COMPLAINT PORTAL SYSTEM

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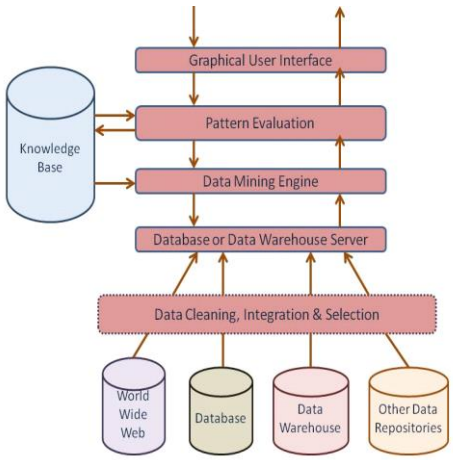
ABSTRACT: Reporting complaints such as transportation, EB, and water problems has no longer been an easy process for a person. They have to undergo a long procedure and formalities to report such problems like fault, road damage, infrequent water supply etc. or in short everything that comes under the surveillance of the company. There is still no guarantee that the reported grievances would be addressed by the concerned authority. To facilitate this complaining procedure, we are going to implement an online web application that lets person report problems with infrastructure in their company to relevant authority. So whenever people come across any defects in the company infrastructure, emergency situations or any disturbances, they can share, discuss and get resolved the problems by concerned authority by means of this online web portal. Online Complaint Management is a management technique for assessing, analyzing and responding to complaints. Complaints management software is used to record, resolve and respond to complaints, requests as well as facilitate with any other feedback.

INTRODUCTION

Data mining is the computing process of discovering patterns in large data sets involving methods at the intersection of machine learning, statistics ,and database systems. It is an interdisciplinary subfield of computer science. The overall goal of the data mining process is to extract information from a data set and transform it into an understandable structure for further use. Data mining is the analysis step of the "knowledge discovery in databases" process, or KDD. Data mining (the analysis step of the "Knowledge Discovery in Databases" process, or KDD), a field at the intersection of computer science and statistics is the process that attempts to discover patterns in large data sets**.** It utilizes methods at the intersection of artificial intelligence**,** machine learning, statistics, and systems. The overall goal of the data mining process is to extract information from a data set and transform it into an understandable structure for further use.



Aside from the raw analysis step, it involves database and data management aspects, data pre-processing, model, and inference considerations, interestingness metrics, complexity considerations, post-processing of discovered structures, visualization, and online updating**.**

EXISTING SYSTEM

In earlier existing systems, one must visit the office and complaints given through written statement. Based on the priority, the complaint can be submitted in drop box or directly to the commissioner or the concerned department, which may take physical effort and time consuming task. In this existing system, one cannot get any acknowledgement that the complaint has been received. Guarantee for problem solution is given through verbal communication. Hence, it is not meant for problem solution. Since complaints are a valuable source of feedback to improve the infrastructure and condition of our city. The citizens may have complaints with respect to their environment and city`s infrastructure but they might not like the traditional complaining system in which they have to undergo a long procedure like going to the office and standing there for hours in queue, wasting so much of their valuable time and efforts. So, to bridge the gap, we came up with an online application introducing a new platform for sharing problems between the service authorities and the workers just in two clicks which can be easily used by the citizens in an optimal manner keeping them unaware of the background processes and details.

PROPOSED SYSTEM

The Complaint Management System is one of the most significant and resource intensive project in which proposed system the citizen need not go to the respective office for getting his problem solved. He can get his problem solved by posting his problem in this proposed system thus to encourage and assist this sector and he can suggest a possible solution to the problems posted on the system. He can even get the information of the funds and other details of his place in detail through this system. This paper presents an analysis review on the principle needs of an intelligence security system with technology requirement and challenges to build the system by keeping the entire help tools ready to safely escape from violent situation. This reduces risk and brings assistance when needed. To facilitate this complaining procedure, we are going to implement an online web application that lets workers report problems with infrastructure in their city to relevant authority. So whenever people come across any defects in city`s infrastructure, transportation, environment

cleanliness or any daily life disturbances, they can share, discuss and get resolved the problems by concerned authority by means of this online web portal. Online Complaint Management System provides an online way of solving the problems faced by the public by saving time and eradicate corruption, and the ability of providing many reports on the system, and add to facilitate the process of submitting a complaint. In this project we can design the web and android application to analyze the complaints and to provide a high importance to children and women problems. Workers can easily known about the status of complaints. If the action can't be taken properly, it will be send to higher authorities. Finally provide feedback systems to predict the positive reviews using text mining algorithms. Based on positive reviews credit scores can be applied to the appropriate departments.

MODULES

- User Application
- Admin GUI
- Alerts and notification
- Reviews Posting
- Sentiment Analysis
- Recommendation System

USER APPLICATION

The main purpose of the project is to help the people who are facing different problems in the localities by this online application. This project is having that potential to reduce the gap between the officer and workers. The Complaint Management system is web based application and it is designed to keep track of complaints registered by the people, so this system need to have distributed platform independent web application. In this module, user registers their basic details such as name, phone number, address, contact and so on. Then post the complaints through mobile or web site. If it is in android, send emergency code to server otherwise post complaints based on priorities and also departments such as EB, Water, Transportation, Women problems and so on. Priorities include immediate or normal.

ADMIN GUI

The proposed model acts as the platform for the users to address the problem regarding any issue and which should be handled carefully. Admin can read the complaints which are posted by the user and check the priority of complaints. If the priority is high, then action may be taken immediately. Then the particular information is forwarded to an appropriate department. The privileged user has an access with both admin level and user side. He can view the tasks, requests, complaints, login details of both the user and admin. The privileged user has to login into the system first, and then access the data as he wants. Privileged user can view the complaints reported by the user and also the managed complaints by admin.

ALERT AND NOTIFICATION SYSTEM

In this module, we can see the alerts and notification through the respective application.

Admin can send notification to user about status of complaints and deadline about the complaints that are resolved. In the managed complaints, he will check for the solved and unsolved complaints. If there are any unsolved complaints, he will take actions towards the problem. If the complaints are not resolved, it will forward to higher authority. Otherwise, send notification to the user about status of complaints. The admin of the portal manages all the complaints and passes those complaints to the respective complaint handling departments. If the complaint is not solved within a period of time provided by the system, the complaint will be automatically sent to the municipal commissioner who is the head of all departments. By this process, the users are satisfied regarding their problems

REVIEWS POSTING

In this module user can post the feedback about actions. Feed backs may be text reviews or ratings or Emoticons. All reviews are collected and tokenize as per text mining instructions. This module eliminates the noisy words from text data sets. Stop words are words which are filtered out before or after processing of natural language data (text). Determiners - Determiners tend to mark nouns where a determiner usually will be followed by noun examples: the, a, an, another. Coordinate conjunctions – Coordinate conjunctions connect words, phrases, and clauses examples: for, an, nor, but, or, yet, so.

SENTIMENT ANALYSIS

In this module, implementation of SJASM model is proposed to read the keywords. Sentiment analysis refers to the use of natural language processing (NLP), text analysis, computational linguistics to systematically identify, extract, quantify, and study affective states and subjective information. Sentiment analysis is widely applied to the voice of the workers material such as reviews and ratings for the application that range from marketing to customer service to buy the products efficiently. Admin can analyze whether the product is positive or negative. In star rating, we can calculate star count values. In text reviews, extract keywords are matched with the database.

RECOMMENDATION SYSTEM

Recommendation systems are a subclass of information filtering system that seek to predict the "rating" or "preference" that a user would give to complaints. Admin read the positive and negative reviews. Set the credit score to each departments based on positive counts. Forward promotion details to appropriate departments

CONCLUSION

Application software has been computed successfully and was also tested successfully by taking “test cases”. It is user friendly, and has required option, which can be utilized by the user to perform the desired operations. Application software meets the information

requirements specified to a great extent. The system has been designed keeping in view the present and future requirements in mind and made very flexible. The goals that are achieved by the software are instant access, improved productivity, Optimum utilization of resources, Efficient management of records, Simplifications of the operation, Less processing time and getting required information, User friendly, Portable and flexible for further enhancement. The system has the benefits of easy access because it is has been developed as a platform independent web application, so the admin can maintain a proper contact with their users, which are in access anywhere. All communications between the client/user and administrator has done through online, so this communication cost also is low. Feedback analysis is used to analyze the performance of each department. Android based system application can be used at the time of emergency.

FUTURE WORK

In future, we can extend the framework to implement in all departments of central government. The android application can be implementing with GPRS system to identify the locations of women and children at the time harassment problems with sensors

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