

CITY CORPORATION COMPLAIN PORTAL: AN ANDRIOD BASED APPLICATION

BY

**Md. Azedul Islam
ID: 162-15-8007**

**Md. Anamul Haque
ID: 162-15-8032**

**Md. Forhad Hossain Haven
ID: 162-15-8049**

This Report Presented in Partial Fulfillment of the Requirements for the
Degree of Bachelor of Science in Computer Science and Engineering

Supervised By

Anup Majumder
Lecturer
Department of CSE
Daffodil International University

Co-Supervised By

Masud Rabbani
Lecturer
Department of CSE
Daffodil International University



DAFFODIL INTERNATIONAL UNIVERSITY

**DHAKA, BANGLADESH
MAY 2019**

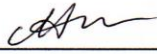
APPROVAL

This Project/internship titled “**CITY CORPORATION COMPLAIN PORTAL: AN ANDRIOD BASED APPLICATION**”, submitted by **Md. Azedul Islam**, ID No:162-15-8007, **Md. Anamul Haque**, ID No:162-15-8032, **Md. Forhad Hossain Haven** ID No:162-15-8049 to the Department of Computer Science and Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on **02 May 2019**.


BOARD OF EXAMINERS

Dr. Syed Akhter Hossain
Professor and Head
Department of Computer Science and Engineering
Faculty of Science & Information Technology
Daffodil International University


Chairman


Nazmun Nessa Moon
Assistant Professor
Department of Computer Science and Engineering
Faculty of Science & Information Technology
Daffodil International University

Internal Examiner


Abdus Sattar
Assistant Professor
Department of Computer Science and Engineering
Faculty of Science & Information Technology
Daffodil International University

Internal Examiner


Dr. Mohammad Shorif Uddin
Professor
Department of Computer Science and Engineering
Jahangirnagar University

External Examiner

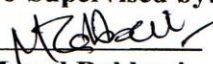
DECLARATION

We hereby declare that, this project has been done by us under the supervision of **Anup Majumder, Lecture, Department of CSE**, Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

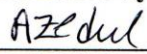
Supervised by:

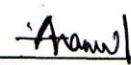

Anup Majumder
Lecturer
Department of CSE
Daffodil International University

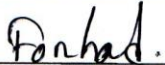
Co-Supervised by:


Masud Rabbani
Lecturer
Department of CSE
Daffodil International University

Submitted by:


Azedul Islam
ID: 162-15-8007
Department of CSE
Daffodil International University


Md. Anamul Haque
ID: 162-15-8032
Department of CSE
Daffodil International University


Md. Forhad Hossain Haven
ID: 162-15-8049
Department of CSE
Daffodil International University

ACKNOWLEDGEMENT

First we express our heartiest thanks and gratefulness to almighty God for His divine blessing makes us possible to complete the final year project/internship successfully.

We really grateful and wish our profound our indebtedness to **Anup Majumder, Lecturer**, Department of CSE Daffodil International University, Dhaka. Deep Knowledge & keen interest of our supervisor in the field of Android application Development influenced to carry out this project. His endless patience ,scholarly guidance ,continual encouragement , constant and energetic supervision, constructive criticism , valuable advice ,reading many inferior draft and correcting them at all stage have made it possible to complete this project.

We would like to express our heartiest gratitude to **Professor Dr. Syed Akhter Hossain**, Head, Department of CSE, and **Anup Majumder**, Lecture, Department of CSE, Daffodil International University, Dhaka and for their kind help to finish our project and also to other faculty member and the staff of CSE department of Daffodil International University.

We would like to thank our entire course mate in Daffodil International University, who took part in this discuss while completing the course work.

Finally, we must acknowledge with due respect the constant support and patients of our parents.

ABSTRACT

This project titled “**City Corporation Complain Portal An Android Based Application**”. The purpose of our project is solving issues on various fields. We face various kinds of problems in our day to day life. Sometime there is a damaged road, unwanted load Shedding or sewerage problem. We don’t know where to complain or where to inform. We tried to build a system where anyone can give information or give complain about this type of problem. Anyone can complain to authority just through a simple android application. User can complain through registration. There will be email id to identify the user or complainer. User will be notified after receiving the complaint via email. Authority will be notified about the problem. After taking the required action the complainer will be notified again through email or text on phone. By this application we are trying to solve some problems we face on daily life. Hope it will help a lot of people.

TABLE OF CONTENTS

CONTENTS	PAGE
Approval	i
Board of examiners	i
Declaration	ii
Acknowledgements	iii
Abstract	iv
CHAPTER	
CHAPTER 1: INTRODUCTION	1-3
1.1 Introduction	1
1.2 Motivation	1
1.3 Objectives	2
1.4 Expected outcome	2
1.5 Report layout	3
CHAPTER 2: BACKGROUND	4-8
2.1 Introduction	4
2.2 Related Works	4
2.3 Comparative studies	7
2.4 Scope of The Problems	7
2.5Challenges	8

CHAPTER 3: WORK PROCESS	9-13
3.1 Business Process Modeling	9
3.2 Requirement Collection And Analysis	10
3.3 Use Case Modeling And Description	11
3.4 Logical Data Model	12
3.5 Design Requirements	13
CHAPTER 4: DESIGN SPECIFICATION	14-17
4.1 Front-end Design	14
4.2 Back-end Design	14
4.3 Interaction Design and UX	15
4.4 Implementation Requirements	17
CHAPTER 5: IMPLEMENTING AND TESTING	18-24
5.1 Implementation of Database	18
5.2 Implementation of Front-end Design	21
5.3 Implementation of Interactions	23
5.4 Testing Implementation	23
5.5 Test Results and Reports	24
Chapter 6: Conclusion and Future Scope	25-26
6.1 Discussion and Conclusion	25
6.2 Scope for Further Developments	25
REFERENCES	26

LIST OF FIGURES

FIGURES	PAGE NO
Figure 3.1: BPMN of an android application of complaint	9
Figure 3.2: Use case modeling of an android application of complaint	11
Figure 3.3: Logical data modeling of android application of complaint	12
Figure 3.4: Flow chart of android application of complaint	13
Figure 4.1: Tenant System back end architecture	15
Figure 4.2: UX Design of Interaction Design	16
Figure 5.1: All Registered User.	18
Figure 5.2: Main database root.	18
Figure 5.3: Profile info of registered user	19
Figure 5.4: Upload problem.	19
Figure 5.5: Login Page Interface	20
Figure 5.6: Hospital information by admin	20
Figure 5.7: Log in screen	21
Figure 5.8: Registration screen	21
Figure 5.9: App Front Activity	21
Figure 5.10: User Profile	21
Figure 5.11: Profile submit	22
Figure 5.12: Profile info	22
Figure 5.13: select problem	22
Figure 5.14: submit problem	22

LIST OF TABLES

TABLES	PAGE NO
Figure 4.1: Screen List	14
Figure 5.1: System Testing Table	24
Figure 5.2: User Acceptance Testing	24

CHAPTER 1

INTRODUCTION

1.1 Introduction

In our society we face different types of problems everyday like broken roads, blocked sewerage lines, electric line damage and so on. Some of them can be solved by the people of the society and some cannot be. Some time it needs proper equipment's to solve a particular problem. But the main problem is focusing the problem to the respected organization.

If they do not know about the problem they will not come to solve it. So that at first we need something that will be a media to present out problems to them. From that concept this idea to make an android application that can connect people with different government organization like WASA, PWD, City Corporation, etc. came to our mind.

In our country we do not have any android application that can directly present people's problems to the respected authority. Therefore we came up with this idea to make an android application to inform our problems to be solved.

Now a days problems like broken road, blocked sewerage line are very common and if they are not fixed in time it becomes difficult to solve later. At the same time it also creates more problems in our life. To avoid those extra waste of time, money, man power and resources we came up with this idea to create an android application to inform respected authority about their respected problems to be solved on the right time. This application will be used by all who use android mobile anywhere and any time through online.

Expected outcome of the project is developing an android application that will have features of making complain with proper document to a selected organization. As all government organizations will be found in one apps people will not need to visit multiple websites to make complain, so this will save everyone's valuable time. Moreover maybe it is not possible for all the organizations to find out problems, updates, status of their service, so it will be helpful for them to get updates and take necessary steps according to the situation as soon as possible.

1.2 Motivation

In developing country like Bangladesh, we face a lot of problem because of we don't have required maintenance. Authority is not informed in right process.

The system will provide an easy system to send complaints to specific authority in low cost and without any problem. In real life we don't have correct information about where to complaint, to whom to complain. Moreover if we know the information, then we have to face a lot of procedure. This long procedures discourage a lot of people to talk about the problems they face on their day to day life.

In Bangladesh we don't see lots researches and tasks regarding this discipline. So we've got attempted to do an assignment to construct an app to conquer this problem. This is our first model, we will endeavor to create it more.

1.3 Objectives

Our intention is creating an app for gathering complaints about problems in our real life. As we can say in our electricity problem, water problem, road damage problem, transportation problem, gas supply problem. Anyone can just download this app and inform us about the problem. The app will provide a system to complain to required authority. Our intention is to help normal people to talk about their problem and send information to exact authority.

This is the era of digitalization. This era demands online app supporting platform for every aspect of our life. No more queue to an office, no more paper documents. Besides that, availability to internet and smart phone is increasing day by day. So we have proposed a system of complaining through an app. Easy access to all possible people to complain about their sufferings.

1.4 Expected Outcome

Our project purpose is to build an android application which can help us to complain easily and effectively. This app will be maintained by an admin. There be some authority under admin, who will be given access to this application. They will maintain the complaint and send feedback to complainers. This authorities will inform real life authorities to solve the problem.

- Complainer will download this app and send complaints
- Authority will be received a notification.
- Real life authority will solve the problem.

1.5 Report Layout

The project is consist of five chapters. In report layout all chapter is condensed. We tried to summarize all the chapters. The summarization is given below:

1. In chapter one, we gave introduction to our complaint app. We discussed its objective, motivation and expected output.
2. In second chapter we discussed about the literature review of the projects have been done before on complaint app.
3. In chapter four there are discussion on the methodology we used on this project. Then we discussed about application development. We tried to give answer how we developed the project.
4. Chapter four is about result and discussion. We tried to analyze the output. Some of the components were explained with figure.
5. Chapter five is about conclusion. In this chapter we explained our future plan on this project.

CHAPTER 2

BACKGROUND

2.1 Introduction

In this chapter we basically discussed about background study on complaint mobile application. We discussed about few similar approaches that resembles our attempt. We discussed about what could be possible outcome.

The concept of this complaint portal is simple. The process is easy. Whenever a person face any kind of problem, but don't know where to complain, then he or she will download this app and write down his or her problem. User must include a photo of the problem. User must give his phone number, so that we can track him down. As a result we can inform the user about the progress. Moreover, there won't be any spamming. This will be simple medium of communication of general people and the authority of City Corporation or any kind of organization who are in charge of public service.

2.2 Related works

We are going to recapitulate about some national and international complaint portals available.

1. EPA: EPA is an American complain portal where anyone can complain about environmental protection. If anyone feel environment is in danger because of certain people or organization can visit their website and make a complaint to this authority. They are trying to provide accurate information about environment management and pollution to reduce risk against human health and environmental degradation.[1]

2. IDEM: IDEM's full meaning is Indiana Department of Environmental Management. This website is a medium to file report about polluting activities. They take first action in response to complaint within 30 days of receiving the complaint and address the each complaint within 90 days. The site don't need any personal information like name , phone numbers or social security number to file a complaint.[2]

3. LAPOR: LAPOR is an Indonesian complaint site. If someone have any kind of problem they are trying to solve by informing government and concerning authority via web platform, they can use LAPOR. LAPOR was launched in 2011.
The meaning of “LAPOR” in English is report. The idea was, if there is a broken bridge near your home or if there are poor service in a hospital or if you want to make a copy of your lost national id card, how you will access your authority? So they launched this website.[3]
4. Grievance redress system Bangladesh: there is a website of Bangladesh government to complain. They named it Grievance redress system. Currently beta version of this website is running. It is maintained by a2i. If someone complain here they will notify the complainer through email and sms. Definitely it is an appreciable project by a2i and Bangladesh government.[4]
5. CPGRAMS: CPGRAMS stands for Centralized Public Grievance Redress and Monitoring System. It is a project of Indian government to reduce grievance on various fields. The service is open 24/7. This project is an attempt to centralized Grievance redress system. That means a simple platform where you can complain about anything. [5]
6. San Antonio portal: This site is mainly used for San Antonio city, a city of Texas. Where citizen of San Antonio can complain about the difficulties they face in the city. Citizen can use the site, use the android app, call to helpline, tweet or use the site to complain. Citizens can complain about pet animals problems, garbage recycling, tax payments , transportation etc.[6]
7. Illinois Commerce Commission: It is an organization of Illinois. It is a quasi-judicial tribunal. It conducts public utility services. It has a complaint service. It resolves consumer complaints. Anyone can file an informal complaint. [7]

8. Texas Commission on Environmental Quality: This is an institution on environmental quality. They basically works with air, land, water quality. [8]
9. Indiana Office of Utility Consumer Counselor: It is a helping concern of Indiana government where someone can complain about consumer rights. [9]
10. BMET complain system: It is a site to help complainer. It is also a Bangladeshi complaint system. BMET stands for Bureau of Manpower Employment and Training. They work with manpower employment. Their complain portal is for the people of Bangladesh who are immigrant and working outside of Bangladesh. If they are cheated by their Employer Company, agencies who took them to work abroad or agents they can complain here. Obviously it is appreciable work. [10]
11. Gold Coast complain portal: Gold Coast is a city of Australia. The authority of this city has different sites for their work. The site we are talking about is mainly for citizen of Gold Coast. They can report problem about animals, city parks and beaches, development compliance, graffiti rubbish and illegal dumping, noise, pollution, public health and safety, roads and footpaths, vehicles, water and swear.[11]
12. Queensland Government reporting system: Queensland an Australian city has a reporting system for their citizens. The reporting system we are discussing mainly used for pollution reporting. Air, water, soil, environmental nuisance, water problem and illegal dumping. Anyone can report their problem [12]
13. MACC complaint management system: MACC stands for Malaysian Anti-Corruption Commission. This is an anti-corruption commission. They have a complaint management system where anyone can report about corruption. With proper documents and evidence victim can file a report online[13]

2.3 Comparative studies

From previous discussed we can easily say that the platforms we have discussed are individually used for some problems. But there is no specific android application which can be used for centralized complaint system.

Out of the previous related work done concerning customer complaint, the most recent research was: Razali et al. (2011) develop a new complaint management system called (e-Aduan) as a platform for UiTM Pahang's customers to complaint and comment regarding the services and facilities provided by the university. [15]

The user friendliness of our web site is an asset. On the other hand the portal we have mentioned above are not so much user friendly. Where we gave our best effort to make our project as friendly as possible.

Though the response time of our web portal is comparatively low. Where the response time of those site is higher. As we had limited time and resources, we did our best as we can. In future development we will work with that.

2.4 Scope of the problem

The scope of the problems we have mentioned above is great. We can create a new system where people can easily submit their problems. We can work with the data we will receive from the complainers.

As we mentioned before there is centralized system for complaining, where any one can submit their any kind of problem. Surely it has a great scope to work in future. We hope that someday this application can bring huge change on our system.

Work can be progressed with user friendliness and we can motivate people to submit more problems. More development can be done in the field of response time. Mass people don't want to waste their time on this type of thing. So we must work with this problem. We want to develop a system where complaining to authority won't be thought as a problem

Government can work with the data and can bring huge changes on the rural and urban development process. As Bangladesh is now a developing country, this type of problems should be solved as soon as possible.

2.5 Challenges

Though there are great scopes to work on, besides that there are great challenges to. We are going to emphasize on the challenges we are going to face in this field.

We know internet is not widely available in Bangladesh. Though there are available connection of internet in Dhaka and other cities of Bangladesh, the connection or availability of internet in rural area is very poor. If someone needs to complain via our app they must have internet connection. I hope we are going to overcome this problem. Moreover that, complainer must need upload a photo of the problem, so that admin or authority can identify the problem. So we can easily say that complainer must need an android phone to capture the problem.

Second problem is popularization of the system. Though we have built a successful system, but we must remember complainer or users are the heart this system. The more complainer we get, the more system will be the useful. It will encourage us to development in future. So we must popularize the system.

Third problem is future development and maintenances. As we have limited resources and financial solvency, it will be hard for us, if we don't get any sponsor or fund to run the system and make further development. We hope, we will get some funds on this project to make it more updated.

CHAPTER 3

REQUIREMENT SPECIFICATION

3.1 Business Process Modeling

To play out a role complainer need to begin a program and go to the site page of Complain Portal. At that point the client must choose the Complain Us choice to make the complaint. In the structure there is a few options where somebody will have the capacity to make a choice and among them the correct one must be chosen. There will be a few required data that should be topped off accurately and client must transfer photograph or any record as the evidence of grumble. At the point when the client transfers or sends photo and every one of the information are given effectively information will be put away to the database.

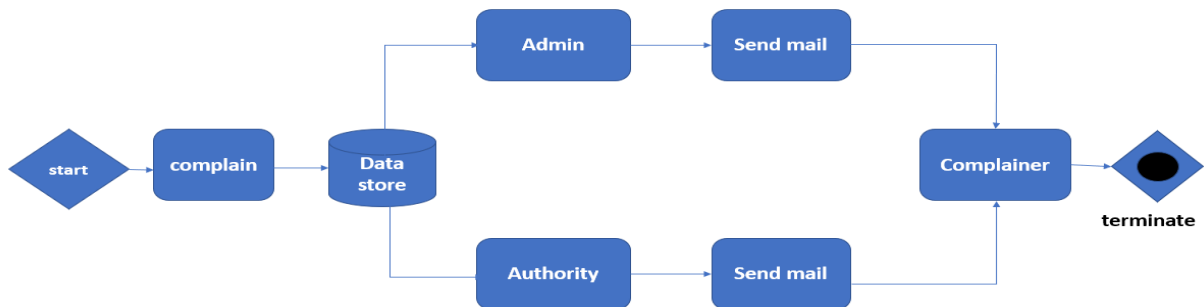


Figure 3.1: BPMN of an android application of complaint

3.2 Requirement Collection and Analysis Software Requirements

To develop this application we used following Software and tools:

- Operating System: Windows 10.
- System Design: Photoshop
- Language: Java
- Database: Firebase Real-time database
- Tools: Android Studio [3]
- Technologies used: Java, XML.
- Debugger: Android Dalvik Debug Monitor service

For running the application those following are the Software Requirements:

- Operating System: Android 4.2.2 or higher versions
- Network: Wi-Fi Internet Network or Cell Phone data
- Minimum space to execute: 100 MB

Hardware Requirements

To develop this application we need the following Hardware Requirements:

- Processor: Intel Core I3 or Higher
- RAM: 8GB or Higher
- Free space on disk: minimum 10GB

Functional Requirements

- Graphical User interface which the application user
- Give ease of understanding to the application through Wi-Fi or cellular network Firebase Real time Database that stores the data or information to be displayed to the user

3.3 Use Case Modeling and Description

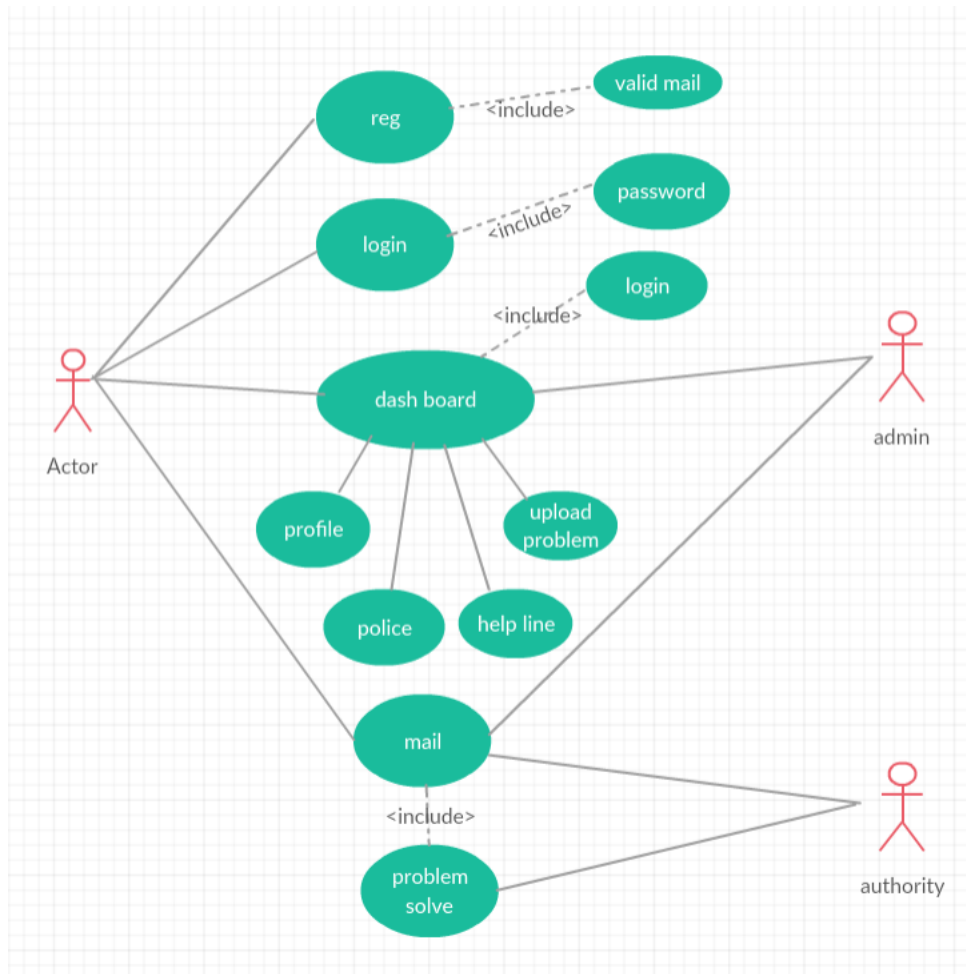


Figure 3.3: Use case modeling of an android application of complaint

In use case modelling we will see the actors of this system where we can see there are three types of actors. Firstly the user for complainer secondly the admin at last there is a role for authority. In our system a user or Complainer can create profile and can upload complaint the role of admin is create profile and he will see the uploaded complaint he must login to play a role as admin. He can see the details of uploaded complaint. Moreover he can authorize the complaint. Admin can appoint as authority. The people who will apply for the role of authority will be appointed by and verified by admin without the authorization of admin no one can be appointed an authority.

3.4 Logical Data Modeling

The logical data model represents the data processing modules. It used for data analysis and process easily. The Entity-Relationship Diagram/Model represents the logical data model.

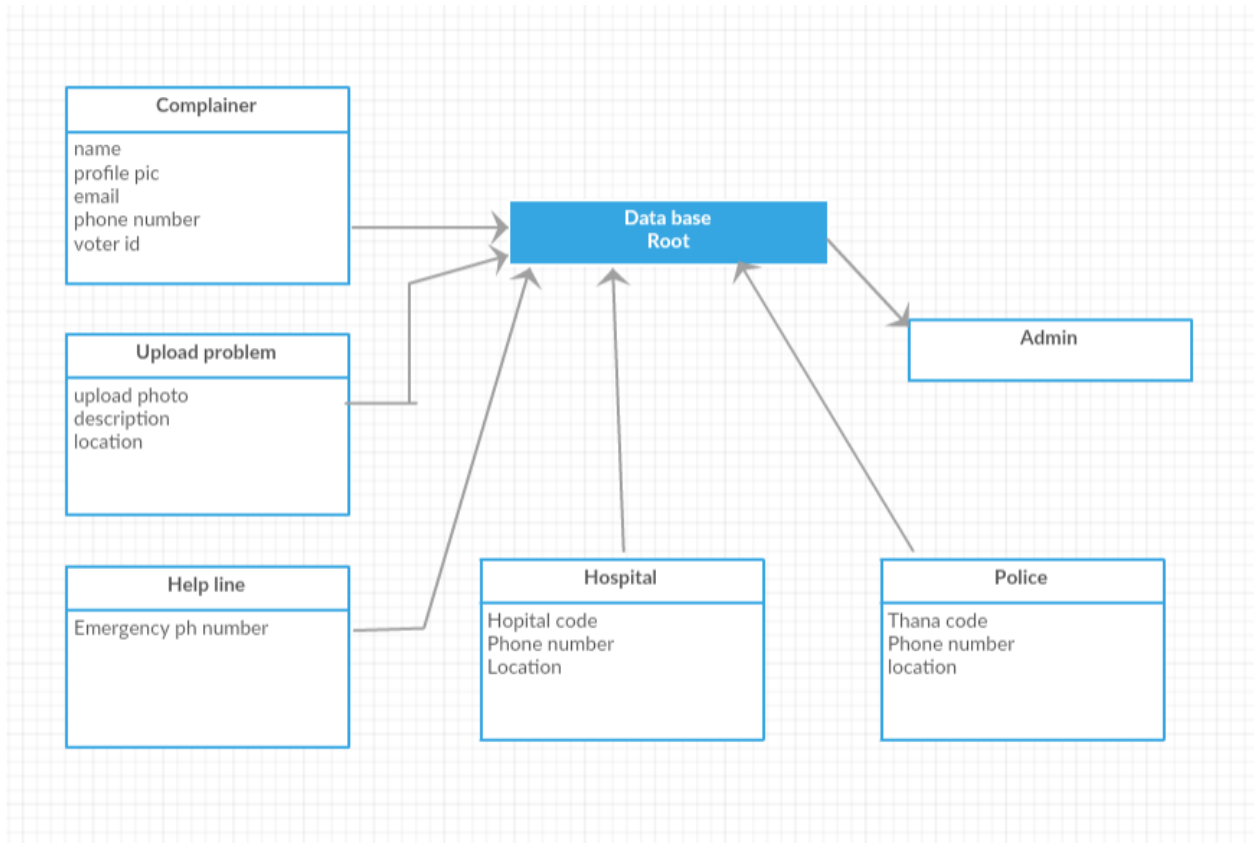


Figure 3.4: Logical data modeling of android application of complaint

3.5 Design Requirements

When designing systems or software, following issues must be considered that reproduce the overall design of the goals that the system expected to achieve. The following goals were kept in mind while designing the system. Make system simple and flexible for users .The system users are able to have a great amount of control over their purpose in achieving objectives. Make the system compatible .It should be fit in the total system, future maintenance and enhancement must less.

In this project, the flow chart we used is given below

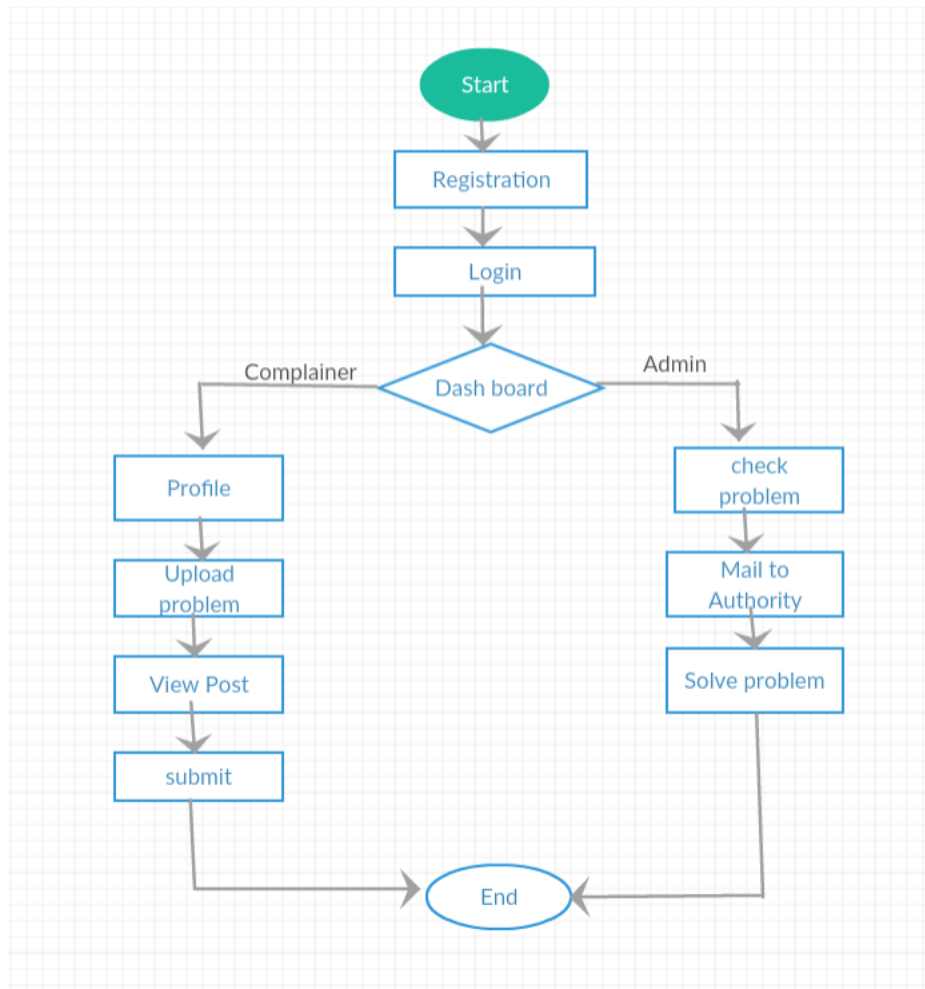


Figure 3.5: Flow chart of android application of complaint

Chapter 4

DESIGN SPECIFICATION

4.1 Front-end Design

Front-end Design is the main attraction of an application. It also should be user friendly. Our application we designed a beautiful front-end Design. We also try to design user friendly. In front-end Design our Application has some activity screen.

Table 4.1: Design our Application has some activity Screen List

1. App dash board
2. Registration
3. Login
4. Submit profile
5. Upload profile photo
6. Select problem photo
7. Select location
8. Submit problem
9. Police phone number
10. Hospital phone number
11. Help line
12. Delete uploaded problem

4.2 Back-end Design

Our Application is Dynamic this function works by using the internet. Here I am using firebase real-time database. Firebase is a Backend-as-a-Service. Firebase frees developers to focus crafting fantastic user experiences. What feature I am using in this project:

- Firebase authentication
- Firebase real-time database
- Firebase real-time analytics
- Firebase storage

What is firebase real-time Database? :

Store and sync data with our No SQL cloud database. Data is synced across all clients in real time and remains available when your app goes offline. The Firebase Real-time Database is a cloud-hosted database. Data is stored as JSON and synchronized in real time to every connected client.

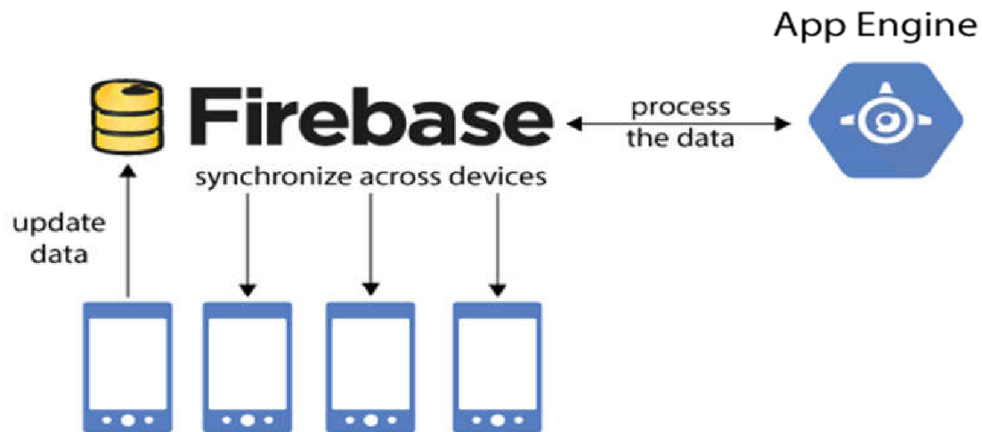


Figure 4.1 Tenant System back end architecture [11]

4.3 Interaction Design and UX

Interaction Design is most important part of User Experience (UX) design. An application fruition depends on User satisfaction. How an application is more attractive to a user is depends on interaction and Design part. In our application, we used a useful model of Interactive design. Android users expect your app to look and behave in a way that's consistent with the platform. Not only should you follow material design guidelines for visual and navigation patterns, but you should also follow quality guidelines for compatibility, performance, security, and more [10]. Android provides a variety of pre-built UI components such as structured layout objects and UI controls that allow you to build the graphical user interface for your app. Android also provides other UI modules for special interfaces such as dialogs, notifications, and menus.

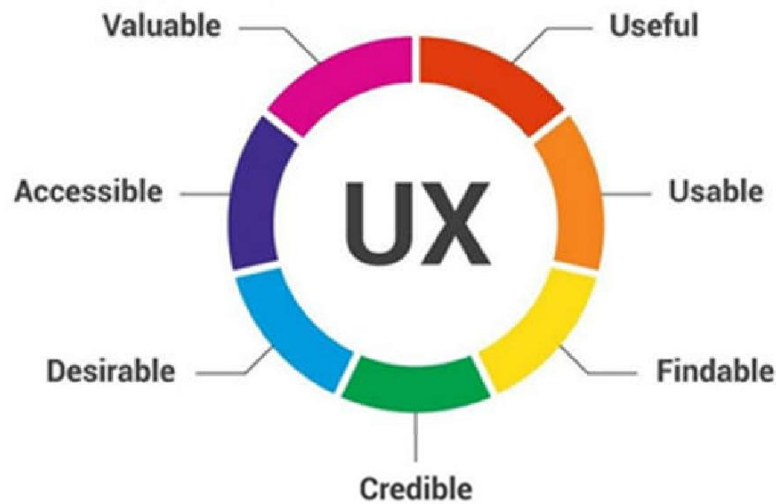


Figure 4.2 UX Design of Interaction Design

Home Screen Interaction Design and UX:

We have chosen an option for complain system. If the user chooses any kind of help user has to register first if he is not registered yet. A user can directly login with email and password. If the user haven't any account he /she can't send complain. so, the user must be registration this app then he/she can be able to access this system.

Landlord Screen Interaction Design and UX:

After login as this app user will get a different option to complain. Here complainer can Submit their profile with image and other valid information. Here complainer can select thecomplaint & description how types problem and submit this. There is another service optionavailable as like that many police station phone numbers, hospital's phone number and we have to emergency any kind of problem solution in 24hours to help line.

4.4 Implementation Requirements

Implementation Requirement is given below:

- Android Studio
- Android Programming
- Java and Xml
- Firebase Real time database
- Firebase Authentication
- Firebase Storage

CHAPTER 5

IMPLEMENTATION AND TESTING

5.1 Implementation of Database

Implementation of a database is a difficult part of a project. Here in this project i used firebase real-time database. Here data is saved as a NoSQL pattern. Here data is saved in the different root node.

All users shown below

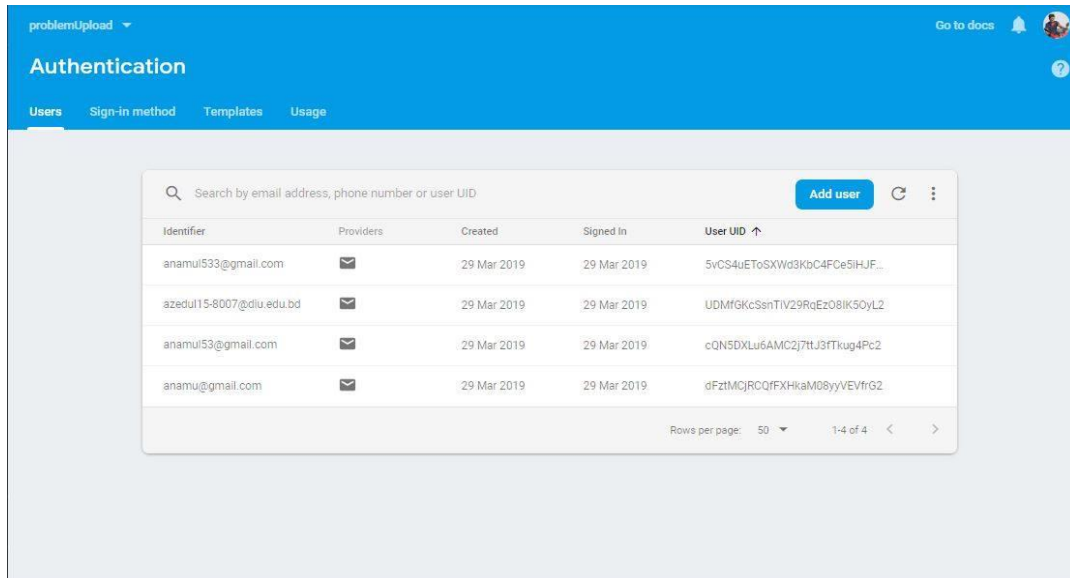


Figure 5.1 All Registered User.

Here in the above figure all the registered users are shown

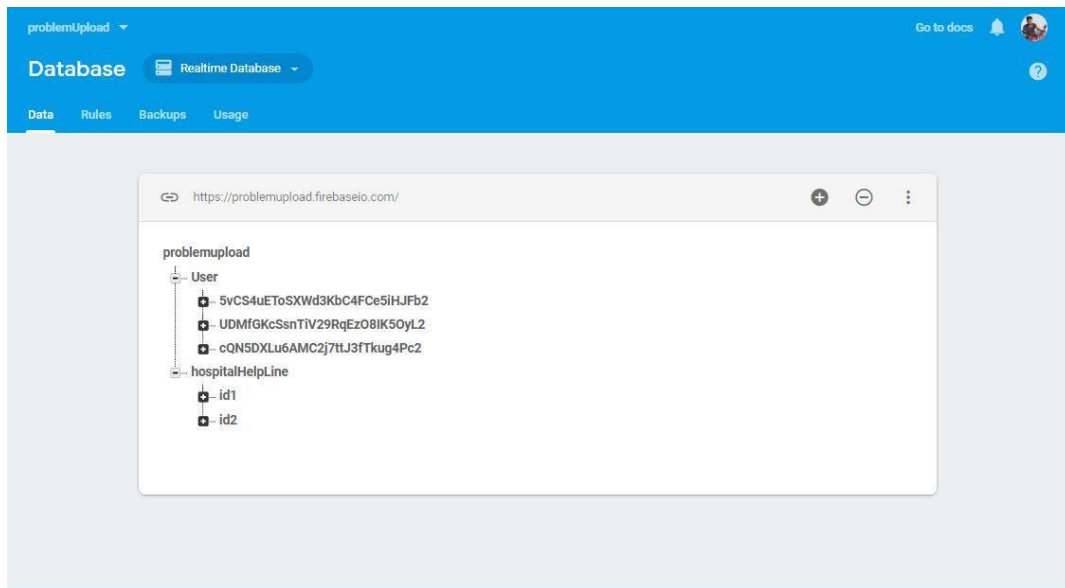


Figure 5.2 Main database root.

Here in the above figure all the root node are shown here

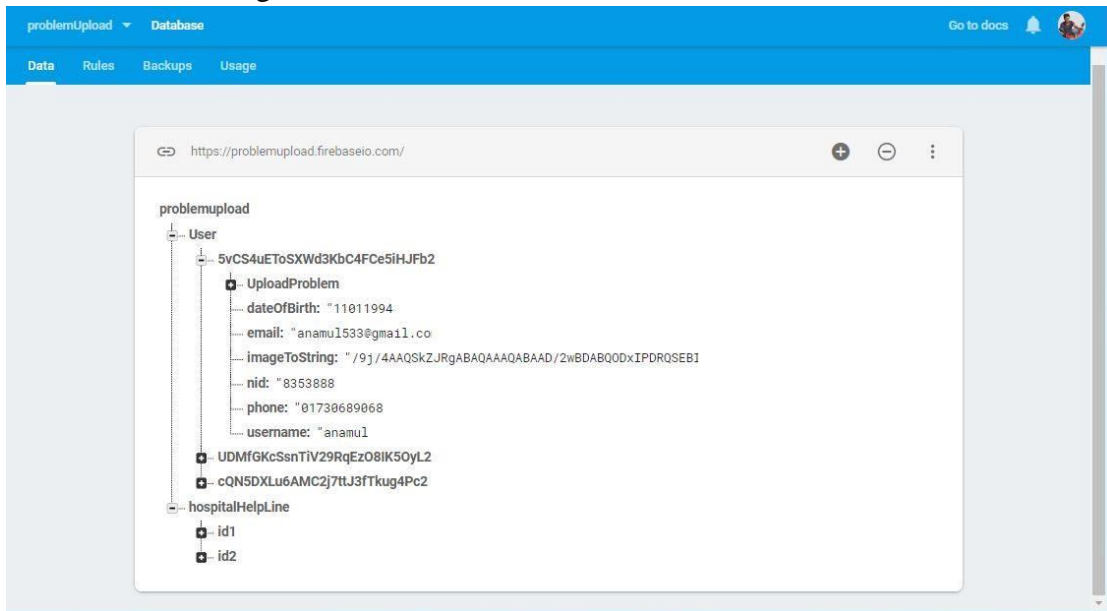


Figure 5.3 Profile info of registered user

Database figure of upload problem

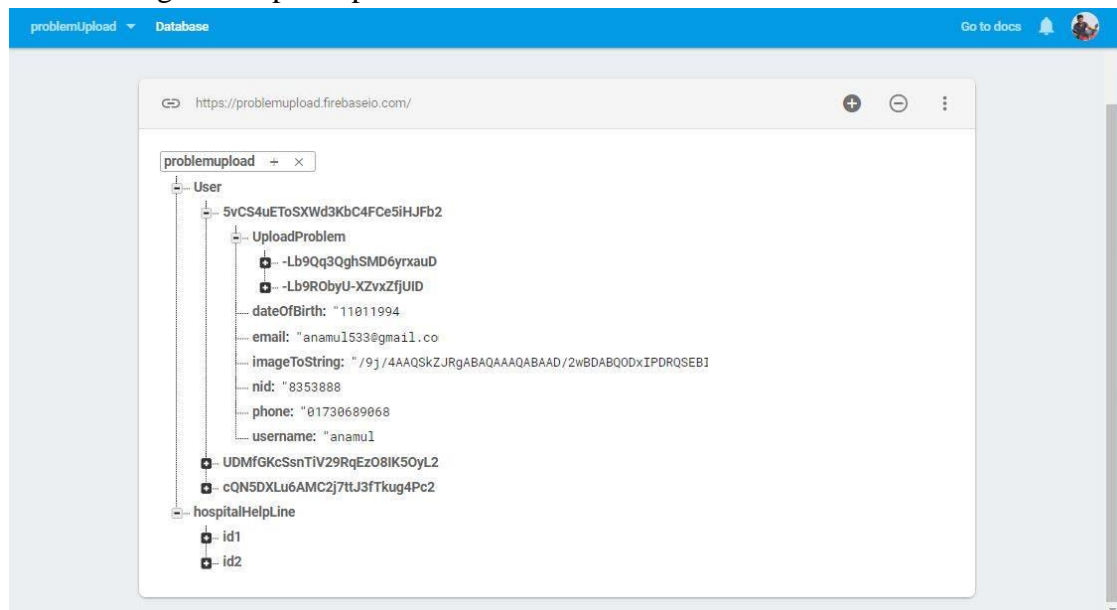


Figure 5.4 Upload problem.

User uploaded problem information

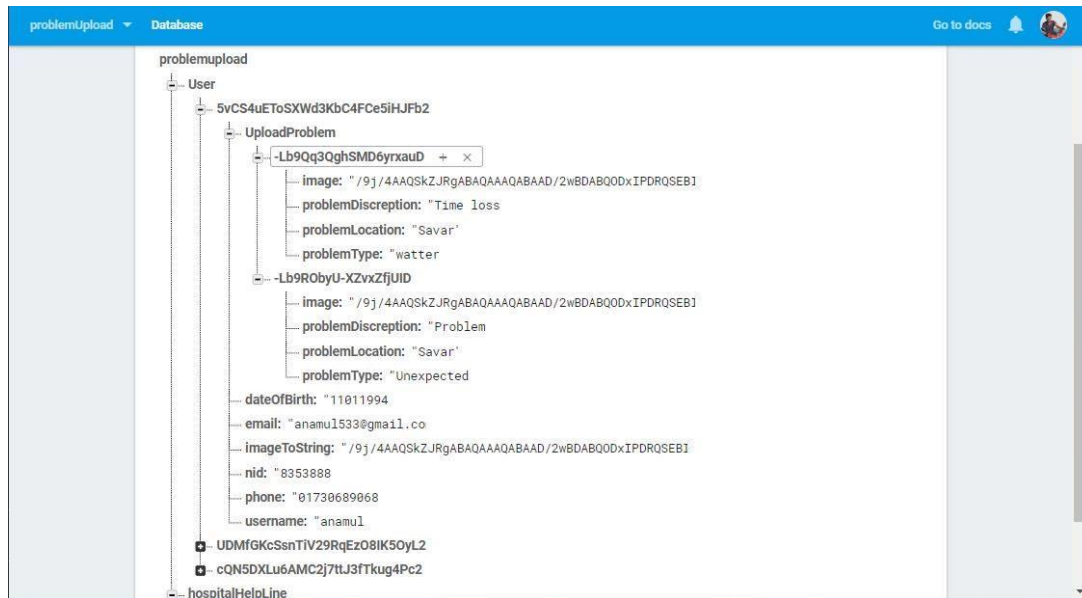


Figure 5.5 Uploaded problem information

Hospital information submit by admin

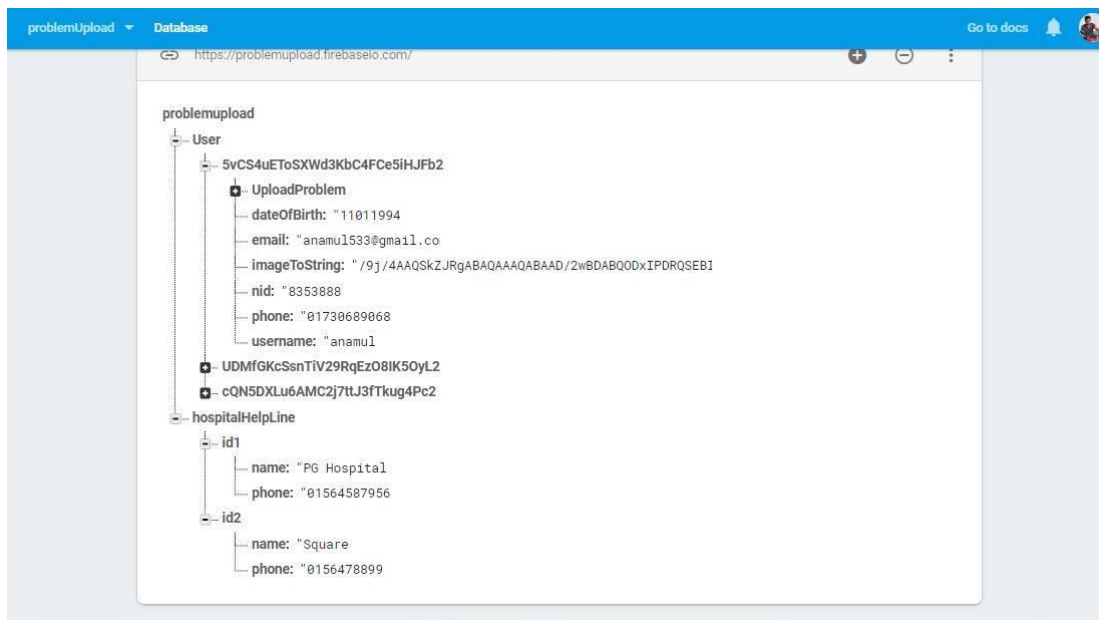


Figure 5.6 Hospital information by admin

5.2 Implementation of Front-end Design

We implement our front-end design with some screen. The challenge was more when we design the screen of several users.

5.2.1 Login and Registration for User

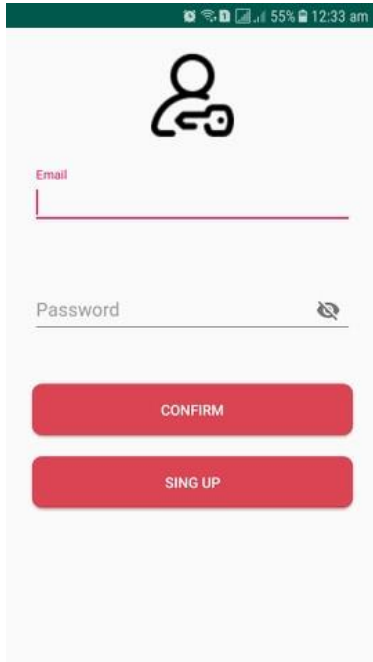


Figure 5.7 Log in screen

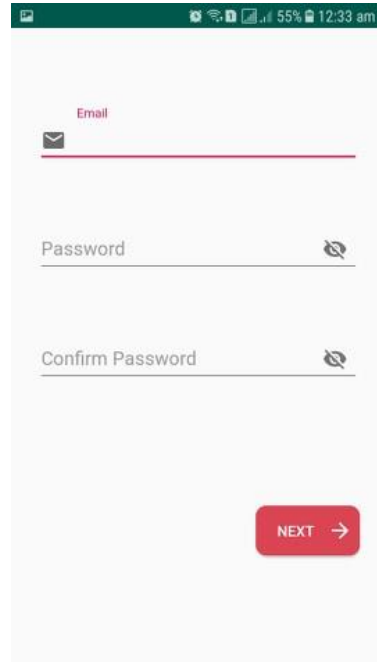


Figure 5.8 Registration screen

5.2.2 Problem system app main Activity and Profile



Figure 5.9 App Front Activity



Figure 5.10 User Profile

5.2.3 Profile submit Activity

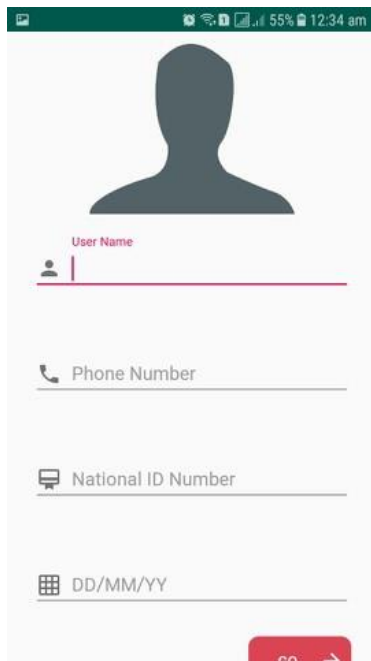


Figure 5.11 Profile submit

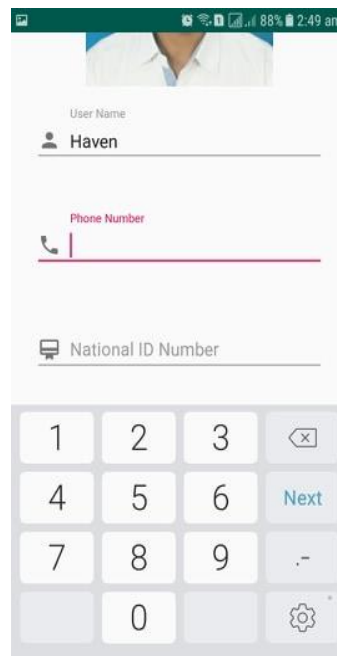


Figure 5.12 Profile info

5.2.4 Select problem and info

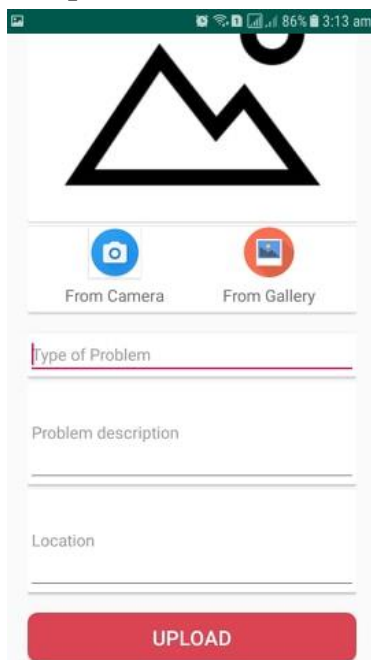


Figure 5.13 select problem

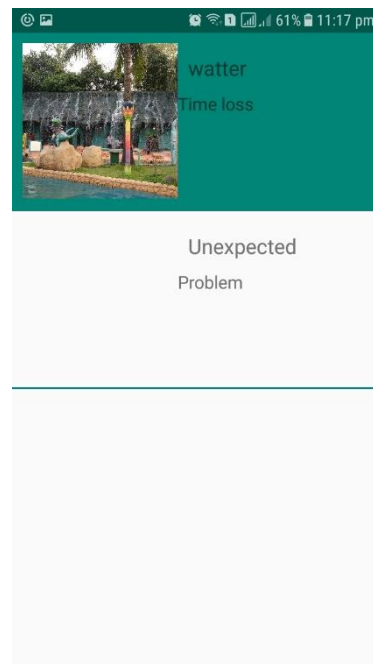


Figure 5.14 submit problem

5.3 Implementation of Interactions

Implementation of interaction is most important part of a system. Interaction means when we are in a specific function and go to another function that we want those time. I separate the function for a variant of a user. I design every user part very politely that user what he wants is indeed here. I design very carefully that the design attractive to users. An application Successions where a user is satisfied using the application. The Satisfaction level of our system is high.

5.4 Testing Implementation

When a system is implemented and tested some specific function is called test implementation. I have tested our system several times. User Registration, Login, Create Profile, Select Problem, Submit problem , View problem post to uploaded etc. test by we in various time.

I have tested the following factors:

- User Registration
- User Login
- Profile create
- Select problem
- Submit a post with an image
- Update post
- View post from profile

I test the whole system by maintains SDLC method.

5.5 Test Results and Reports

System Testing Table show below a bridge the result of system testing:

Table 5.1: System Testing Table

Test Case Id	Date Tested	Tester	Pass/Fail	Severity Of Defect	Summary Of Defect	Closed prior to Release?	Comment
1	10.3.2019	Forhad	Pass	Bug in 1 places	Bug	<Yes>	Working well

5.6 User Acceptance Testing

The table below a bridge the test cases for user acceptance testing and the test result obtained each other.

Table 5.2: User Acceptance Testing

Test Case Id	Date Tested	Tester	Pass/Fail	Severity of Defect	Summary Of Defect	Closed prior to Release?	Comment
1	14.3.2019	Ramon	Pass	No Defect	No Defect	<Yes>	
2	16.3.2019	Akash	Pass	No Defect	No Defect	<Yes>	All ok
3	16.3.2019	Farhan	Pass	No Defect	No Defect	<Yes>	

Chapter 6

CONCLUSION AND FUTURE SCOPE

6.1 Discussion and Conclusion

For the grace of ALLAH, we have successfully completed our project and documentation. After the long-term of thinking, Discussion, implementation we are in the last session and happy of completion.

During the development of this project we have started the working principle of android application. specially we had to learn java & android studio.

The proposed system is developed with the combination of above stated to which will lead the user to hassle free use of a complaint app.

6.2 Scope for further development

We have a future plan for the application. Some of the planes are:

- Add Real time chat with admin.
- Add google map for automatically select the location on complaining.
- Feedback system for the problem solving.

References

- [1] United States Environmental Protection Agency; (available at <https://www.epa.gov/>; last accessed on: 25th January 2019)
- [2] Indiana Department of Environmental Management (available at <https://www.in.gov/idem/5274.htm>; (available at last accessed on: 20th January 20189.)
- [3] LAPOR, the People's Online Aspirations and Complaints Service (available at <https://www.lapor.go.id/> last accessed on: 2nd February 2019.)
- [4] Grievance Redress System (available at <http://www.grs.gov.bd/> last accessed on: 11th March 2018.)
- [5] Centralized Public Grievance Redress and Monitoring System (available at <https://pgportal.gov.in/> last accessed on: 15th march 2019.)
- [6] San Antonio portal (available at <https://www.sanantonio.gov/GetConnected/Services> last accessed on: 20th march 2019.)
- [7] Illinois Commerce Commission (available at <https://www.icc.illinois.gov/complaints> last accessed on: 20th march 2019.)
- [8] Example of a related work (available at <https://www.icc.illinois.gov/complaints/> last accessed on: 25th march 2019.)
- [9]Texas Commission on Environmental Quality (available at <https://www.tceq.texas.gov/permitting/ossf/10381.html> last accessed on: 29th march 2019.)
- [10]Indiana Office of Utility Consumer Counselor (available at <https://www.in.gov/oucc/2452.htm> last accessed on: 29th march 2019.)
- [10] Bureau of Manpower Employment and Training portal <https://ovijobmet.org/> last accessed on: 29th March 2019
- [12]Gold Coast complain portal (available at <http://www.goldcoast.qld.gov.au/report-a-problem-24142.html>, last accessed on: 1st April 2019.)
- [13] Queensland Government reporting system (available at <https://www.qld.gov.au/environment/pollution/reporting>, last accessed on: 2nd April 2019.)
- [11] Hookumi, Qatar e-government (available at <http://portaladuan.sprm.gov.my>, last accessed on: 11th April 2019.)
- [15] Implementation, ABD EL-FATAH A. HEGAZY, MONA AHMED KADRY EL-SAYED (2011) ‘A Model for Customer Complaint Management System using SOA’

Turnitin Originality Report

Processed on: 30-Mar-2019 17:22 +06

ID: 1102588480

Word Count: 4825

Submitted: 1

anamul15-8032@diu.edu.bd
By Md.anamul Haque Mony

Similarity Index

15%

Similarity by Source

Internet Sources:	10%
Publications:	2%
Student Papers:	14%

[include quoted](#) [include bibliography](#) [excluding matches < 10 words](#) [download](#)
[refresh](#) [print](#) mode: [quickview \(classic\) report](#)

2% match (student papers from 04-Apr-2018) 

Class: Article 2018

Assignment: Journal Article

Paper ID: [940891790](#)

1% match (student papers from 28-Mar-2018) 

Class: Article 2018

Assignment: Journal Article

Paper ID: [937505521](#)

1% match (student papers from 05-Nov-2013) 

[Submitted to Higher Education Commission Pakistan on 2013-11-05](#)

1% match (Internet from 21-Sep-2018) 

<http://dspace.library.daffodilvarsity.edu.bd:8080>

1% match (student papers from 27-Apr-2017) 

[Submitted to University of Greenwich on 2017-04-27](#)

1% match (Internet from 21-Feb-2013) 


<http://www.wseas.us>

1% match (student papers from 08-May-2018) 

[Submitted to University of Ulster on 2018-05-08](#)

1% match (Internet from 15-Aug-2018) 

<http://www.dubai.aqssquadz.com>

1% match (student papers from 04-Apr-2018) 

Class: Article 2018

Assignment: Journal Article