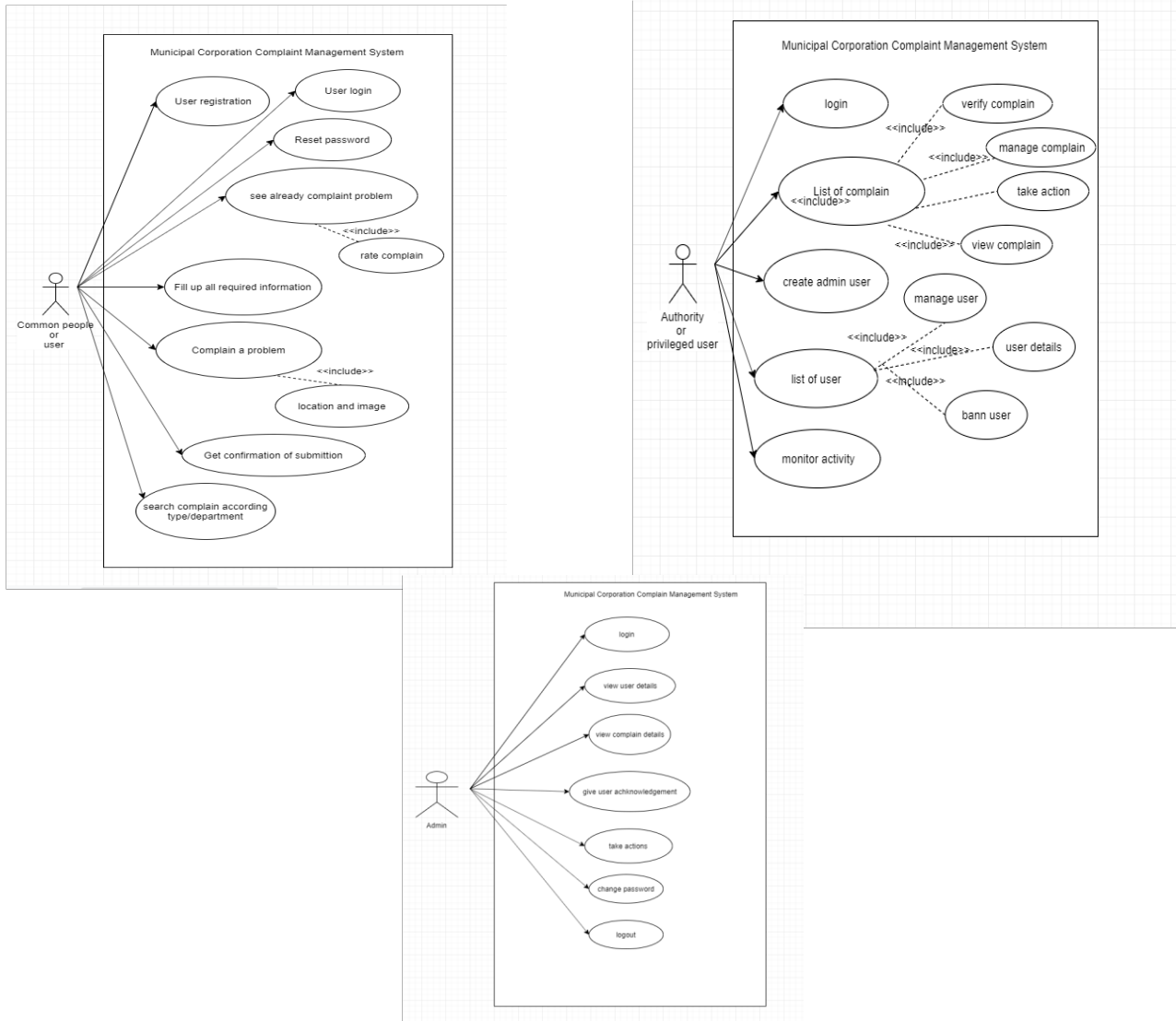


Figure 02: Use case Diagram

3.2 Use Case Description

Use case Description: Common people

Use case Name	Municipal Corporation Complaint Management System
Actor	Common people
Pre-condition	Registration and login
Flow of Events	<ol style="list-style-type: none">1. Click the “Complain” button on the navigation bar.<ul style="list-style-type: none">• Login first.• If not registered, registration first.2. Fill up the given form and attach an image with the complaint.3. Submit your complain.<ul style="list-style-type: none">• Check the confirmation message.
Exit Conditions	Submit your complain and logout from page.
Alternate Flow	Check for new update of news or notice from municipal authority.

3.3 Activity Diagram

The activity diagram of my project is given below,

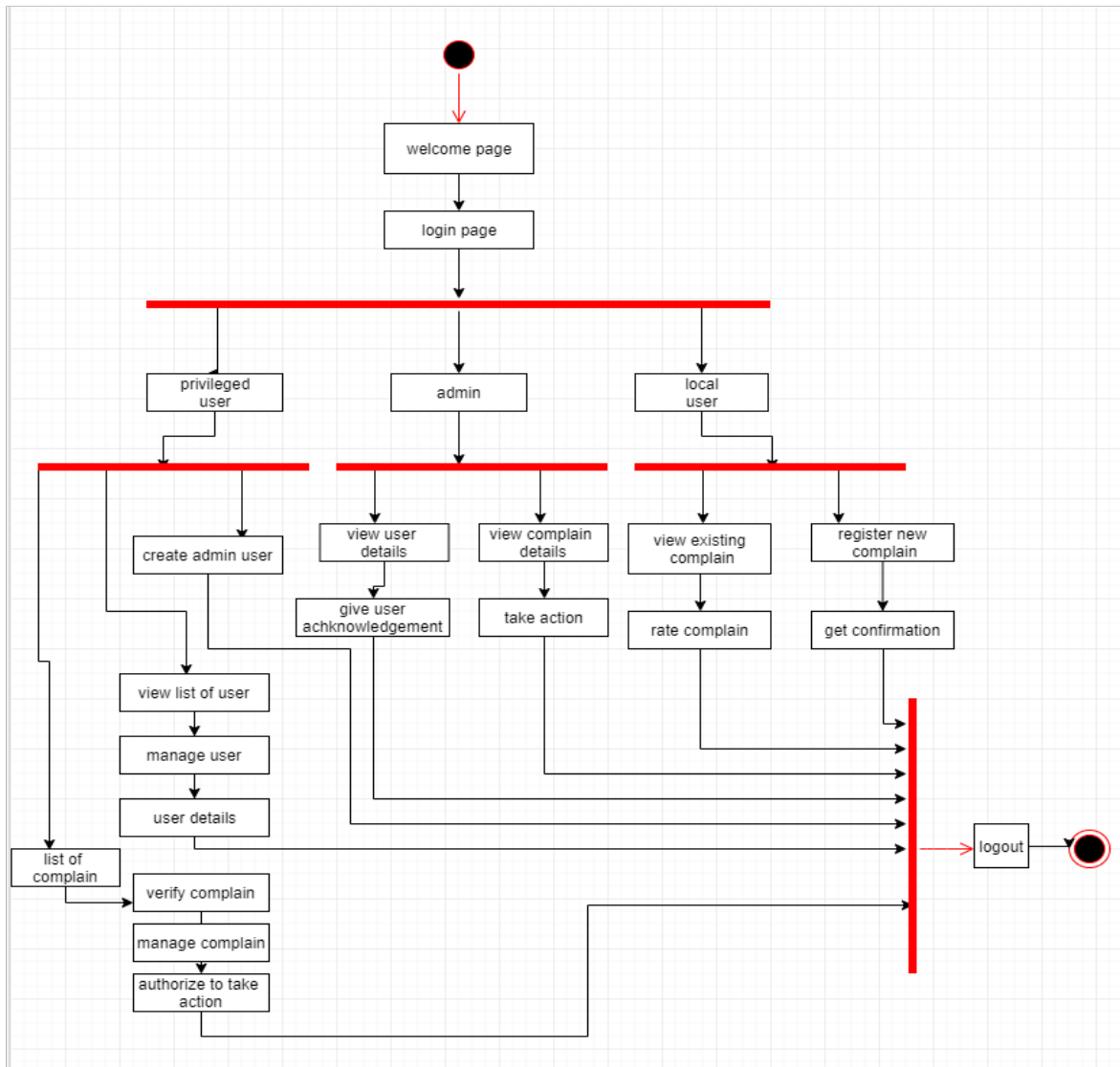


Figure 03: Activity Diagram

3.4 ER Diagram

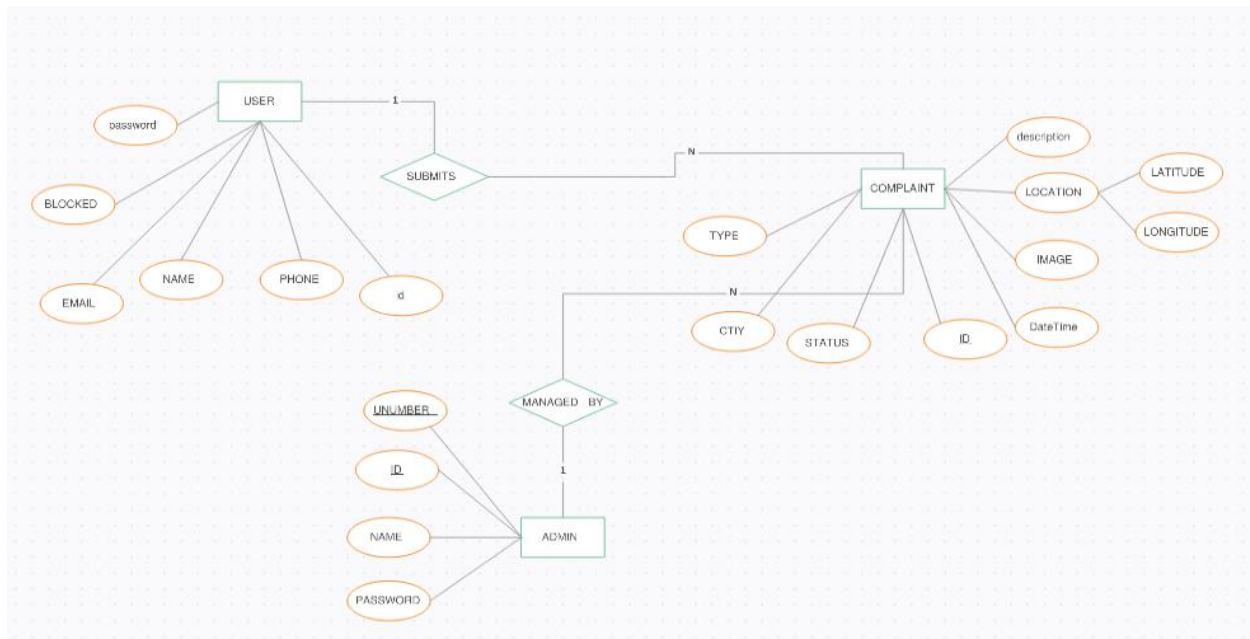


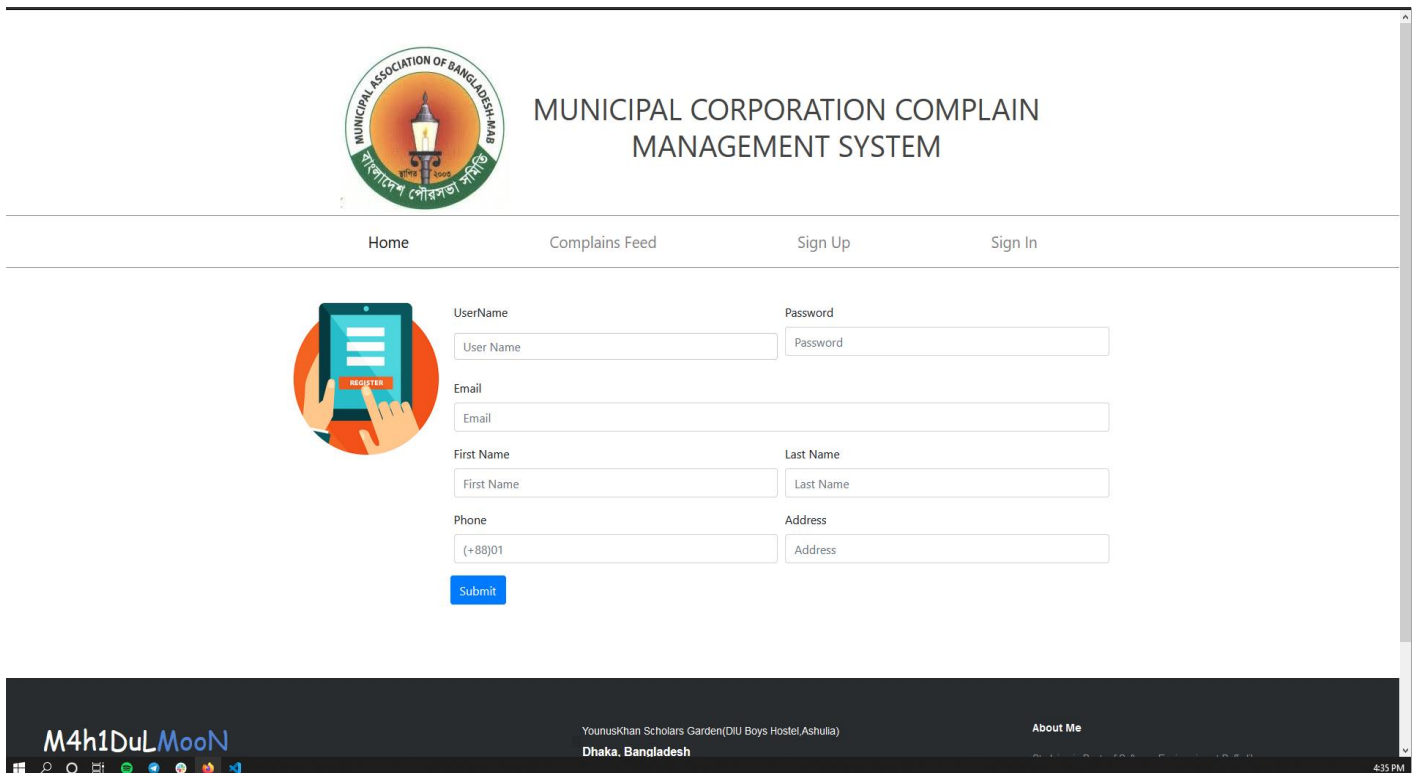
Figure 04: ER Diagram

CHAPTER 4: USER MANUAL

User Type:

User Type A: Admin

User Type B: Registered Users




The screenshot displays the registration form for the Municipal Corporation Complain Management System. At the top, there is a logo for the Municipal Association of Bangladesh (MAB) and the system title. Below the title is a navigation menu with links for Home, Complain Feed, Sign Up, and Sign In. The registration form itself includes fields for Username, Password, Email, First Name, Last Name, Phone, and Address, along with a Submit button. The footer contains the website name 'M4h1DuLMooN', the location 'Dhaka, Bangladesh', and the time '4:35 PM'.

MUNICIPAL ASSOCIATION OF BANGLADESH (MAB)
স্বাধীনতা পৌরসভা পরিষদ

MUNICIPAL CORPORATION COMPLAIN MANAGEMENT SYSTEM

Home Complain Feed Sign Up Sign In

 Username Password
User Name Password
Email
Email
First Name Last Name
First Name Last Name
Phone Address
(+88)01 Address
Submit

M4h1DuLMooN YounusKhan Scholars Garden(DIU Boys Hostel,Ashulia) About Me
Dhaka, Bangladesh 4:35 PM

Figure 05: Registration form

Login form:



Figure 06: Login

Home page:

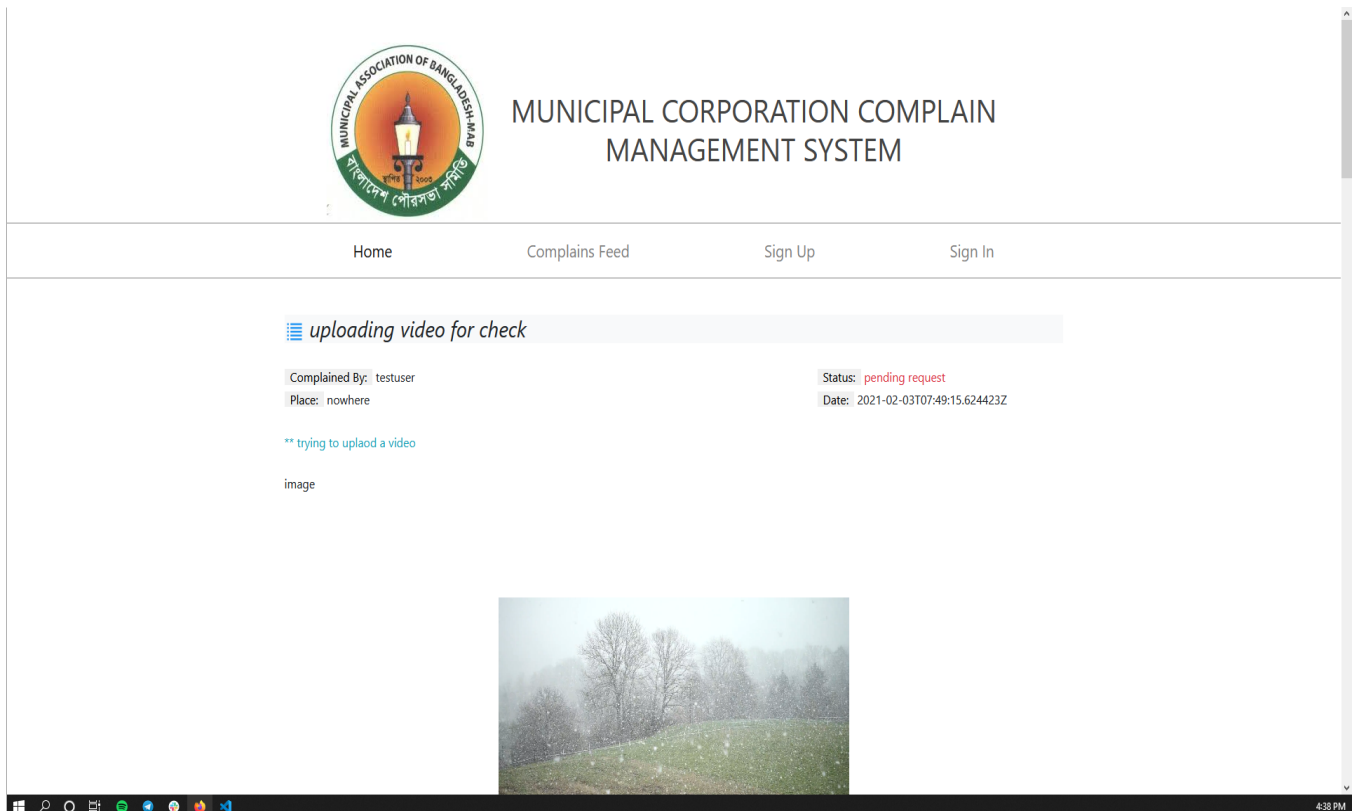


Figure 07: Complain feed

Admin Control Complains:

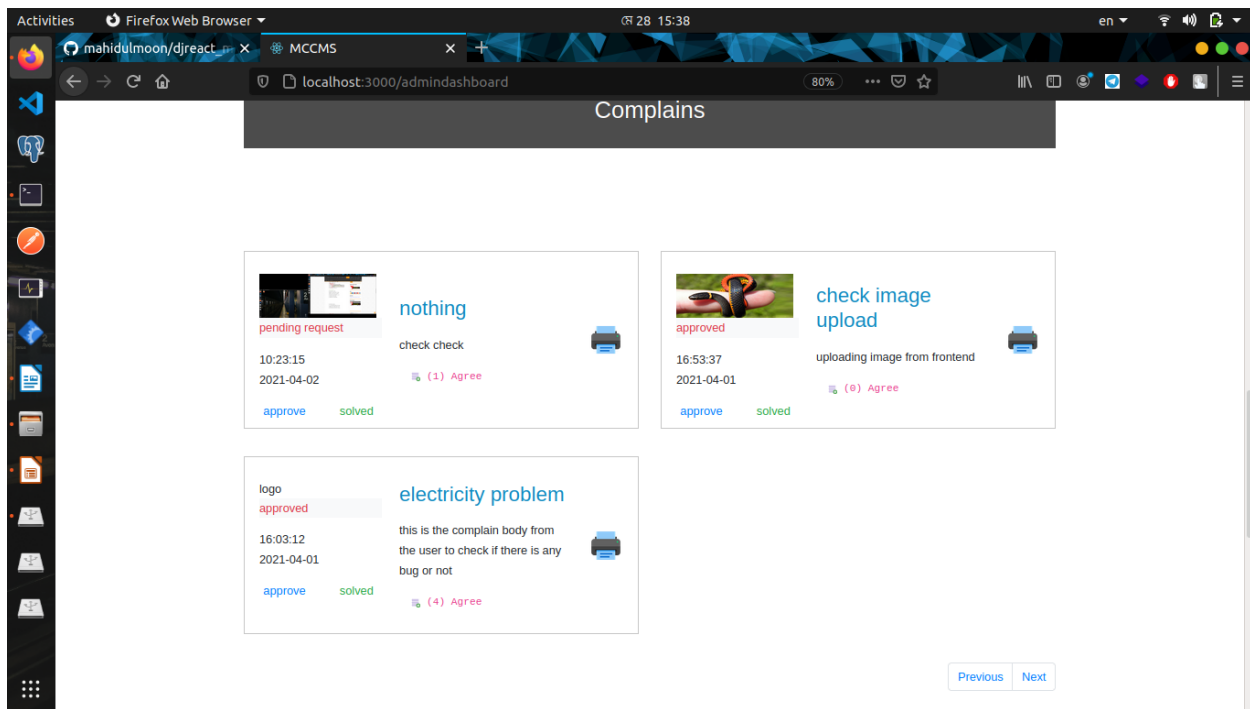


Figure 08: Admin Control complain

Global Notice Form:

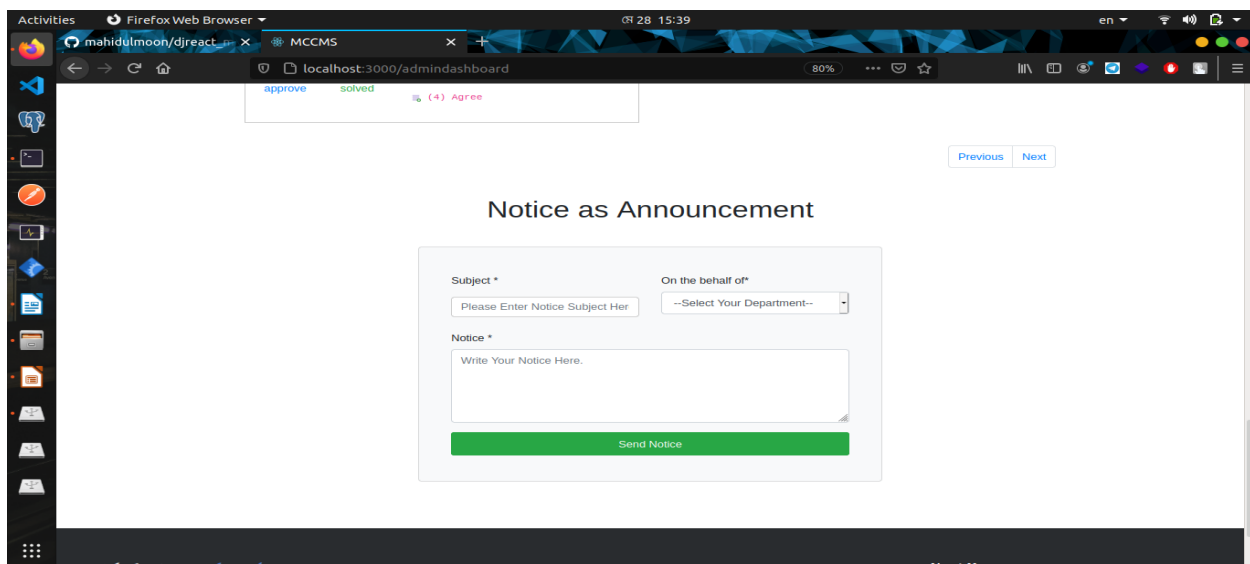


Figure 09: Global Notice Form

Complain Form:

The screenshot shows the 'COMPLAIN PAGE' of the Municipal Corporation Complain Management System. The form includes the following fields:

- Your Name (Username): mahidulmoon
- Your Email: mahidulmoon@gmail.com
- Your Phone Number: +8801771042196
- Your Area Name Or Address: Complaint Area Name
- Area Postal Code: Enter Area Postal Code
- Complain Subject: Enter Your Complain Subject Here
- Your Complain Here: (Large text area)
- Upload File/Image: Browse... | No files selected.
- Submit button

Figure 10: Complain Form

User Profile:

The screenshot shows the user profile page for Mahidul Moon, Software Engineer. The profile includes:

- Profile picture: A blue atom icon.
- Stats: 38 posts, 980 followers, 8.9 rating.
- Buttons: Chat, Follow.
- Section: 'Already Complied by You' with a table of complaints.
- Section: 'Notices' with a list of announcements.

Complain ID	Subject	Status	Post time	Likes
1	this is for demo	pending request	2021-01-28T10:58:18.542578Z	2

The 'Notices' section contains two announcements:

- বিন বন্ধুর মেয়াদী সেমিনারের প্রকল্প বিল এড মিলিটা গোটা ফাইলেশন এর আর্থিক সহযোগিতার বিন বন্ধুর মেয়াদী সেমিনারের প্রকল্প কাজকর্ম করেন মিউনিসিপাল এগেসিটিসহন অব বাংলাদেশ-মার। সমাপনি অনুষ্ঠান ৯৩ ৩১ ডিসেম্বর ২০২০, বুধবারের মেয়াদে পূর্বনির্ধারিতকাল, ঢাকায় অনুষ্ঠিত হয়।
2021-01-28T07:34:41.841062Z
- মাননীয় প্রধানমন্ত্রীর নিকট যাব সজ্ঞপ্তির প্রস্তাব ও মে ২০২০ তারিখে করোনা ভাইরাসের সর্বাধিক পরিচিত নিয়ম আওতাধীন মিলিটারী জেলার সাথে বিভিন্ন কনফারেন্সে সজ্ঞপ্তি যোগ নিউজপেপার মাননীয় প্রধানমন্ত্রী অবলম্বন আ জন্মেরই শেষ ঘটনা। বিভিন্ন কনফারেন্সে শেয়ারসহকারে সর্বাধিক কর্মকর্তা ও কর্মচারী জীবন জরি রেখে জনগণের সেরা প্রত্যয়ের বিষয়টি উপস্থাপন করেন মিউনিসিপাল এগেসিটিসহন অব বাংলাদেশ মার এর সজ্ঞপ্তি ও নিউজমাত্রী পৌরসভার সেরা জন্ম দেওয়ার কামাল আহমেদ। করোনা ভাইরাসের প্রস্তুতির মোকাবেলায় পৌরসভার কর্মকর্তা-কর্মচারীদের জীপ বাড়ি রেখে কর্তব্যে পরিচালনা করা তিনি মাননীয় প্রধানমন্ত্রীর নিকট উন্নয়ন করেন। মাননীয় প্রধানমন্ত্রী মার সজ্ঞপ্তির বন্ধন অভ্যন্তর মনোযোগ সহকারে শোনেন। আশা করি এর পৌরসভার কর্মকর্তা-কর্মচারীদের বেকন-কার্য নিমিত্ত প্রত্যয়ের বিষয়টি সমাধান হবে। মিউনিসিপাল এগেসিটিসহন অব বাংলাদেশ মার এর পক্ষ থেকে জন্ম দেওয়ার কামাল আহমেদকে অভিনন্দন ও ধন্যবাদ।
2021-01-28T07:19:16.498336Z

Figure 11: User Profile

Admin Profile:

MUNICIPAL CORPORATION COMPLAIN MANAGEMENT SYSTEM

Home Dashboard Profile Complains Feed Complain Form Sign Up Sign Out

26 New Messages!

11 New Tasks!

123 New Orders!

13 New Tickets!

26 New Messages!

11 New Tasks!

123 New Orders!

13 New Tickets!

Notices

- **staff user posting** staff user post token auth check
2021-02-04T05:52:06.277305Z
- **testuser token check** check me
2021-02-04T05:38:30.057452Z

[Previous](#) [Next](#)

Updated yesterday at 11:59 PM

User Table

search

Name	Uusername	Email	Phone	Address	Actions
test user	testuser	testuser@gmail.com	01988520214	gazipur	\$320,800

[Previous](#) [Next](#)

Updated yesterday at 11:59 PM

Privileged User Table

search

Name	Uusername	Email	Admin	Super User	Actions
	mahidulmoon	mahidulmoon@gmail.com	●	●	\$320,800
meher afroz	meherafroz	meherafroz@gmail.com	●	■	\$320,800

[Previous](#) [Next](#)

Figure 12: Admin profile

CHAPTER 7: PROJECT SUMMARY

Github Link:

frontend: https://github.com/mahidulmoon/djreact_mccms_frontend.git

backend: https://github.com/mahidulmoon/djreact_mccms_backend.git