Intelligent - Online Public Grievance Redressal System

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Abstract— The goal of this paper is to analyze the role of an online public grievance redressal system (OPGRS) in the satisfaction of the denizens of India. Improving the current mechanism of an online public grievance redressal system of the Government of India is imperative. At present citizens have access to an Indian PG Portal which is not user-friendly inconvenient and inefficient. An increasing number of citizens are reticent about registering their complaints due to a lot of constraints imposed on the user at the time of registering the complaint. This paper discusses the way to improve the OPGRS and implementation methods that would build confidence in the system.

Key words: Online public grievance system; Current mechanism; Government of India

I. INTRODUCTION

Online Intelligent public grievance system provides us with information that is critical in determining the satisfaction of the user. This information, if mined, would also provide the government data regarding efficient work of the officials. As this system is transparent as the users would be able to view and analyze other users complaints. This transparency would, in turn, generate trust in the IPGS, unlike the current portal.

Officials feigning lack of awareness will not be able to do so because this system spreads awareness among officials and public alike. Grievances such as potholes, garbage dump, illegal parking etc. would be the types of complaints that would be addressed by this application.

The Mumbai Municipal Corporation lacks an online public grievance system. This encouraged us to make this decision. Potholes have become a huge problem lately. Despite the BMC repairing potholes, the problem still tends to persist. This app will help the citizens in reporting and the BMC for detection of potholes.

After citizens report the BMC can prioritize and repair potholes efficiently. It can collect feedback of users and take necessary actions post repairs. An efficient analysis can be made available to the public. This measure will enhance transparency. This project will reduce bureaucratic and corruption issues.

II. LITERATURE SURVEY

This idea has been inspired from existing application using by Commonwealth application and the present Indian Government Public Grievance Portal. This application has a verygood growth potential in Indian metro cities as well as the developing towns of India.

The application will be different from the present Indian Government Public Grievance portal and this application will have a similar usage pattern, as the Commonwealth application as this application will utilize The Technology Acceptance Model (TAM) as well as 5 constructs taken from a paper in the book titled Grand Successes and Failures in IT. Public and Private Sectors. We have carried out a survey in our college. The results of the survey affirmed our initial prediction of the lacks and strengths of the 2 systems.

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A. Technology Acceptance Model (Tam)

The Technology Acceptance Model (TAM) is an information systems theory that models how users come to accept and use a technology. The model suggests that when users are presented with a new technology, a number of factors influence their decision about how and when they will use it, notably[1]:

- Perceived usefulness (PU)
- Perceived ease-of-use (PEOU)

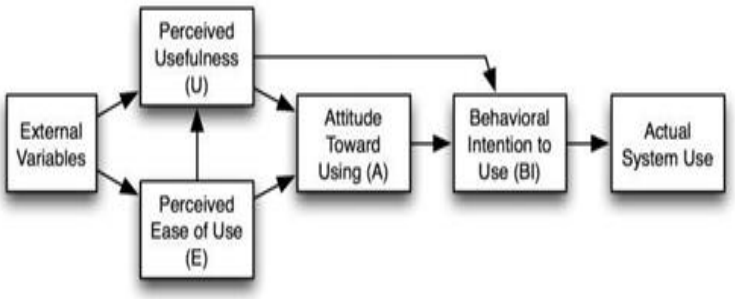

Fig 1.1 Technology acceptance model

B. Grand Successes And Failures In IT. Public And Private Sectors

These constructs were taken from the paper titled ”Examining the Factors Affecting Intention to Use of, and User Satisfaction with Online Public Grievance Redressal System (OPGRS) in India(SPRINGER)”by Nripendra P. Rana, Yogesh K. Dwivedi, Michael D.Williams.[2]

- System Quality:
- Information Quality:
- Perceived Usefulness:
- User Satisfaction:
- Intention of use

C. Screenshots Of The Survey

Fig. 2:

Fig. 3:

III. MOTIVATION

Public grievances systems have existed for a long time. With every iteration, these systems are only improving. The advancement in technology should be utilized for the welfare of the general public. While researching for the public grievance systems that existed in India and especially Mumbai. We came across the knowledge that this system is still in development.

Apart from this, Potholes are the major causes of nuisances faced by the denizens of our country. And Persistent efforts undertaken by the Government have proved to be futile. Mass media like Television and newspaper, daily reports incidents of roads caving in due to excess road complaints. Road problems cause excess vehicular traffic on roads leading to delays, backache due to jerks and other problems like stress.

IV. PROBLEM DEFINITION

To create an interface between Government Authorities and the general denizens using Google App Engine in Python. This interface will capture users complains. Users will be able to fill details of the nature of the grievance as well as photos. This application will also display nearby complaints based on its dynamic parameters. It will show the user satisfaction on resolution of their complaints by the authorities. This data will be stored in an SQL database.

V. PROPOSED SYSTEM

This Intelligent Public grievance system as endeavored by us in our project will derive from present systems. It will simplify the current Indian Public Grievance portal of the government of India by using the transparency of the commonwealth connect. At the same time, we intend to make this system much smarter than the Commonwealth connect, by using the data mining techniques that will predict the satisfaction of the citizens. We also derive our design templates from the Mumbai municipal android app.

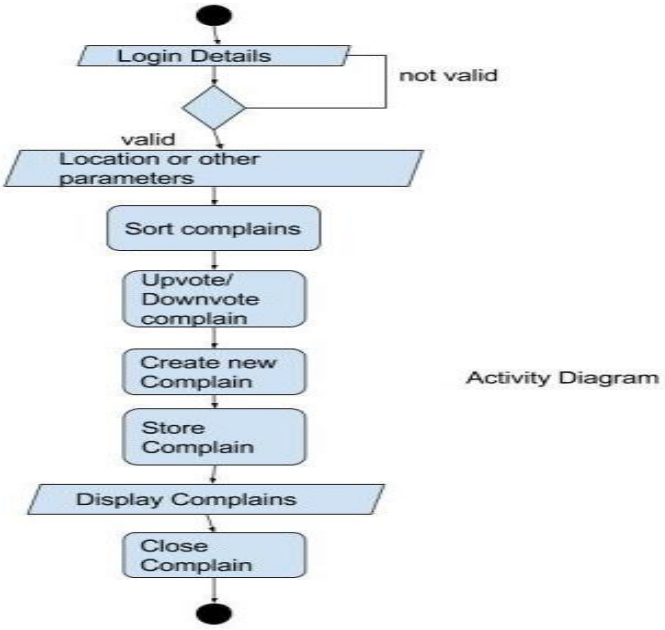

Fig. 4: Activity Diagram of the System

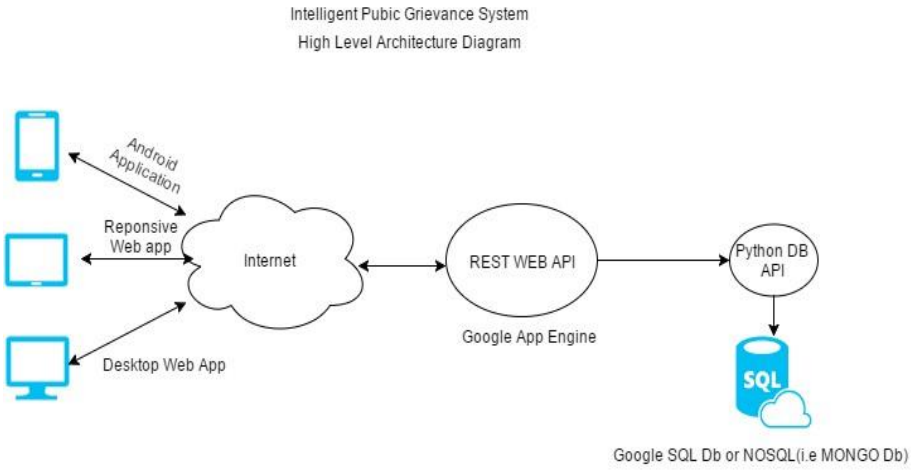

Fig. 5: Architecture Diagram

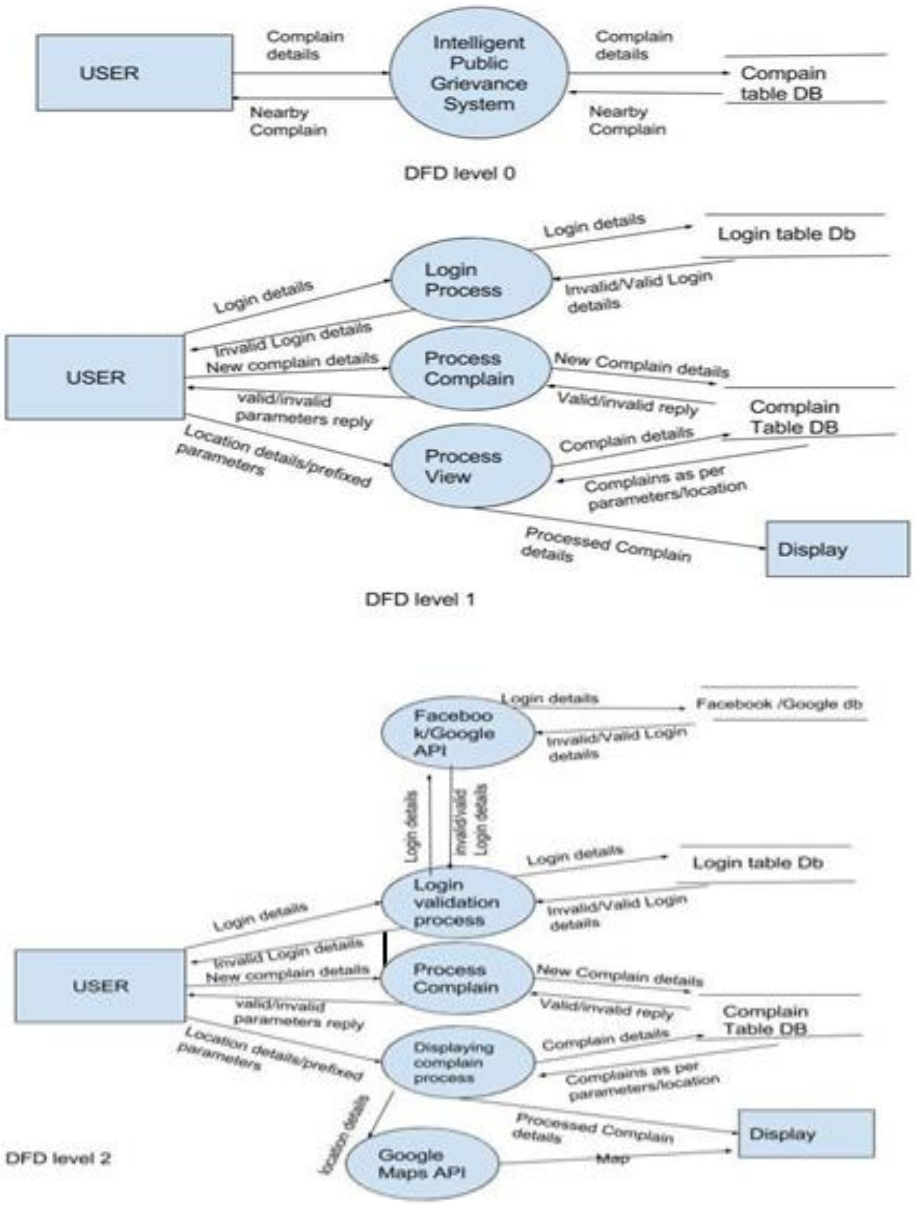

Fig. 6: Data Flow Diagram

VI. SCOPE OF PROJECT

This application suite comprises of various small application connected by common communication backbone. This is a crowdsourcing application where input or issue will be logged by the responsible civilian of the city. There would be one map-based mobile application, where civilian can record the following issue of the street. Potholes, Blocked Drain, Streetlight Maintenance, Encroachment in No Parking Zone, Contamination of water supply They can capture the various description of the problem by supplying its real time snap associated with the exact map location. Moreover, they can supply addition information like is it an asphalt road? Is it a paver block road? Is it a synthetic cement road? Also, user can provide the possible reason of pothole like due to underground cable maintenance? Is it due to drainage maintenance? Etc. This project has a very wide scope. This platform will initially be built for redressal of issues arising due to potholes. This platform can be used for many other issues faced by the citizens of Mumbai.

For instance illegal, parking, garbage dumping, illegal hawker menace etc. This project will widely help the citizens as well as the government. This project is touted to be used by most of the smartphone users.

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VII. CONCLUSION

In summary, with the help of this new and improved intelligent online public grievance redressal system, we can determine whether citizens of a city are satisfied with the working of the civic department and governments. As well as the transparency of the system would encourage denizens to post their grievances. When their grievances are resolved by the concerned authority. Citizen will start trusting the system. Satisfaction of the citizens is a step towards an efficient and transparent government. The Democratic leader of a locality can use this satisfaction rating for measuring his response As reviews will be recorded and improvement in the product shall follow this process is an everlasting project. Satisfaction of the citizens will be an accurate indicator to check the process of the city under the current Government Redressed of public grievances will help the city economically, socially.

People have predispositions about Mumbai being an unhealthy and a polluted city. If the government acts upon user complaints and strives to resolve it with perseverance, Mumbai city can be transformed into a city with the clean and healthy environment.

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