Drop Your Complain

By

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161-35-1429

This Report Presented in Partial Fulfillment of the Requirements for the Degree of Bachelor of Software Engineering.

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APPROVAL

This project entitled on "Drop Your Complain(An Online Platform)" submitted by **Mushrif Hoque** bearing ID:161-35-1429 to the Department of Software Engineering of Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of Bachelor of Science in Software Engineering and approval as to its style and contents.

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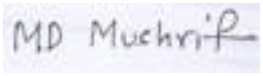
Declaration

I hereby declare that I have taken this project under the supervision of **Khalid Been Md.Badruzzaman**, Senior Lecturer, Department of Software Engineering, Daffodil International University. I also declare that neither this report nor any part of this has been submitted elsewhere for award of any degree.



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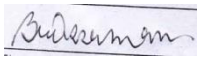

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Executive Summary

The time when we started the development part it's in October. Like other projects, it is important to work hard, endurance, dedication, and concentration to complete the project. There are many reasons for the capitalization of the project development, such as the requirements of the stakeholder to be properly filled.

If you follow the requirements analysis properly, then it helps a lot in the development of the project. We first analyze our project requirements and then we do the next step design specification.

An application system database plays an important role. For this reason, we are focused on creating a database design. We have designed the drawing table to say table with the right relationship. Admin part can also be called part of the maintenance. Admin plays a big role in our system.

The user interface is easy to create if any user can easily understand. After that, I check everything again and go to the main functionality of the project.

Developing a project is not an easy task. But building the project is not the and actually. At the end of complete the project, you have to make sure that your project functionality works fine. For that, you have to come in the testing part, its part of quality assurance. The responsibility of quality assurance is to find the vulnerability of the system. If any bug can be found before the system release then there is a change to fix that bug. So testing the project we have assured the quality of the project.

ACKNOLEDGEMENT

At first, I am grateful to The Almighty Allah for making me eligible to complete this project. Then I would like to thank my supervisor Senior Lecturer ,**Khalid Been Md. Badruzzaman** Department of Software Engineering. We are extremely grateful and indebted to her expert, sincere and valuable guidance and encouragement extended to us.

We wish to express our sincere thanks to **Dr. Touhid Bhuiyan**, Professor & Head of Software Engineering department for his constant encouragement.

Last but not least, we would like to thank our parents, for their unconditional support, love and without this we would not have come this far.

Above all, we would like to thank to The Almighty Allah for giving me strength to complete this project.

A project submitted in partial fulfillment of the requirement for the degree of Bachelor of Science in Software Engineering.

Department of SoftwareEngineering
DaffodilInternational University

Contents

CHAPTER 1

INTRODUCTION

1. INTRODUCTION

1.1. Project Overview

Problem of under Dhaka city corporation like: Garbage problem, Drainage problem ,Manhole missing problem, Road damage problem ,To complain this kind of problem through online to city corporation.

1.2. The Purpose of the Project

When someone face this kind of problem then he/she can complain easily to the city corporation without waste of time and energy through this application. By this application authority can understand the problem under the city corporation and take the essential steps to solve theproblem.

1.2.1. Background of the Project Effort

In Dhaka city we often face this kind of problem and we don't do anything and because we don't want to go city corporation office or most of the time we haven't any option to do something .To solve this problem Idevelop a website to drop complain . Where When someone face this kind of problem then he/she can complain and check the work status of complain .

1.2.2. Goals of the Project

By Using this system when anyone face problem like road damage , dustbin problem he or she can complain with proper location and complain details and admin can verify the problem ,andthen admin canupload thestatusofwork .Complainer can seethe workby Complain Id whichprovidebysystem. Byusingthissystemit willsavelotsoftime,energyandaddvaluein people life of under Dhaka city corporation.

1.3. Beneficiaries and Benefits

This projects are mainly beneficiaries for Complainers and Admin. Benefits are,

* To Complain by complainer is fully functional and flexible.

* Complainer can check work status.

* Admin can keep records.

* Admin upload work status.

*It saves a lot of time, energy of complainer.

* People start believing in online complain system

1.4. PROJECT PLANNING

1.4.1. Project Scenario

Complainer can submit the problem to authority with exact location with details and photography. After submit any problem to the authority the system will give him a Complain Id in Website UI and also sent the Complain Id in complainer Email so that complainer can view work status by complain id. City corporation check the problem with proper location and verify the problem . City corporation will upload the work status. The system have only 3 type of user, Admin and register and non-register Complainer .

1.41.1 Scenario 1:- Admin Based

- Admin login into the systems
- Check or view the complain list
- Upload work status
- Then Admin can logout

1.4.1.2 Scenario 2:-Complainer Based

1. Complainer can complain when he/she face
2. Complainer get complain Id in System UI
3. Complainer also get Complain Id in his/her Email which she/he provide while submit Complain
4. Complainer can registration to system
5. Complainer can log in to view or check work status of complain
6. Then complainer can logout

1.5. Stakeholders

1.5.1. The Admin

1. View complainer complain
2. Upload work status

1.5.2 The user(Complainer)

1. Submit Complain
2. Check Work status
3. Can registration

1.5.3 The user(Complainer, Non-Register)

1. Submit Complain

1.6. Mandated Constraints

1.6.1. Budget Constraints

Primary budget – 5k

Yearly maintenance cost – 2k

1.7. Project Schedule

1.7.1 Gantt chart

Task Name	Start Date	Finish Date	Durations
Requirements gathering and analysis	15.7.19	29.7.19	14 days
Project proposal	30.7.19	6.8.19	7 days
UI design	10.8.19	15.8.19	5 days
Implementing	15.9.19	20.10.19	36 days
Testing	25.10.19	5.11.19	10 days
Evaluation The Project	5.11.19	7.11.19	2 days
Documentation of the Project	8.11.19	20.11.19	12 days

Table-1.01: Gantt chart

1.7.2. Release Plan/Milestone

Task No	Task Name	Time
1	Requirements gathering and analysis	14 days
2	Project proposal	7 days
3	UI Design	5 days
4	Implementing	36 days
5	Testing	10 days
6	Evaluation The Project	2 days
7	Documentation	12 days

Table 1.02: Release Plan

Chapter 2

Software Requirements Specification

The description of a software system to be developed is called **software requirements specification** (**SRS**) .

2.1 :Requirement Specification

FRQ_ID	FRQ_Name	Description	Priority
FRQ01	Complain Submit	Anyone can complain by using this System.	High
FRQ02	View Complain Status	Register can view complain status by using this system if provide complain id.	Low
FRQ03	Login[Admin]	Admin Can login to view complain list ,without login admin cant view complain list and upload status	High
FRQ04	Upload Status	Admin Can Upload status	High
FRQ05	Complain Id	Complainer get complain Id by Email	Medium
FR06	Admin Logout	Admin can close connection to system by logout .	Medium
FR07	Registration[Complainer]	Complainer can registration to view the complain status.	Medium
FR08	Login[Register Complainer]	Register Complainer can login to view the complain status.	Medium

Table 2.0: Functionalities

2.2 :Data Requirement:

No	Description	Priority
DR01	Complain type , Complain Area, Road Number , Photograph , Complain details , Complainer Name , Complainer Email , Complainer Contact Number requires when submit Complain by complainer .	High
DR02	Admin have to insert the login credentials accurately otherwise system will show an error with message.	High
DR03	Complainer have to registration to view complain status	low
DR04	Complainer must have to login to view complain status	Medium
DR05	Complainer must provide complain id to check complain status	Medium

Table 2.1: Data Requirements

2.3 :Performance Requirements

2.3.1:Speed and Latency Requirements

No	Description
SLR01	Maximum 2 seconds to load data from SQL server to System .
SLR02	Maximum 2 seconds to upload data in SQL server from System.
SLR03	The system must have a high speed to reply to the user request.

Table 2.2: Speed and Latency Requirements

2.3.2. Precision and Accuracy Requirements

No	Description
SLR01	The input data should be accurate when Complainer or Admin provide data to the system.
SLR02	All data should be in place accurately where it is associated

Table 2.3.: Precision and Accuracy Requirements

2.3.3. Capacity Requirements

Table 2.4: Capacity Requirements

No	Description
CR01	The system will be managed all the insertion of data in database.
CR02	The server database size must be able to load the system data.

Table 2.4: Capacity Requirements

2.4. Dependability Requirements

2.4.1. Reliability Requirements

No	Description
RR01	All data should collect from users by permission and by accepting privacy policy
RR02	No one can use user's data for any other purpose except system needs.

Table 2.5: Reliability Requirements

2.4.2. Availability Requirements

No	Description
AR01	The system should work 24 hours a day.
AR02	The system should provide the desired data to the user in time.

Table 2.6: Availability Requirements

2.4.3. Robustness or Fault-Tolerance Requirement

No	Description
FTR01	If the system has been crashed, it should not be more than an hour.

Table 2.7: Robustness or Fault Tolerance Requirements

2.5 Maintainability and Supportability Requirements

2.5.1. Maintenance Requirements

No	Description
MR01	The system maintenance should be quick.

Table 2.8: Maintenance Requirements

2.5.2. Supportability Requirements

No	Description
SR01	The system should support Google crome ,firefox .

Table 2.9: Supportability Requirements

2.5.3 Adaptability Requirements

No visible adaptability requirements

2.5.4 Scalability or Extensibility Requirements

No visible adaptability requirements

2.6 Security Requirements

2.6.1 Access Requirements

No	Description
SR01	To get access to the system, the system provides session way..

Table-2.10: Access Requirements

2.6.2 Integrity Requirements

Toprotect credentialsofuser from beingstolen, allpasswordsarestoredin encryptedform. The Requirements significantly reduces the value of stolen user credentials, it's not easy to decrypt the password.

2.6.3.Privacy Requirements

No	Description
PR01	The user data should not contain any private issues.
PR02	All the confidential data should be encrypted.

Table 2.11: Privacy Requirements

2.7 Look and field Requirements

2.7.1Appearance Requirements

Table 2.12: Appearance Requirements

No	Description
AR01	The user interface must be attractive.
AR02	The user interface must be user friendly.
AR03	The user interface must be user interactive with user experiences.

Table 2.12: Appearance Requirements

2.7.2. Style Requirements

SR01	The interface color should be material.

Table 2.13: Style Requirements

Chapter 3
System Analysis

3.1. Use case
A use case is a software and system engineering term that describes how a user uses a system to accomplish a particular goal. A use case acts as a software modeling technique that defines the features to be implemented .

3.1.1 Use case diagram

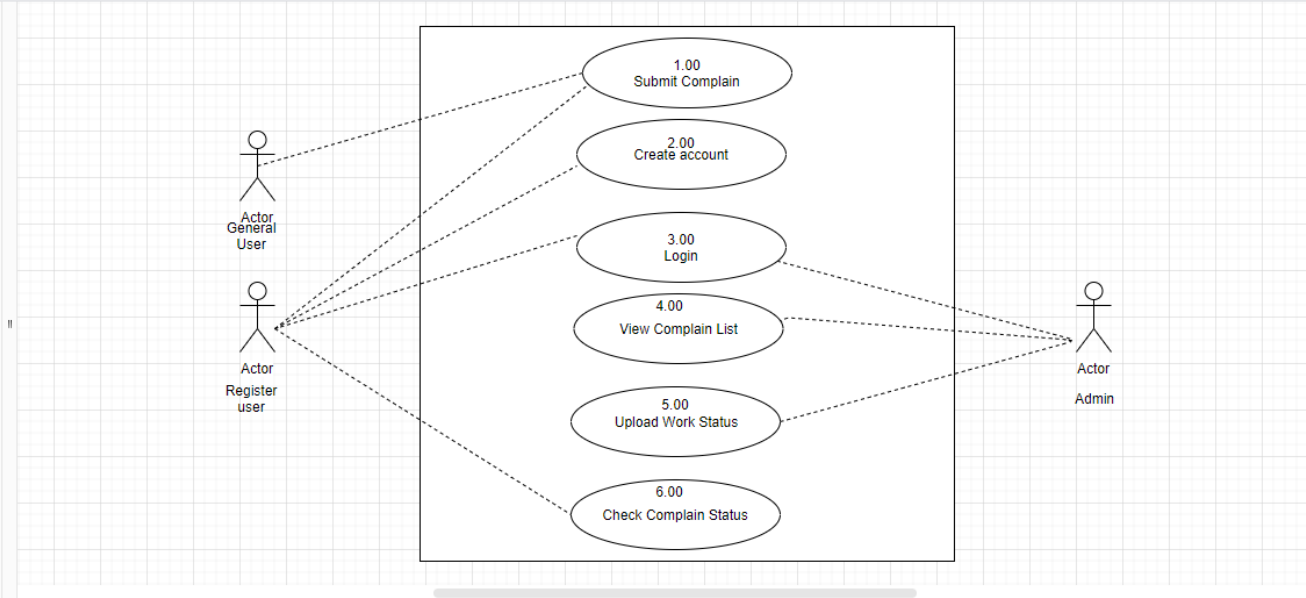

Fig- 3.01: Use case Diagram

3.1.1.1 Submit Complain

Use case no	1.00
Use case	Submit complain
scenario	Any user can submit complain to system
Brief	Userscanenterthesystemandsubmittheproblemwith properlocation, photograph and details
Actors	General user Register user
preconditions	Enter into the system
Post conditions	Get complain Id

Flow of event	**ACTOR**	**SYSTEM**
	1.EnterAlltherequiredfiled 2.Press submitbutton	1.1 check validation if field are empty
Exception conditions	2.1If complainisalreadyexist insystem whichissubmit byothercomplainerand if the work status is pending the system will show complain in already exist by other complaier	

3.1 : Submit Complain

3.1.1.2 Create account

Use case no	2.00	
Use case	Create account	
scenario	Any complainer can registration for create account in the system	
Brief description	Any complainer can registration for create account in the system if he/she wants to view the complain work status	
Actors	General user	
preconditions	Enter the system	
Post conditions	Can check work status of complain view	
Flow of event	**ACTOR**	**SYSTEM**
	1. Enter username and password and email 2. Press singUp button 3. System give Acoount open message	1.1 check validation if field are empty
Exception conditions	2.1 If username , email is exist the show all ready register in the system	

3.2 create account

3.1.1.3 Login

Use case no	UC1.0	
Use case	Login	
scenario	All user are need to login this web site	
Brief	Users can enter the system and use their account	
Actors	Tutor Parent	
preconditions	Registration for Tutor and parent, user must be exist	
Post	Enter the system	
Flow of event	**ACTOR**	**SYSTEM**
	1. Enter username andpassword 2. Press login button	1.1 check validation if field are empty
Exception conditions	2.1 If username and password is not exist the show wrong username and password	
Use case no	3.00	
Use case	Login	
scenario	Register user and Admin need to login the system	
Brief description	Users can enter the system and use their account	
Actors	Admin Register user	
preconditions	Registration for Register user must exist in database of the system	
Post conditions	Enter the system and go to the login page	
Flow of event	**ACTOR**	**SYSTEM**
	1. Enter username andpassword 2. Press login button	1.1 check validation if field are empty
Exception conditions	2.1 If username and password is not exist the show wrong username and password	

Table 3.3: Login

3.1.1.4 View Complain list

Use case no	4.00	
Use case	View Complain list	
scenario	Admin need to login this web site	
Brief description	Admin Can enter in the module and view the complain list	
Actors	Admin	
preconditions	Must have to login the system	
Post conditions	Enter the system	
Flow of event	**ACTOR**	**SYSTEM**
	1. Enter username andpassword 2. View the Complainlist	1.1 check validation if field are empty
Exception conditions	2.1 If username and password is not exist the show wrong username and password	

Table 3.4:View Complain list

3.1.1.1 Upload status

Use case no	5.00	
Use case	Upload status	
scenario	Admin upload the work status of complain	
Brief description	Admin view the complain list and upload the work status	
Actors	Admin	
preconditions	Login and view the complain details	
Post	Enter the system	
Flow of event	**ACTOR**	**SYSTEM**
	1. Click on upload status button 2. Go to the upload status page 2.Press uploadbutton 3. System show data update	1.1 check validation

Exception conditions	2.1 If username and password is not exist the show wrong username and Password while loging

Table 3.5: Update Status

3.1.1.1 Check complain status

Use case no	6.00	
Use case	**Check complain status**	
scenario	Register user can view work status of complain	
Brief description	Register user can check work status of complain by complain id	
Actors	Register user	
preconditions	Login in the system	
Post conditions	View the complain status	
Flow of event	**ACTOR**	**SYSTEM**
	1. Give id in search box 2. presssearchbutton 3. show the result	1.1 check validation is field is empty
Exception conditions	2.1 If complain id is not exist the show nothing	

Table 3.6: Check Complain status

3.2. Activity Diagram:

3.3.1. Activity Diagram for Register user:

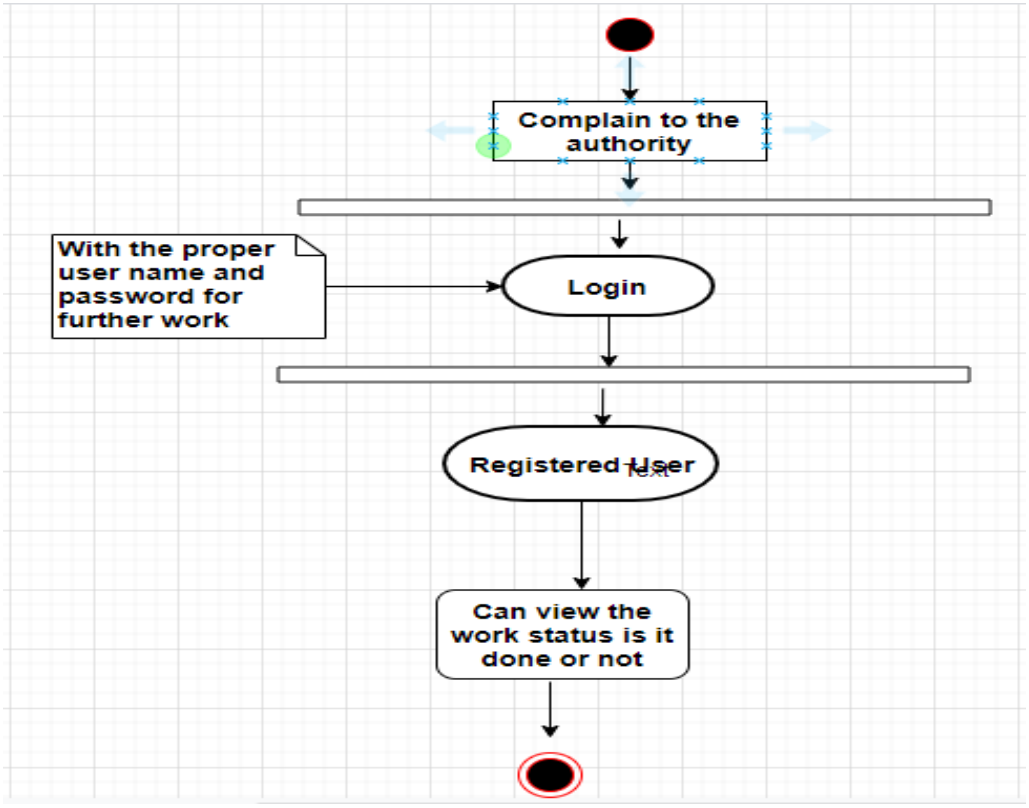

Fig3.02: Activity Diagram for Register user

3.3.1. Activity Diagram for General user:

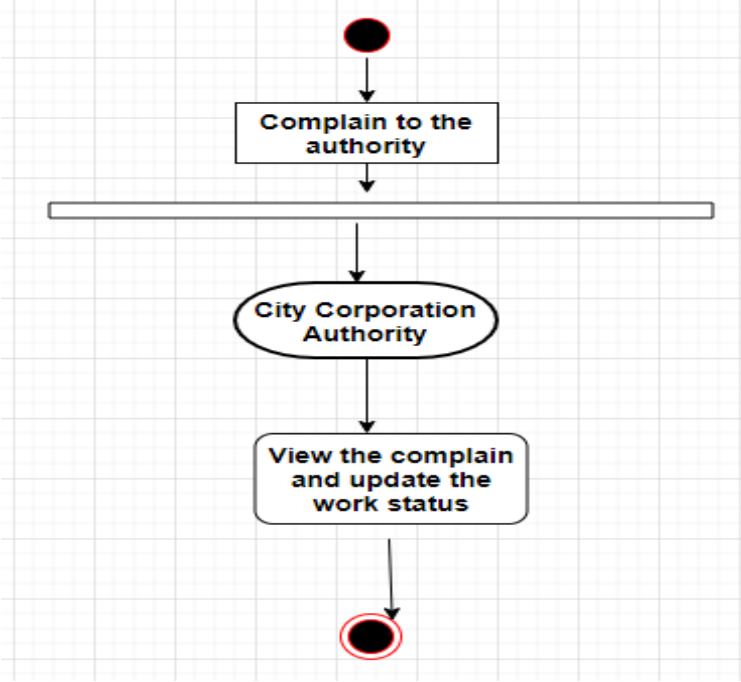

Fig3.03: Activity Diagram for Register user

3.3.1. Activity Diagram for Admin city corporation:

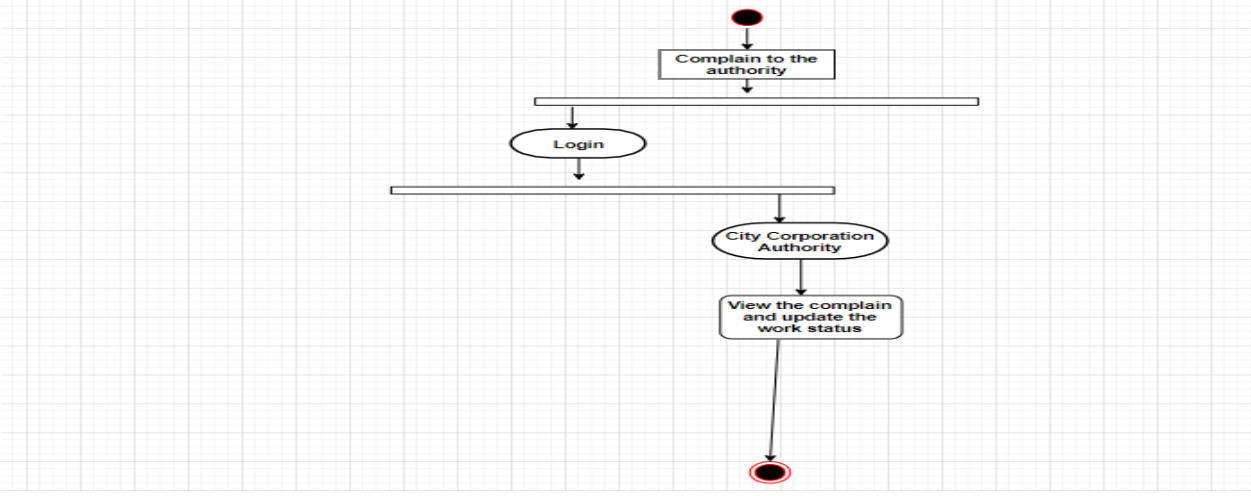

Fig3.04: Activity Diagram for Admin

3.3.1. Activity Diagram for All users:

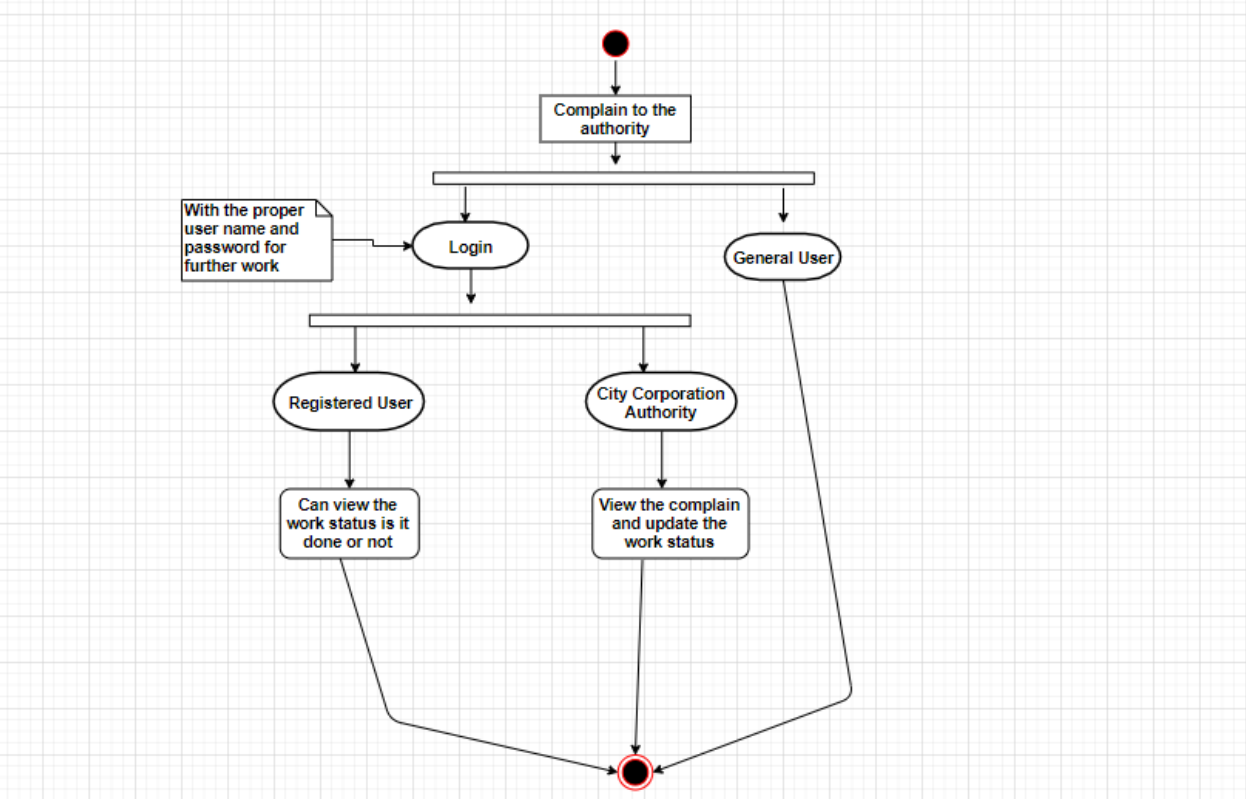

Fig3.05: Activity Diagram for All user

3.4. Sequence Diagram:

UML Sequence diagrams are interaction diagrams that detail how operation are carried out.

3.4.1. System sequence diagram for user

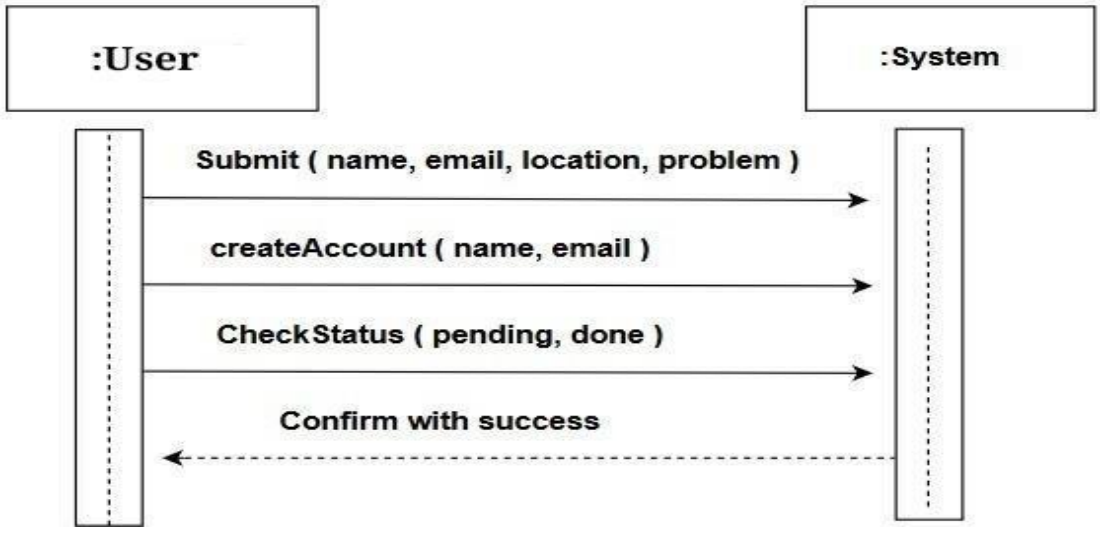

Fig3.06: Sequence Diagram for user

3.4.2. System sequence diagram between system and city corporation admin

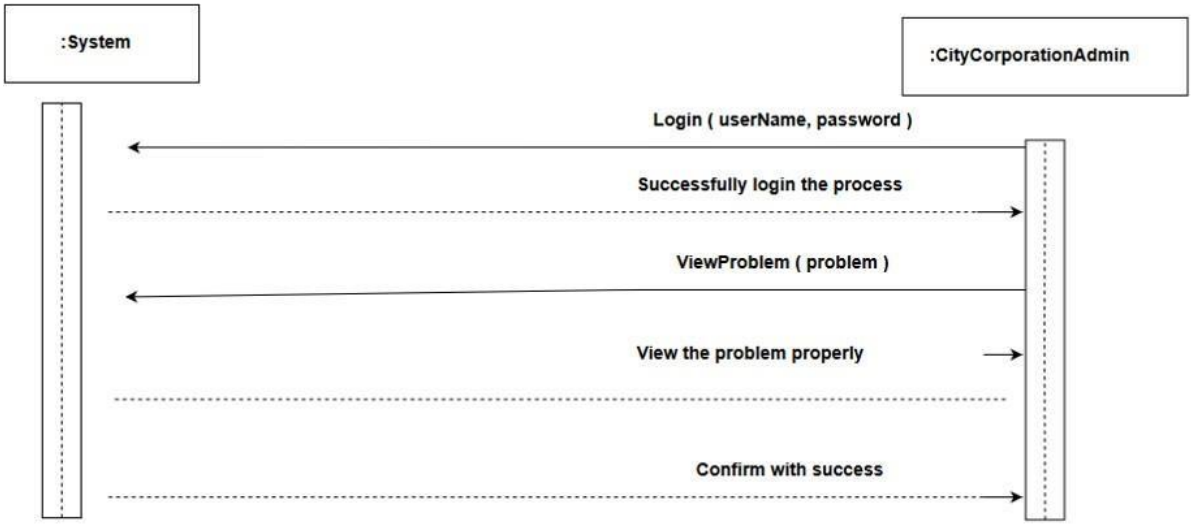

Fig3.07: Sequency Diagram for Register user

3.4.3 Sequence diagram between System &Complain

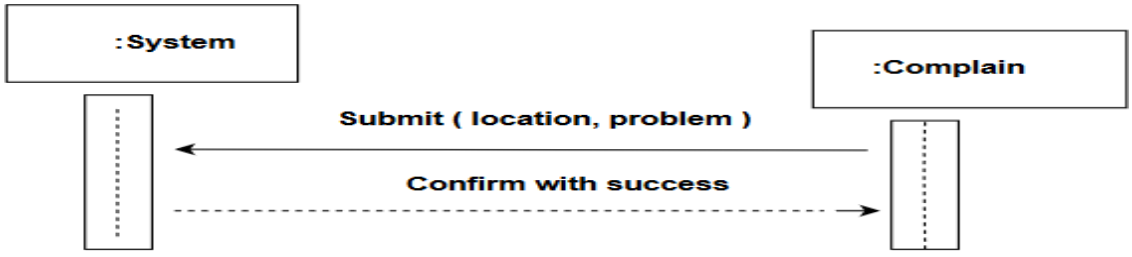

Fig3.08: Sequency Diagram Between system and admin

3.4.4. All User Sequence Diagram

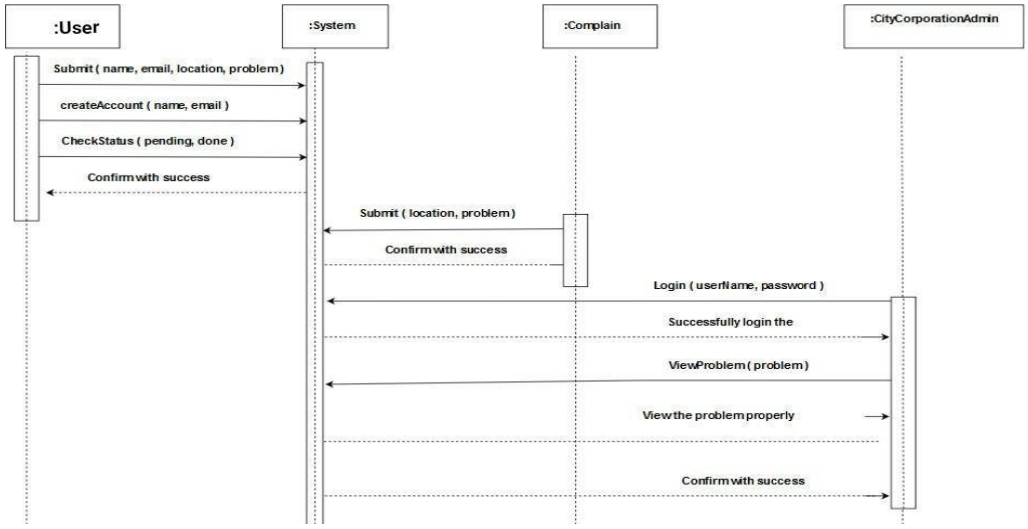

Fig3.09: Sequency Diagram for All user

3.5. Development Tools & Technologies

1. ASP.NET
2. MVC FRAMEWORK
3. ENTITY FRAMEWORK
4. Jquery
5. C#
6. Html
7. Bootstrap
8. css

Chapter 4

System Design

4. Class diagram

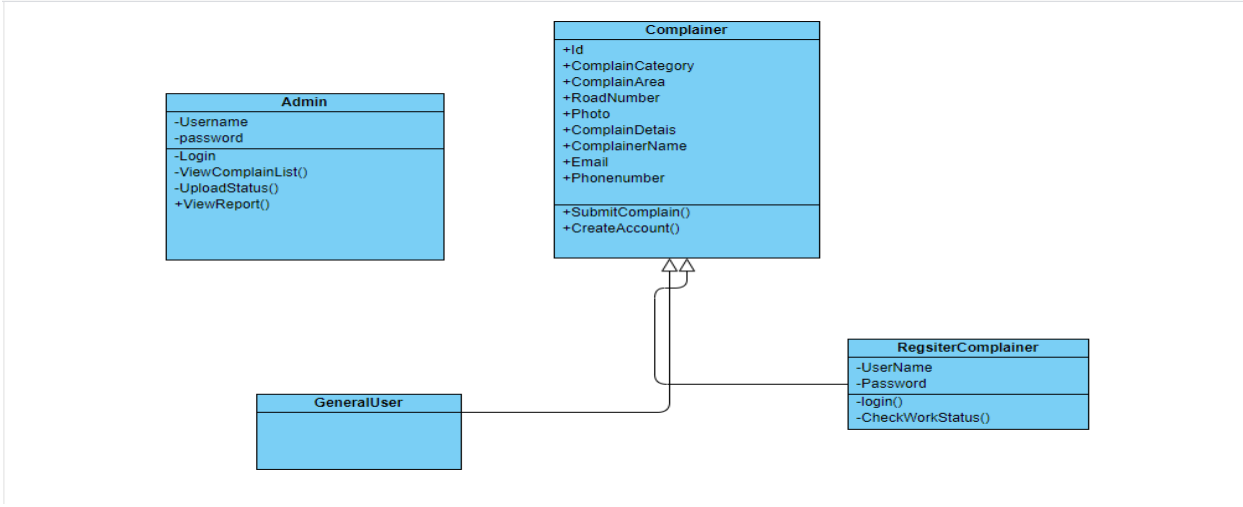

Fig4.01: Class Diagram

4.1 Database Design Diagram

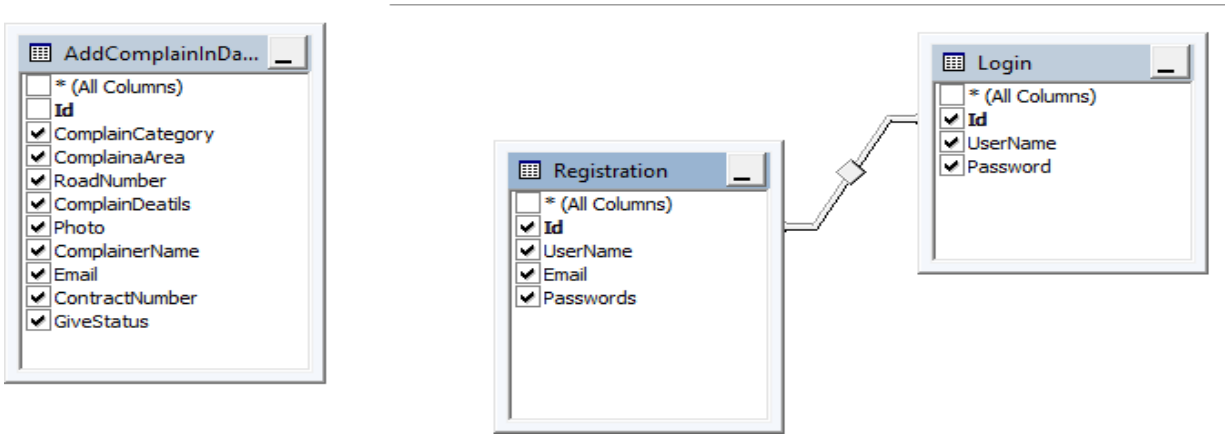

Fig4.02: Database Diagram

Chapter 5
System Testing

5.1. System Testing:

Software testing is defined as an activity to check whether the actual results match the expected results or not and to ensure that the software system is bug free and give proper output.

5.1.1. Features to be tested

Featured Id	Featured Name	Description	Involved User
ST001	Submit Complain	User can Submit Complain	Register, General
ST002	Create account	User can create account to view work status	Register
ST003	Login	Login as authenticated user	Admin , Register user
ST004	Upload Work status	Admin need to login to upload work status	Admin

Table 5.0: Featues tested

5.1.2. Features not to be tested

Featured Id	Featured Name	Description	Involved User
ST001	View Complain Photograph	Admin will see the Complain Photograph.	admin

Table-5.1: Feature not to be tasted

5.2. Testing Strategies:

5.2.1. Test Case Table for Submit Complain

Test case #ST001		Test case name: Submit Complain		
Test Priority: High		System:		
Designed By: Md Mushrif Hoque		Designed Date: 19.11.19		
Executed by: Md Mushrif Hoque		Executed date:19.11.19		
Short Description: This section cover the functionalities of submit complain of complainer				
Pre-conditions: Enter the system				
Step	Action	Expected Result	Pass/ Fail	Actual Result
01	Complainer	Display successful message	pass	
02	Enter empty value for any required field	Display error message	pass	
03	All the input field is filled but complain is existindatabase with pending status	Display Complain is exist by Other Complainer	pass	
Post-conditions: Submit information is inserted into the database successfully				

Table 5.2: Submit Complain Test case

5.2.2. Test Case Table For Create Account

Test case #ST002		Test case name: Create account		
Test Priority: Medium		System:		
Designed By: Md Mushrif Hoque		Designed Date: 21.11.19		
Executed by: Md Mushrif Hoque		Executed date:21.11.19		
Short Description: This section cover the functionnalities of registration e new user.				
Pre-conditions: Enter the system				
Step	Action	Expected Result	Pass/ Fail	Actual Result
01	New user	Display successful message	pass	
02	Enter empty value for any required field	Display error message	pass	
Post-conditions: Registration information is inserted into the database successfully				

Table 5.3: Create account Test case

5.2.3. Test Case Table for login

Test case #ST003		Test case name: login		
Test Priority: Medium		System:		
Designed By: Md Mushrif Hoque		Designed Date: 21.11.19		
Executed by: Md Mushrif Hoque		Executed date:21.11.19		
Short Description: This section cover the functionnalities of login .				
Pre-conditions: Have account in system				
Step	Action	Expected Result	Pass/ Fail	Actual Result
01	Match Username and password	Display successful message	pass	
02	Enter empty value for any required field	Display error message	pass	
Post-conditions: Get access in the system				

5.2.4. Test Case Table For Upload Work Status

Test case #ST004		Test case name: Upload work status		
Test Priority: Medium		System:		
Designed By: Md Mushrif Hoque		Designed Date: 21.11.19		
Executed by: Md Mushrif Hoque		Executed date:21.11.19		
Short Description: This section cover the functionnalities of upload work status				
Pre-conditions: Have account in system as a Admin				
Step	Action	Expected Result	Pass/ Fail	ActualResult
01	Upload Work status	Display successful message	pass	
Post-conditions: View update complain report				

Table 5.5: Upload work status Test case

CHAPTER 6

User Manual

6.1 User Manual

6.1.1 Home Page

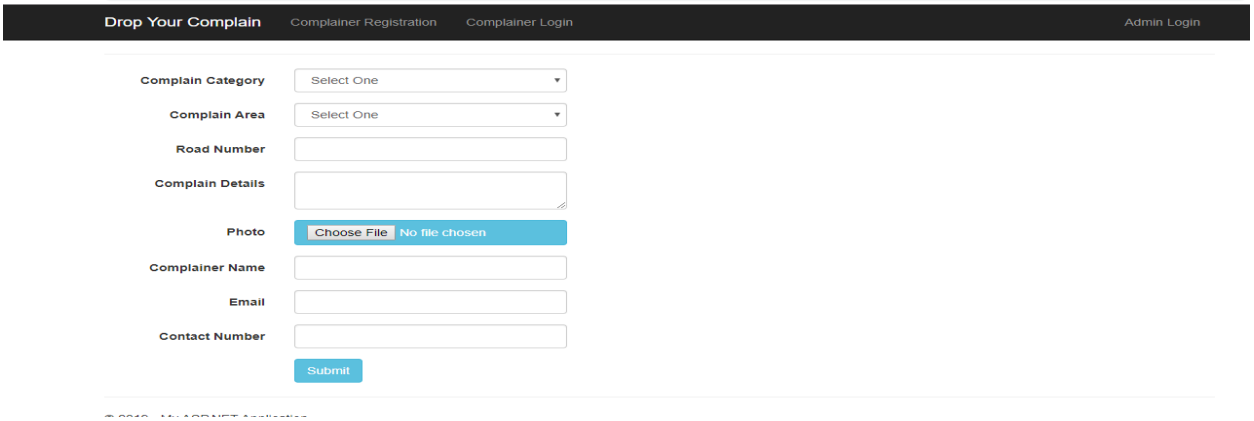

Fig6.01: Home page

6.1.2 Registration

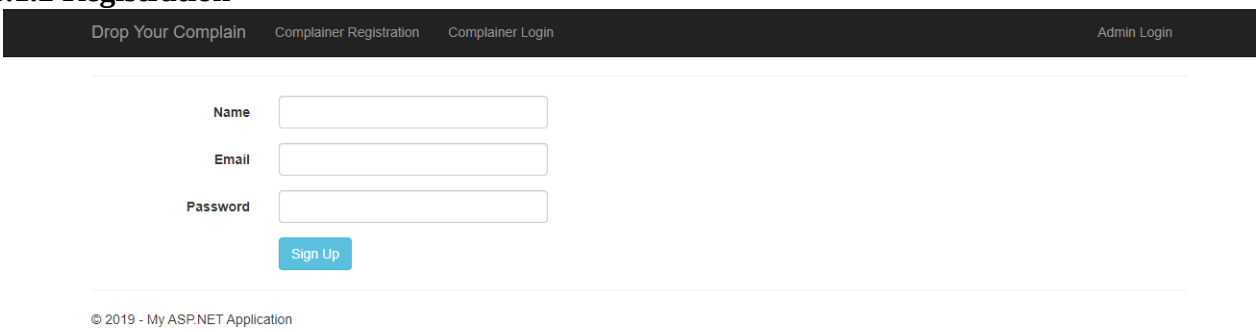

Fig6.02:Registration page

6.1.3 Admin login

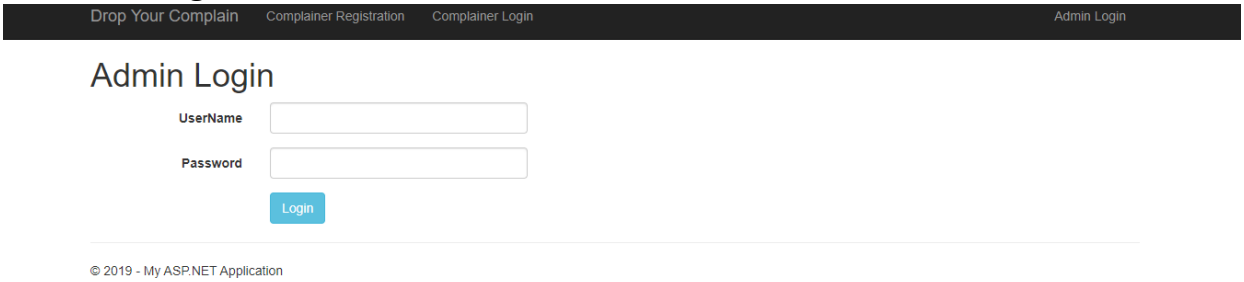

Fig6.03: Admin Login

6.1.4 Admin view complain list

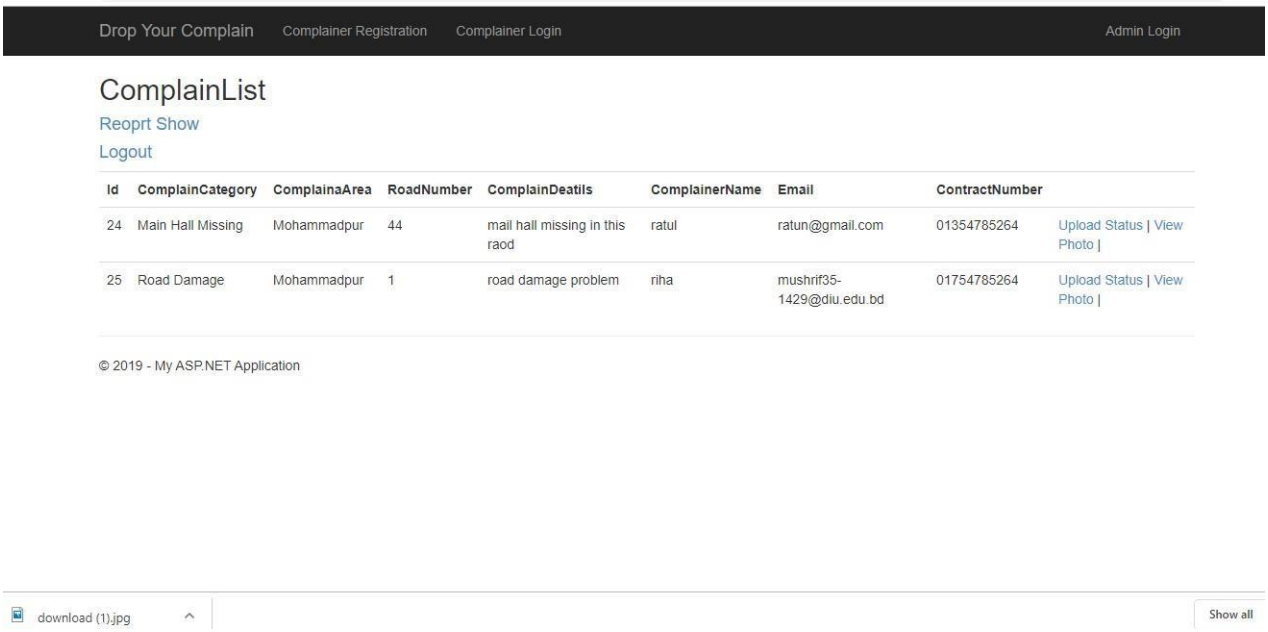

Fig6.04:Admin View Complain list

6.1.5Admin view and upload work status

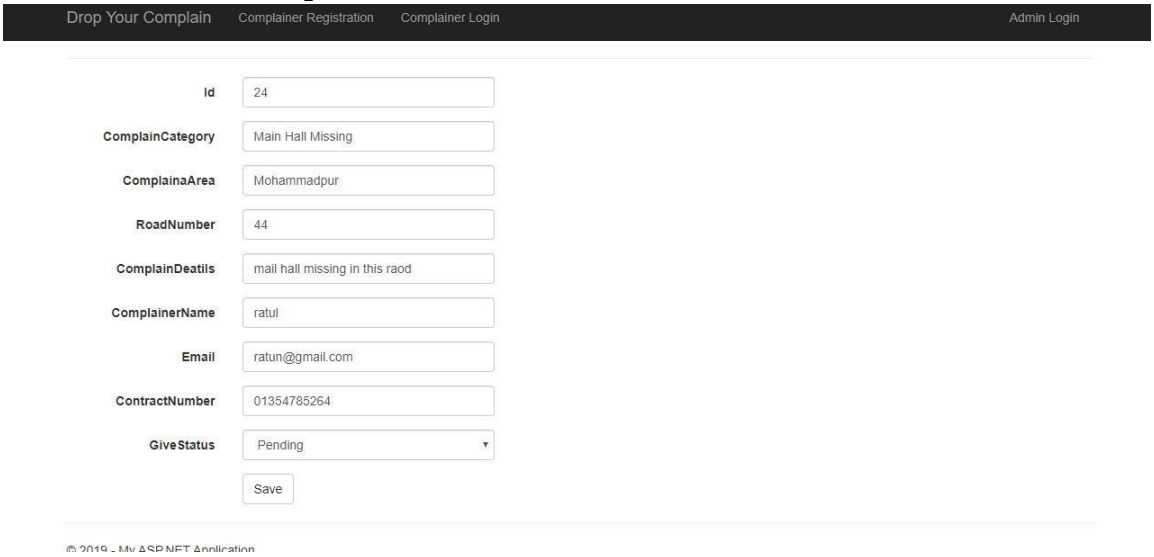

Fig6.05: Admin Upload Work status

6.1.6 Admin view complain photograph and details

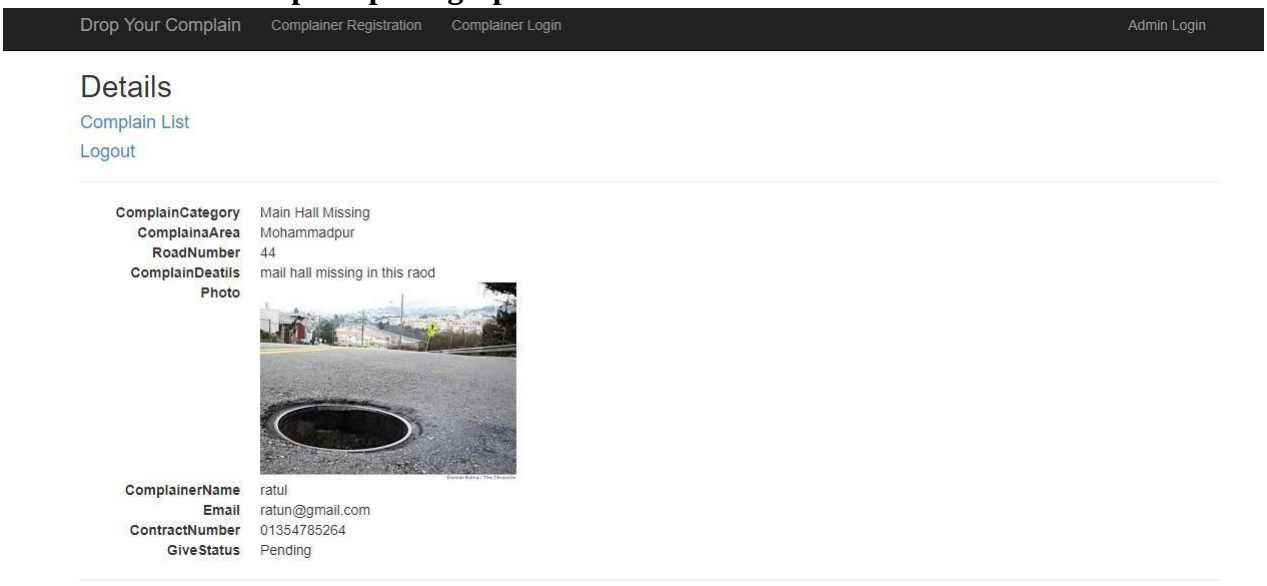

Fig6.06:Admin View Complain Photograph and deatils

6.1.7 Admin view complain report

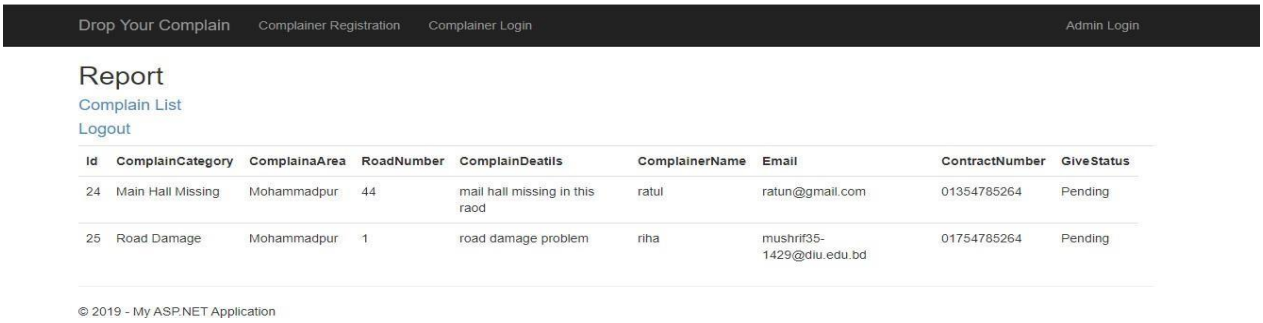

Fig6.07: Admin View Report

6.1.8 Register user login

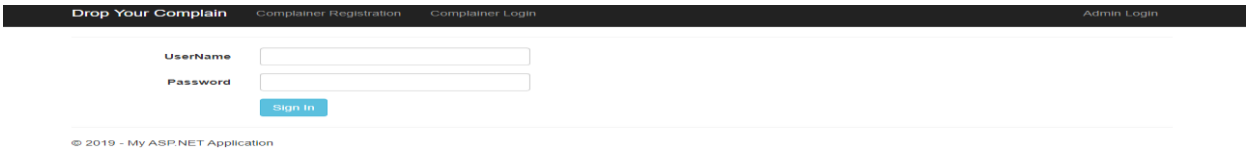

Fig6.08: Register User Login

6.1.9 Register Check work status

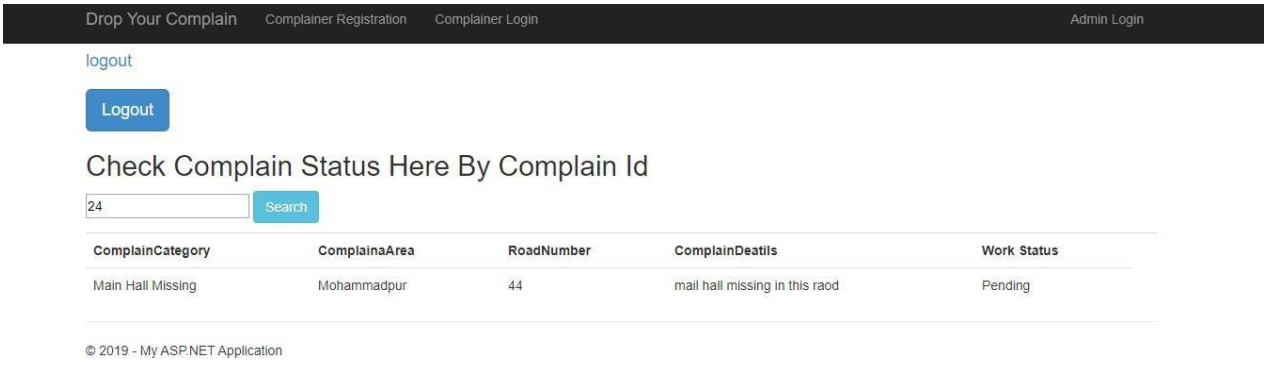

Fig6.09: Register User check work status

Chapter 7

Project Summery

7.1 GitHub link: https://github.com/prantoshon/ProjectFinalYear

7.2 Limitations:

- Cant Attach Google map.
- Limited Complain Id can sent in Email

7.3 Obstacles & Achievements:

I have to face many obstacles to complete this project as example add photograph of complain in database and then show in complain details, email verification , catch duplicate request . Although I have done it by taking help from my supervisor, searching the concept from google ,friends . I achieve my confident to develop this project alone.

7.4 FUTURE IMPROVEMENT

1. Attach Google map
2. Sent Complain Id in Phone Number

7.5 References

To complete audit application, I have taken help from many places. Some references are given bellow:

[1] https://www.tutorialsteacher.com/mvc/mvc-architecture

[2] http://csharp-video-tutorials.blogspot.com/p/aspnet-mvc-tutorial-for-beginners.html

[3] https://www.c-sharpcorner.com/article/introduction-to-asp-net-mvc2/

[4] www.w3schools.com