Grievance Redressal Portal

K. VikasChandra[#1], K. Mahesh Reddy[#2], T. Babitha[#3], P. Mahesh Kumar[#4]

[1]B. Tech C.S.E TKREC Hyderabad Email: iam@vikaschandrakurella.tk
[2]B. Tech C.S.E TKREC Hyderabad Email: kolvimaheshreddy001@gmail.com
[3]B. Tech C.S.E TKREC Hyderabad Email: thakurbabitha2@gmail.com
[4]Asst. Professor, TKREC, Hyderabad, TS-India, Email: maheshkumarpunna@gmail.com

Abstract- Grievance is a primary measure of dissatisfaction. An effective and efficient response to these grievances is an essential index of organization's performance. The presented model for the Grievance Redressal Portal will have the ability to minimize dissatisfaction and on the other hand it can encourage participation in controlling the quality of the service provided. In this paper, we try to improve the relationship between Students and the Institution by presenting a new model of e-Complaint web service. This paper describes the Grievance Redressal Portal oriented by Web-application which will be used by students in order to make complaints about their dissatisfaction on Institution. This system will be able to handle complaints by recording and giving feedback for each raised complaint. Results of the study can be a good reference to find out student needs from e-complaint.

Keywords: - e-Complaint, Grievance Redressal Portal, Complaint Handling, Complaint Management

I. Introduction

Poor communication can result in poor services being provided by the institution. Whilst concentrating on the topic of complaint handling, institutions can achieve an efficient success factor by increasing their user satisfaction and their loyalty. Therefore, each institution needs to develop its internal and external communication towards its staff and students to achieve success. Although appropriate communication can reduce dissatisfaction; it cannot eliminate complaint. Every day students complain because of feeling dissatisfied. No matter direct or indirect accusation to any staff, such as face to face complaint, telephone complaint, complaint letter, and message on the web, all the complaints should be accepted and properly cared for. Also, it should weight these complaints i.e., weak complaint or strong complaint and take respective measures to address them.

Objectives

In order to avoid above existing leave communication gap, we are planning to design a system to automate this process, so that posting grievances and redressal becomes more interactive, automated and effective.

1. Complaints are posted will be placed through Web Application which can be maintained in the database. It reduces the paper work and storage area.
2. Save time & work load for Organisation Administration.
3. Easy to access.
4. Easy and quick process.
5. It will have a user-friendly interface

II. Existing & Proposed System

A. 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 concerned department, which may take physical effort and time consuming task. 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.

B. Proposed System

Identification and solution for the complaints, rectifying them within the specific time limit. A clear report is generated by the system which shows assignee name, complaint type/ department, etc. The admin examines weather the problem is rectified or not within the grace period. If it is not solved, then the report is automatically forwarded to the higher authorities so that it maintains an effective problem solving solution. No physical presence is required as the portal can be accessed anywhere.

Implementation of Tools

1. Posting a Grievance:

A user can post a grievance by providing parameters such as type of grievance, level of grievance etc. Once the grievance is posted, it is routed to Administrator. If Administrator approves the request, then the user is notified of the complaint status. The admin even has the ability to approve or reject the grievance.

2. Addressing Grievances

The grievance posted is routed to the Privileged User by the administrator. The Privileged User is the highest authority in the organization. He is the one who addresses the complaints and provides the solution to the posted grievances. The information of the complainer is maintained confidential. If any grievance is addressed then it's notified on user dashboard.

III. System Architecture

The development of the proposed model is not only depending on how the system works. It also depends on the working flow process that being identified and need to be implemented and followed. The proposed grievance redressal portal is a method, platform or web-application to ensure that the grievance is addressed and handled properly. The system architecture is shown in figure 1.
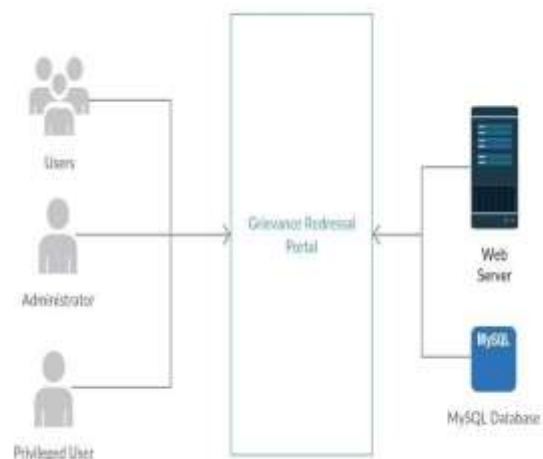
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Fig.1. System Architecture

IV. Algorithm

MD5 was designed by Ronald Rivest in1991 to replace an earlier hash function MD4. The MD5 algorithm is a widely-used hash function producing a

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128-bit hash value. Although MD5 was initially designed to be used as a cryptographic hash function, it has been found to suffer from extensive vulnerabilities. It can still be used as a checksum to verify data integrity, but only against unintentional corruption. The ideal cryptographic hash function has four main properties:

1. It is quick to compute the hash value for any given message.
2. It is infeasible to generate a message from its hash value except by trying all possible messages.
3. A small change to a message should change the hash value so extensively that the new hash value appears uncorrelated with the old hash value.
4. It is infeasible to find two different messages with the same hash value.

A related application is password verified. Storing all user passwords as clear text can result in a massive security breach if the password file is compromised. One way to reduce this danger is to only store the hash digest of each password. To authenticate a user, the password presented by the user is hashed and compared with the stored hash.

The password is often concatenated with a random before the hash function is applied. The password is stored with the password hash. Because users have different password, it is not feasible to store tables of pre-computed hash values for common passwords.

V. Modules

A. User

In this module, the user can go to the website and login with the help of their unique id and password. After they get access to their profiles, they can view post and view their grievances in the dashboard provided to them. A profile section dedicated to every user, where they can update their personal details.

B. Administrator

In this module, the administrator will perform some checks and responds to the grievances posted. Once approved by the administrator, the request is routed to the higher authorities. If the administrator rejects the grievance, then it's not routed to higher authorities.

C. Privileged User

In this module, the privileged user has the functionality of both the user and administrator. He can manage all the grievances, he can remove the existing one. He is the sole responsibility of responding to the grievances posted. He is the highest authority in the institute who is responsible for addressing the grievances.

VI. Result Analysis

The majority of the functionalities are available to the Privileged User so 40% is assigned. Administrator when compared to others has more functionality so 20% is assigned. All the functionalities require database which acts as a backend to the application. The database is used to store the data and retrieve to the application whenever required. The frontend which acts as an interface plays a major role. So, the 30% is assigned to the Overall Application which involves the Frontend and Backend.

- User
- Administrator
- Privileged User
- Overall Application
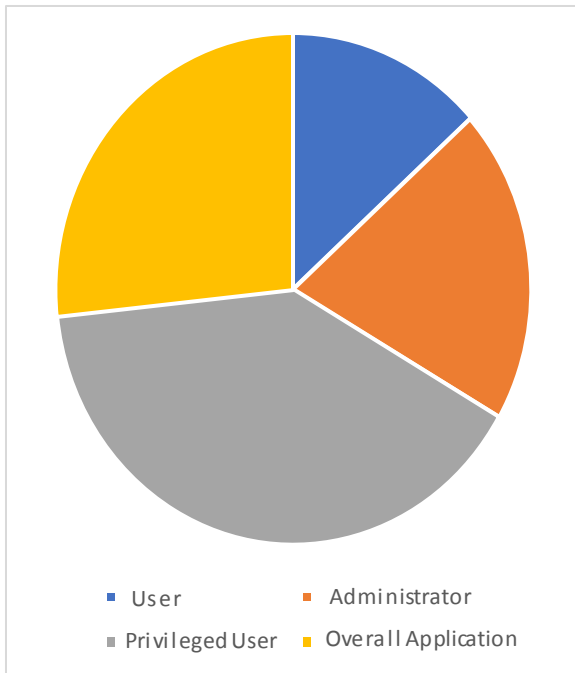
VII.   Conclusion

This paper presents an overview of the development and implementation of the Grievance Redressal Portal as a web-service based on SOA. The results obtained from the implementation are encouraging and promising for the development or more complex systems in the future as the Complaints Management is a complex and critical problem. Complaints and compliments are valuable source of information that organizations can use to improve program delivery and service. By using the prototype that has been developed, the university can try to use the system prototype before they can develop or enhance their complaint system.

VIII.   Future Enhancements

In the future, may be the requirement can be expanding based on the universities that want to use this proposed requirement model. For example, the complaint system can have more functions like integrating with email (Email Complaint), One function that should be added as the future work is to notify the customer through their mobile phone (SMS) so it can make them feel the system is more useful for them, and know whether their complaint is handled or not.

IX.   References

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