# Citizen_research

*by* Lalit .

---

# Citizen Feedback on Maintenance of Road (Complaint Box)

Arqam Ansari, Chirag, Gaurav Gambhir, Lalit Sharma, Jyotsna Seth

School of Engineering and Technology, Sharda University, Greater Noida, India

**Abstract**: Citizen Feedback application will provide an online way for citizen to give feedback or complaints for the maintenance of roads and other necessities. The Main objective of Citizen Feedback app is to make feedbacks or complaints easier to resolve, monitor and coordinate. This android app will provide a user interface to submit a complaint and follow it. Our App will provide citizens to submit complaints and problem to municipal corporation and let them solve the problem in less time. Citizen feedback will help the system or department to continuously improve their work and do their best for the citizens, an effort to identify the changes that needs to be done. After the complaint has been raised, complaint will be assigned to their respective department. Once the complaint is submitted citizen can check status there of complaint.

**Keywords:** Feedback, Complaint, Citizen.

## 1. INTRODUCTION

In India, the fact is, we don't have any direct communication between the government and public in an efficient way for solving the problems like broken roads, street light bulb fused etc. There is no other way for getting an issue solved as one must go through a lot of hassle as they need to register their complaint at the respective department office which will be further forwarded to the respective person who can resolve that issue and then the problem may or may not get solved and also takes a lot of time. So, our application will help the citizen to easily submit a complaint or feedback and make it easier for the citizens to get their problems resolved. Research is needed that how system works for people of different social and economic classes and different age groups, for different political groups and for immigrant workers and contract workers in India or every country. Studies or research is needed complaint systems in political organization, in school, in faith-based organization, health sector, specialized occupations and in military. A complaint or feedback system is a set of steps that needs to be followed in a company to resolve complaints and disputes. In US complaint system have gone from many changes specially after 1970 as the workplace regulation got changed [1]. Our application will have different departments such as transport, security, medical care etc and user can also give feedback whether he liked the service, or his problem or complaint was not resolved. We have used Android studio to make our application.

**Problems of complaint management**

- Details of complaints are insufficient and unclear.
- The redundancy of complaints in the organizations.
- The complaints are not related to responsible department.
- The organisations doesn't have channel for asking more information related to complaint and providing feedback.

### 1.1 Android Studio

Android studio is a tool that provide a fast way to build an app for android smartphones. Android

Studio is official integrated development environment (IDE) for Android Operating system, Which is built on JetBrains' IntelliJ IDEA software and was specially designed to develop Android Applications.

## 1.2 Firebase

Firebase Authentication: Firebase security applies Google's internal expertise to easily build app sign-ins. Used to develop sign-up and login platform with firebase authentication.

Firebase Realtime Database: Store and sync data between your users in Realtime with the Firebase Realtime Database. It is used to make your app have strong user-based security and optimize for offline use.

## 2. RELATED WORK

Alessandro Minelli et al main objective was to do continuous improvement for the citizen feedback. So, they used three elements of complaint communication, discomfort, damage. By using these elements, they were able to improve the local bodies [1]. Sman Nasr et al made management system so that the complaints can become easy to track, resolve, monitor and coordinate. They made an online system to make it easy for the citizens. There Software had optimum utilization of resources, improved productivity, and instant access [2]. Swapnil R.Rajput et al there main objective was to use GPS to track the location of the complaint. They used AJAX for dynamic content on the map, HTML5, Java scripts, C#, and SQL for database. They created a platform for communication between the municipal corporation and the citizen. So, it can help the citizens facing problem in urban areas and by tracking them that will result in a clean and peaceful environment [3]. Jorge Santosa et al system for reporting and managing notifications of non-urgent urban situations and problems of the citizens. They inherited all the features of representation and manipulation of information on the maps. It can be integrated in the existing Geographic information system [4].

Panida Liawsomboon, et al main objective was able to provid several channels for filling the complaint, which enables users to send the complaint easier, and also provides the channels for progress tracking by using the mobile application. classifying the complaint and directly sending to the appropriate responsible department. Therefore, the system could reduce the cost of hiring the staff and time of the operation [5]. Shailesh Indradev et al main objective was it is a system which lets both the police and the common ma to eradicate the crime. The system does not reveal the identity of the police station. Only the central office knows the identity of the complainer [6]. Atit More et al main objective it is being developed as a platform independent web application as well as Android Application, so the admin can maintain a proper contact with their users, which may be accessed anywhere. The gap between government body and citizens also reduced [7]. Gowtham et al aim was to solve issues that are related to internal system of college and track the complaints that are registered for which Server gets various request form the client and it respond according to the client's request and it was easy to access as it maintains a proper communication between user and admin [8]. Arpan Tiwari et al app was used to lodge a complaint online in an easy way and they used the GPS to track the location easily and images is used to properly analyses the issue. User can raise a complaint by uploading a picture of the issue and providing the location using GPS [9]. Deep Shah et al aim main objective was user can raise a complaint regarding the issue they are facing and can attach picture of it, can use GPS for location [10].

## 3. Proposed System

Our projects focus is to provide an online way for citizen to give feedback or complaints for the maintenance of roads and other necessities by making an android application using android studio.

It will be having following Departments in which user can raise a complains:

1. Transport Department: In this department user can raise issues regarding the following situations:

- Traffic issues
- Bus time schedules
- Fare hike

2. Municipal corporation: In this department user can raise issues regarding the following situations:
   - Roads
   - Water
   - Waste Management

3. Medical care: In this department user can raise issues regarding the following situations:
   - Health
   - Staff
   - Services

4. Emergency: In this department user can raise issues regarding the following situations:
   - Polices
   - Fire Stations
   - Safety

5. Electricity: In this department user can raise issues regarding the following situations:
   - Power out
   - Billing
   - Power theft

6. Education: In this department user can raise issues regarding the following situations:
   - Schools
   - Education's subsidiary
   - Others

## 3.1 Methodology:

1. Citizens have to register himself on application with their Phone/Email.
2. After registration citizen will be directed to home screen where citizen can select the department in which they want to raise the complaints.
3. Then citizen will need to enter details of the issues/ problems.
4. After the submission of the complaint citizen can check the status in my complaint.
5. After the complaint has been raised, complaint will be sent to the respective department.
6. After the department receive the complaint, they will monitor and resolve the problems as soon as possible.
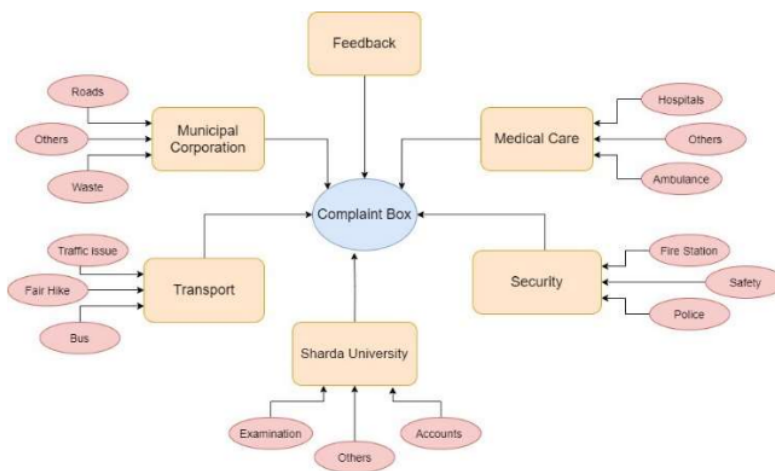
Fig 1: Departments

## 4. Interface design

This section will show the design of our mobile applications

1. Home page:
   This will be the home screen of our application where citizens can select the respective departments to raise the complaint.
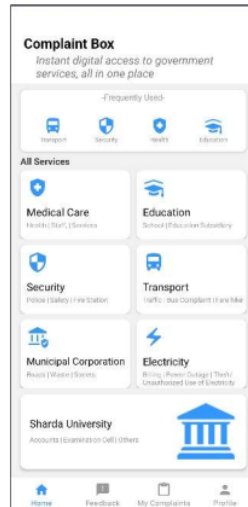


Fig-2: Home page

2. Selected Department page:
   In fig3 citizen have selected transport department now they have to select the issue which they are facing.
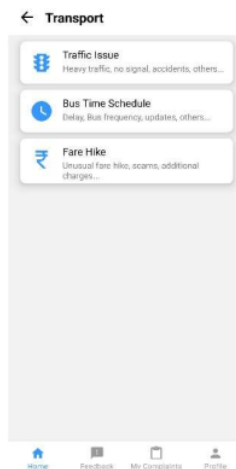


Fig-3: selected department
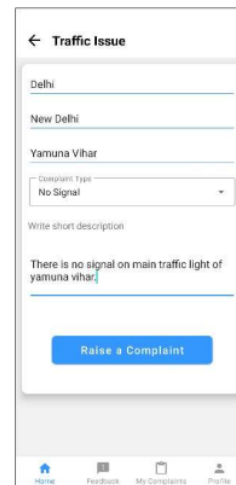
3. Complaint details:

   Now citizen will need to fill required details of the issue.



Fig-4: filling complaint details

4. My Complaints:

   In my complaint section citizen can see all the complaints they have submitted and by clicking on the complaint they can view the details of the respective complaint.
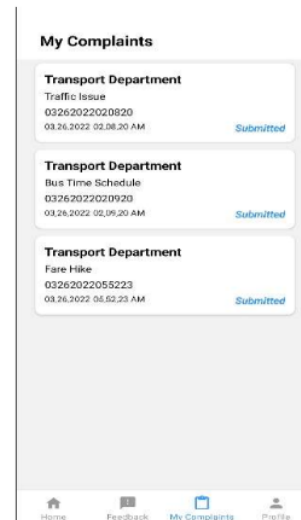


Fig-5: My complaints

## Conclusion

Citizen feedback android app has been completed and we were able to test the application using different test cases like registering as different user and submitting complaints from their id's. We have made the application user friendly so it will be very easy for citizens to raise a complaint and our app have all the options which can be used to raise a complaint for the respective department like medical and transport. We have designed our application in keeping in mind the future and present requirement of the industry. This app has potential to make countries operations more effective and responsive. Our app can also help citizens of country to increase their belief in government and have more faith that elected members and officers will take good decision for the citizen and city. We were able achieve by our app is user friendly UI, instant access, flexible for future improvements, Fast actions on complaints etc. Our application can play a vital role in communication between the municipal corporation and people of our country to help the citizen to resolve their issues fast and in an efficient way.

## REFERENCES

[1] Alessandro Minelli, Renato Ruffini, "Citizen Feedback as a Tool for Continuous Improvement in Local Bodies" ,2017.

[2] Osman Nasr, Enayat Alkhider, "Online Complaint Management System" in IJISET, Vol. 2 issue 6, June 2015, pp.305-307.

[3] Mohd Sohil Deshmukh, Swapnil Rajput, "Smartphone Based Citizen Complaint System for Urban Maintenance Using GIS" in Int. Journal Scientific Urban Maintenance Using GIS" in Int. Journal Scientific & Engineering, Vol.7 issue 5, May 2016, pp. 1591-1599.

[4] Jorge Sentosa, Fátima Rodrigues, Lino Oliveira, "A Web & Mobile City Maintenance Reporting Solution" in International Conf. on Health and Social Care Info. Systems and Technologies, 2013, pp.226-235

[5] Panida Liawsomboon, Narut Phongoen , Pattamaporn Kormpho, Siripen Pongpaichet," Smart Complaint Management System" in Int. Student Project Conf. ,2013.

[6] Shailesh Indradev Gupta, Azaruddin Aianuddin Nayakwadi, Shailesh Indradev Gupta, Asst Prof. Sneha Sankhe, "Mobile Application interface to register citizen complaint" in IJARCET, Vol. 6 issue 4, April 2017, pp. 510-516.

[7] Atit More ," City Complaint Management System" in IRJET, Vol. 6 issue 6, June 2019, pp. 3134-3138.

[8]K.Gowthami,Mrs.Deviselvam,S.Anjali,M.Dharshna , " Complaint Management System",2017.

[9] Arpan Tiwari , Pooja Vijaywargi, Nisarg Gandhewar, Ruchita Narnaware, Prayas Pagade, Devika Radhakrishnan," Smart Complaint Management System" in IJTRD, Vol. 6 issue 6, Nov. 2016, pp.298-301.

[10] Deep Shah, Prof. Harsh N. Bhor, Dhaval Gherwada, Vipul Shah," Mobile Application interface to register citizen complaint",2015.

# Citizen_research

PRIMARY SOURCES

| | | |
|---|---|---|
| 1 | Pattamaporn Kormpho, Panida Liawsomboon, Narut Phongoen, Siripen Pongpaichet. "Smart Complaint Management System", 2018 Seventh ICT International Student Project Conference (ICT-ISPC), 2018 <br> Publication | **5**% |
| 2 | www.ijert.org <br> Internet Source | **2**% |
| 3 | ablock-design.blogspot.com <br> Internet Source | **1**% |
| 4 | Jorge Santos, Fátima Rodrigues, Lino Oliveira. "A Web & Mobile City Maintenance Reporting Solution", Procedia Technology, 2013 <br> Publication | **1**% |
| 5 | inpressco.com <br> Internet Source | **1**% |
| 6 | Gajbhiye, N.S.. "Microwave assisted preparation of $Fe^{3+}$ doped @b-dicalcium silicate by sol-gel method", Materials Research Bulletin, 201008 <br> Publication | **1**% |