

Secure Complaint Resolver

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Abstract - The Secure Complaint Resolver system is web-based application and it is designed to keep track of complaints registered by the college Students, staff and any others faculty so this system need to have distributed platform independent web application. The task of Administrator executives can control all the activities in the system also registration of HOD. In User registration it should be open to all students and any others faculty and they can update their information after registration. This System able to send the notification like department wise pending complaints, individual students' complaints and compliant status.

Key Words: Anonymous complaints, Distributed System, MD5

1. INTRODUCTION

The Secure Complaint Resolver system is web-based application and it is designed to keep track of complaints registered by the college Students, staff and any others faculty so this system need to have distributed platform independent web application. The task of Administrator executives can control all the activities in the system also registration of HOD. In User registration it should be open to all students and any others faculty and they can update their information after registration. This System able to send the notification like department wise pending complaints, individual student's complaints and compliant status.

1.1 Motivation

The main motivation of the project is to help student/staff/other staffs who are facing different problems in college by this online application. Manual Complaint Registration process is lengthy as well as information of a person who fire a complaint is not encrypted. It reduces Processing time. In this project acknowledgement after receiving complaint and action towards complaint given by administrator, within the system generated time limit is the main concept of the

project. Two ways complaint handling approach is followed, Student decides whether complaint forwarded to respective department HOD or Administrator.

1.2 Problem Definition and Objectives

There are several problems arise when the student, staff and other faculty timetable are engaged with the office hours. The student, staff and other faculty timetable which are pack with each other make them unable to make complaints directly by complaint registration offices. Sometimes, when there are able to do, the office hours are close according the office timing. So, this issue can be overcome by proposed online complaint management portal. By using this previous system, the probability for data loss is very high. If the files loss, so the data also will be lost. But in proposed system all data is maintained in system and no chances to loss data. When the administration wanted to see listing of complaint, the department need to check the complaint first and then prepared the list. Certainly, it will take time and only wasting the time. Whereas in this system list of complaints viewed with pagination

1.3 Project Scope

This policy applies to all complaints made by a student or other about any person and manage complaints made about suspect delivered fairly, efficiently and effectively and send feedback.

1.4 Project Limitation

If any fake complaint gets fire by any fake person then it may not get validated properly Proof for Complaint is mandatory it does not provide the means of live communication between the complaint and the responder.

2. LITERATURE REVIEW

Online Complaint Management System provides an online way of solving the problems faced by the public by saving time and eradicate corruption. The objective of the complaints management system is to make complaints

easier to coordinate, monitor, track and resolve, and to provide company with an effective tool to identify and target problem areas, monitor complaints handling performance and make business improvements. Online Complaint Management is a management technique for assessing, analyzing and responding to customer complaints. Complaints management software is used to record resolve and respond to customer complaints, requests as well as facilitate any other feedback.(Osman Nasr , Enayat Alkhider, Online Complaint Management System")

How businesses resolve customer complaining behavior effectively has been considered a “defensive marketing” strategy [12] or a “zero-defections” [22] strategy, which diminishes customer dissatisfaction. Handling customer dissatisfaction accompanies Web customer complaint management, which might be the critical issue for online customer service solutions and e-CRM. In this paper, the authors 1) investigate the current sources and causes of online complaints; 2) seek effective ways of handling customer complaints by examining different product types; and 3) provide guidelines for successful e-CRM. One thousand customer complaints from three different publicized e- business customer service centers and five hundred complaints from online feedback systems were analyzed in this study. The research findings suggest that e- businesses should 1) provide excellent online customer services because customer service is the most important factor in online customer satisfaction; 2) respond to customers’ requests/complaints fast because the response speed is more important in online customer satisfaction than offline; and 3) employ strategies that are appropriate for the product category in question (Yooncheong Cho Il Im ,Roxanne Hiltz , Jerry Fjermestad ,An Analysis of Online Customer Complaints: Implications for Web Complaint Management", Proceedings

3. SYSTEM ARCHITECTURE

System Architectural Design shows the general architecture of the proposed cloud integrated wireless garbage management system framework whose implementation includes following elements:

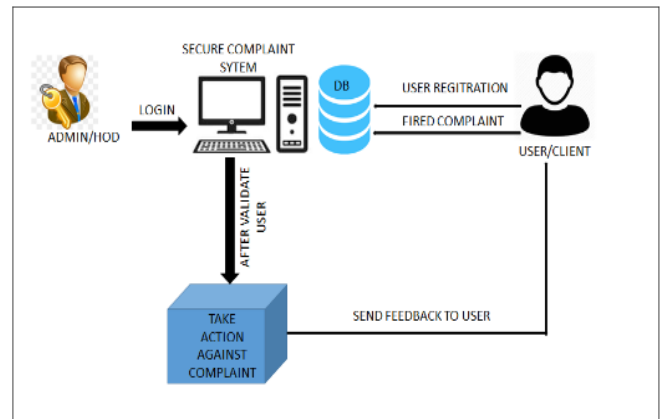


Fig -1: System Architecture

The above System Architecture diagram will provide a ow of Com- plaint Management system will be primarily used by student, staff and other faculties Student/ Staff/ Other Faculties must have to register him before fir- ing a complaint. After registration student may file a complaint through his login and also update his profile. Student has right to decide where to fire a complaint it means to the HOD or to the Principal. The Complaint Management systems user interface should be intuitively designed so that it is fairly simple, easy to use and self-explanatory. Administrator or HOD gives acknowledgement after receiving complaint to the mobile of student/staff/other faculty. And also, he takes proper action against the complaint and updates the status.

3.2 Mathematical Model

System:(I, O, Fn, Sc, Fc)

Where,

I= Input

O= Output

Fn= Function

Sc= Success Condition Fc= Failure Condition

Now,

I: Complaint

O: Action against complaint with status update.

Fn: Register (), Login (), Fire a complaint ()

Sc: Fire a complaint and get acknowledgement from receiver with status update.

Fc: to update status after complaint is fired.

3.3 ENTITY RELATIONSHIP DIAGRAM

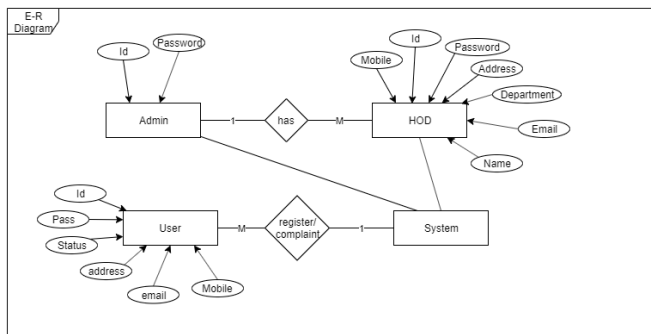


Fig -2: Entity-relationship diagram

Data objects and their major attributes and relationships among data objects are described using an ERD- like form. In this diagram user is an entity which has deferent attribute like user id, voice, size, width and the height and user entity interact with system entity using has a relationship which is represent as a diamond shape system entity required a system related attributes like a id, os, ip address, hardware components and name of a system.

4. SYSTEM IMPLEMENTATION

4.1 Overview of Project Modules

The Secure Complaint Resolver system is web-based application and it is designed to keep track of complaints registered by the college Students, staffs and any others faculty so this system need to have distributed platform independent web application. The task of Administrator executives can control all the activities in the system also registration of HOD. In User registration it should be open to all students and any others faculty and they can update their information after registration. This System able to send the notification like department wise pending complaints, individual students' complaints and compliant status.

4.2 System Algorithms

4.2.1 MD5 Algorithm

The MD5 function is a cryptographic algorithm that takes an input of arbitrary length and produces a message digest that is 128 bits long. The digest is sometimes also called the " hash" or" fingerprint" of the input. MD5 is used in many situations where a potentially long message needs to be processed and/or compared quickly. The most common application is the creation and verification of digital

signatures. MD5 was designed by well-known cryptographer Ronald Rivest in 1991. In 2004, some serious were found in MD5. The complete implications of these has yet to be determined.

4.2.2 C4.5 Algorithm

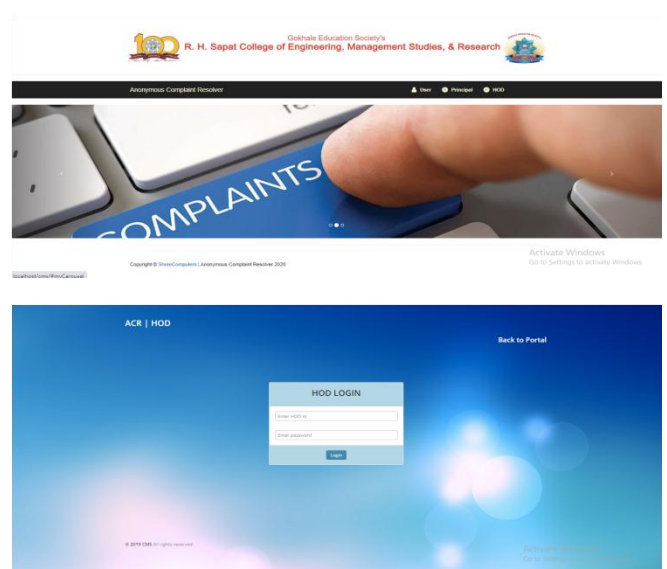
C4.5 is one of the top data mining algorithms and was developed by Ross Quinlan. C4.5 is used to generate a classifier in the form of a decision tree from a set of data that has already been classified. Classifier here refers to a data mining tool that takes data that we need to classify and tries to predict the class of new data.

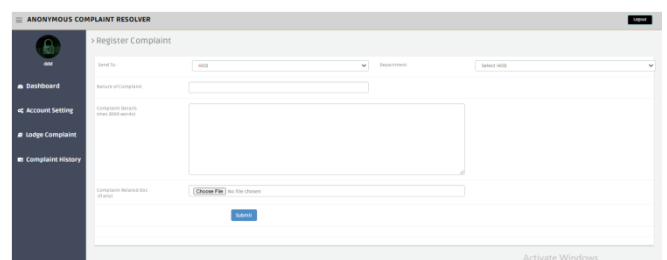
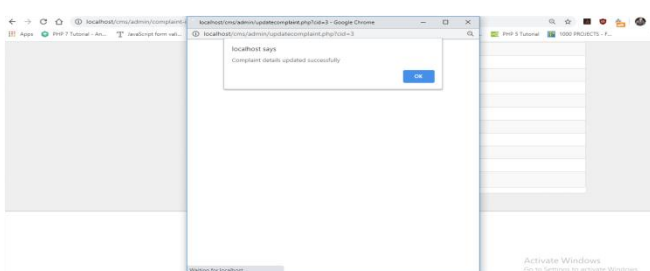
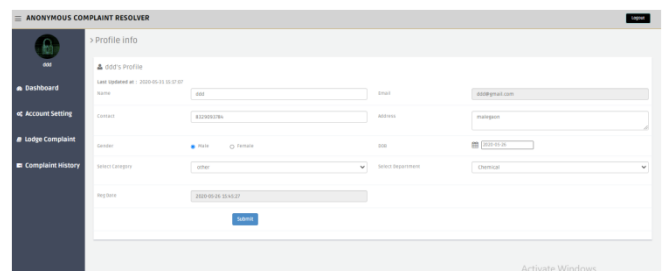
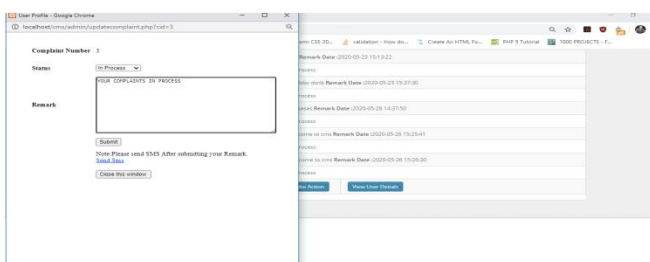
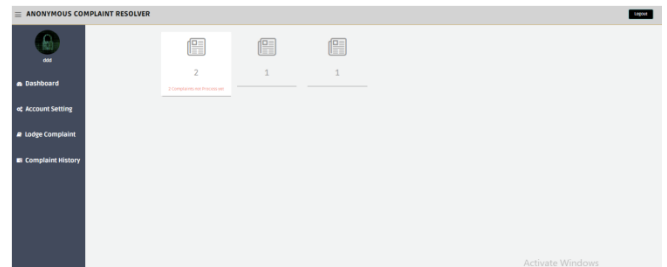
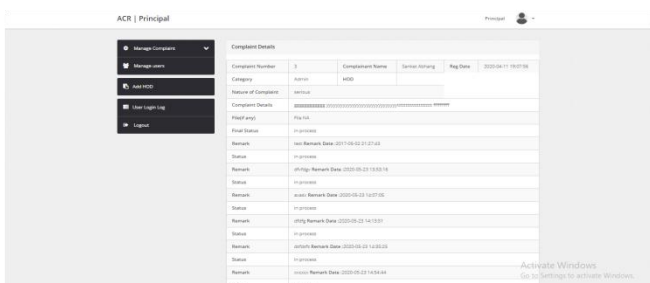
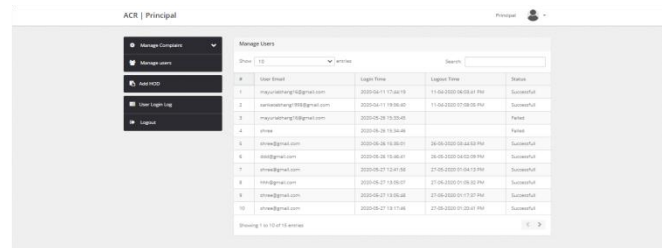
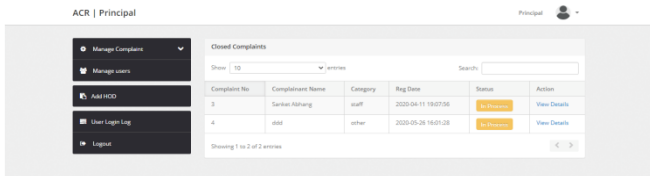
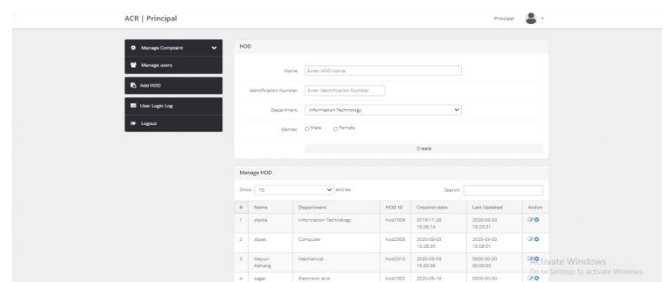
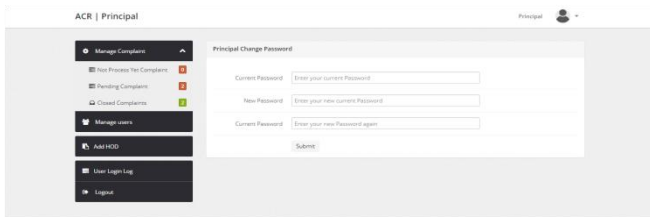
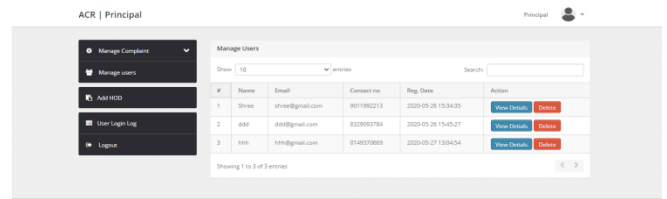
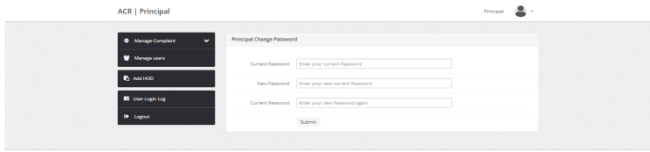
Every data point will have its own attributes. The decision tree created by C4.5 poses a question about the value of an attribute and depending on those values, the new data gets classified. The training dataset is labelled with lasses making C4.5 a supervised learning algorithm. Decision trees are always easy to interpret and explain making C4.5 fast and popular compared to other data mining algorithms.

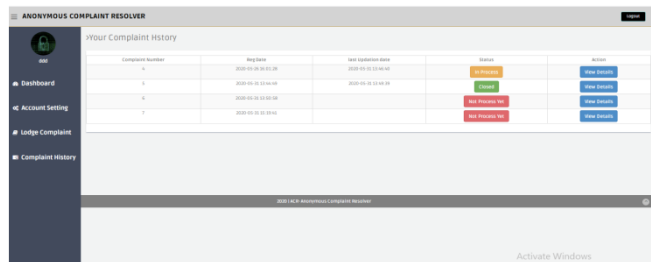
5. FUTURE SCOPE

This policy applies to all complaints made by a student or other about any person and manage complaints made about suspect delivered fairly, efficiently and effectively and send feedback. In future, this application can be extended to be used in various company, offices and industries. This system provides a secure way of communication Due to online approach of this system student/staff/other used this system from anywhere to fire a complaint.

6. RESULTS







7. CONCLUSIONS

Secure complaint management system is designed for easy access because it is developed as a platform independent web application, so the admin can maintain a proper contact with their students, staff and other faculties, which may be accessed anywhere. Confidentiality is achieved by encrypting the data of a person who files a complaint. For that purpose, an encryption algorithm is implemented. All communications between the person who files a complaint and the administrator are done through the online, so this communication cost is also reduced. This system can be taken as an initiation for the systems which will be developed in the future and which are related to complaint management systems. The goals that are achieved by the system are instant access, optimum utilization of resources, efficient management of records, taking proper actions towards complaints, less processing time, user-friendly, future change in the environment or processing can be easily adopted by having simple changes in coding. It is very user-friendly, cost-effective, feature-rich and it provides a very high level of security. Moreover, the system coding is so well designed that new operations can be easily incorporated without much modification. In the future, more secure and authorized systems get designed by eliminating smaller bugs, also validating fake entries of complaints.

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REFERENCES

- [1] Osman Nasr, Enayat Alkhider, "Online Complaint Management System", IJISSET - International Journal of Innovative Science, Engineering Technology, Vol. 2 Issue 6, June 2015.
- [2] S.Anjali, M.Dharshna, K.Gowthami, Mrs.Deviselvam "COMPLAINT MANAGEMENT SYSTEM", International Research Journal of Engineering and Technology (IRJET) Volume: 04 Issue: 04 — Apr -2017
- [3] Devika Radhakrishnan, Nisarg Gandhewar, Ruchita Narnaware, Prayas Pagade, Arpan Tiwari and Pooja Vijaywargi, "Smart Complaint Management System", International Journal of Trend in Research and Development, Volume 3(6), ISSN: 2394-9333 Nov- Dec 2016
- [4] Yooncheong Cho Il Im, Roxanne Hiltz, Jerry Fjermestad, "An Analysis of Online Customer Complaints: Implications for Web Complaint Management", Proceedings of the 35th Hawaii International Conference on System Sciences - 2002
- [5] Amy J.C. Trappey, Ching-Hung Lee, Wen-Pin Chen, Charles V. Trappey, "A FRAMEWORK OF CUSTOMER COMPLAINT HANDLING SYSTEM," 978-1-4244-6487-6/10/2010 IEEE
- [6] Suhardi, Novianto Budi Kurniawan, Deni Prayitno, Jakasembiring, "Public Complaint Service Engineering based on Good Governance Principles", 978-1-5090-6255-3/17/c 2017 IEEE

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