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Implementation Paper "m-Connect"

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ABSTRACT: Reporting water or any cleaning problems has no longer been an easy process for the students. They have to undergo a long procedure and formalities to report such problems like chair damages, classroom cleaning, garbage, light post damages etc. or in short everything that comes under the surveillance of college management system. There is still no guarantee that the reported grievances would be addressed by the concerned authority. That is why most of the time complaints go unheard, unanswered and un-resolved usually because the company is too large to worry about one little complaint from a single person. To facilitate this complaining procedure, we are going to implement an application that lets students report problems with infrastructure in their college to relevant authority. So whenever people come across any defects in college infrastructure, transportation, environment cleanliness or any they can share or discuss and get resolutions status of complaint resolved the problems by concerned authority by means of this online web portal.

KEYWORDS: Complaint management system, Government

which provide support for its existence.

I. INTRODUCTION

We know that complaints are a valuable source of feedback to improve the infrastructure and condition of college. The students may have complaints with respect to their environment and college 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. For this purpose, a mobile platform that accepts user concerns or difficulties and conveys them directly to the respective authorities, is needed. Hence, we plan to develop an application for raising issues to bring about transparency in the system.

The basic idea of our project is user will post his/her complaint which will be stored on the server and will be further forwarded to the concerned authority based on the type of the complaint. The concerned authority will further resolve the complaint and accordingly notify the user about it. The admin will play the role of monitoring the system and viewing the complaints.

II. LITERATURE REVIEW

- Fornell C., Westbrook A. Robert, The Vicious Circle of Consumer Complaints, journal of Marketing, (summer)(1984), 68-78.
 This paper suggests a process whereby increasing consumer complaint proportions leads to organizational suppression of the unit receiving the complaints, which subsequently contributes to a further increase in complaints due to inaction by marketing management. This vicious circle is tested in two independent studies
- Razali R., AbdHalim K.N., Juso_ K., Quality Improvement of services in UnversitiTeknology Mara Pahang from a Management Perspective. Management Science Engineering Vol.5, No.1, (2011), pp.71-80. The aim of this paper was to describe the development of new complaint management system. Manual process of complaint handling between customers and the university was monitored to develop the new complaint



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management system. New complaint management system known as e-Aduan was developed. Both customers and management had accessed to the new system to complaint and retrieve information. Through this study the researchers had also identified workflow procedures to be followed by the management to address customers complaints and comments. This new scenario produced good impact to both customers and management; customers now had a platform to communicate their dissatisfaction and the management would be able to act immediately upon any customer feedback.

- 3. Najar, A.S., Al-Sukhni, H.A., Aghakhani, N, The Application of Service-oriented Architecture in E-complaint System. Paper presented at (ICCSN 10) the Second International Conference on Communication software and Networks, (2010, 26-28 Feb. 2010). In this study researcher tried to improve relation between citizens and government by presenting a new model based on Service Oriented Architecture (SOA). With utilizing the presented model in government body on one hand governments will have the ability to minimize citizens dissatisfaction and on the other hand it can encourage citizens to participate in controlling government body such as governments staffs and organizations. This study can also be helpful in other fields of e-government in terms of citizen adoption and citizen loyalty. Results of this study can be a good reference to find out users needs from e-complaint and the importance of complaint in the body of government.
- 4. Yi, Yooujae, A Critical Review of Customer Satisfaction. In Review of Markiting, Valerie A, Zeithaml, ed. Chicago, American Marketing Association, (1990). The paper highlights some tendencies of customer satisfaction measurement and makes a critical analysis of scales of measurement and its influence in data analysis techniques. The paper also focuses a methodology that can overcome problems of data analysis and concludes with some topics for future research in this subject.
- 5. ESRAA ABD EL-AZIZ ABD EL-SADEK AFIFY, A model for Customer Complaint Management system using SOA, Management Information System Department, Modern Academy for Computer Science Management Technology, CAIRO, EGYPT In this paper the researcher tries to improve the relationship between Citizens and the Social Solidarity by presenting a new model of e-Complaint web-service based on SOA. The Proposed model aims to develop a Service-Oriented framework for e-Complaint Web-based that targets the charity lifecycle. The cycle starts with distribution of different services that are provided through charity. Those services are applied for different people based on their needs. Due to different obstacles those services may not be applied in appropriate way. Therefore, a need for a system that could detect Citizen's problems and provide them with suitable feedback is raised. Also, this paper describes the Complaint Management System oriented by Web-application which will be used by Citizens in order to make complaints about their dissatisfaction on provided services. This system will be able to handle complaints by recording and giving feedback for each raised complaint.

III. SYSTEM OVERVIEW

Our project consists of 3 modules: User, Admin and Concerned Authority.

• User

The user will register into the system using mobile number. This will be used act as the identification for the user throughout the system. After entering the application, it will contain 4 tabs; Home, Complaints, Status and Contact Us. First tab which is "Home" includes 2 sub tabs; About Us and How We Work, which gives the user a basic idea of our application. Second tab "Complaints" is used for the registration of the complaint by selecting the department of the user and concerned category of the complaint to be registered. The third tab which is "Status" contains the list of multiple complaints registered by that particular user, which also shows the status of the complaint. If the status is



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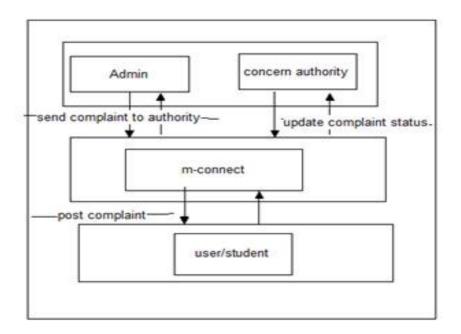
resolved but the user is not satisfied with the solution, this app provides the facility of re-writing the complaint. The last tab "Contact Us" provides the user with contact number and e-mail id in case of emergency. This tab also provides FAQs if the user has any queries regarding the app.

• Admin

Registration for Admin is similar to that of the User i.e. through mobile number. It contains 3 tabs; Complaints, Settings and Add Authority. First tab "Complaints" will show all the complaints of the department it chooses from the drop down list. It will also have the facility of viewing all the complaints registered by all users irrespective of the departments at the same time. "Settings" tab will enable Admin to add new department and new category as per the requirement. The last tab "Add Authority" adds Concerned Authority by specifying the details of the person such as Name, Mobile number and the respective department. It also provides password to the authority in order to ensure the authentication of the person.

Concerned Authority

The Concerned authority will login to the system using the mobile number and password provided by the admin. It consists of 2 tabs; Home and Complaints. The first tab "Home" consists of 2 sub tabs; About Us and How We Work which are similar to the tabs that of user. The next tab is "Complaints" where the Authority can view the complaints of its concerned department. He can also update the status of the complaint registered.



IV. SYSTEM ARCHITECTURE

Fig. 01 System architecture



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V. MATHEMATICAL MODEL

System Description:

- Input: Post complaint
- Output: View status of complaint

Set Theory:

 $S = \{s, e, X, Y\}$ S = Set of system s = Start of the program X = Input of the program X = C1-Cnwhere, C1-Cn = Input is Complaint which is entered by User Y = Output of the program Y = ACK1-ACKnwhere, ACK1-ACKn = Acknowledgement gives by System.

- User makes a complaint.
- System takes an action towards the complaint.
- After taking action/ solving the complaint User gets appropriate acknowledgement.

e = End of the program

• Above mathematical model is NP-Complete.

Success Conditions: Students get posted complaint status.

Failure Conditions:

- 1. Huge database can lead to more time consumption to get the information.
- 2. Hardware failure.



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VI. EXPERIMENT RESULT

1. Admin

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m-Connect_#	Admin	
COMPLAINTS S	SETTING A	DD CONCERN
comp		GET COMPLAINTS
View all Comp	laints	
Department: Concern Cate Description: Status: 2018 Status: Reso	egory: clean dgeh /06/02 12:3	
Department: Concern Cate Description: Status: Status: Reso	egory: clean ryht	ing
Department: Concern Cate Description: Status: 2018 Status: Reso	egory: clean sgwg / <mark>06/02 12:2</mark>	

Screenshot 1: First tab "Complaints" will show all the complaints of the department it chooses from the drop down list. It will also have the facility of viewing all the complaints registered by all users irrespective of the departments at the same time.

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COMPLAINTS	SETTING	ADD CONCERN
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IT		
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Screenshot 2: "Settings" tab will enable Admin to add new department and new category as per the requirement.



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- Screenshot 3: The last tab "Add Authority" adds Concerned Authority by specifying the details of the person. It also provides password to the authority in order to ensure the authentication of the person.
 - 2. User

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m-Cor	nnect_User		
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bench	nes are broken		
	SUE	міт	
	Complaint Regist	ered Success	sfully

Screenshot 4: Second tab "Complaints" is used for the registration of the complaint by selecting the department of the user and concerned category of the complaint to be registered.

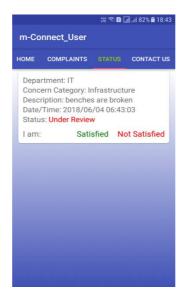


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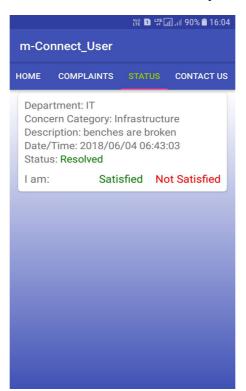
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Screenshot 5: The third tab which is "Status" contains the list of multiple complaints registered by that particular user, which also shows the status of the complaint.



Screenshot 6: Status of the complaint is updated by the Concerned Authority when the issue is resolved.



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m-Co			
			CONTACT US
Conc Desc Da St	rtment: IT ern Category: Ir ription: benches Re-Write Re-Write benches not re	s are broke (04.05.42) Concern	en ed
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Screenshot 7: If the status is resolved but the user is not satisfied with the solution, this app provides the facility of rewriting the complaint.

3. Concerned Authority

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Pa	assword
	Login

Screenshot 8: The Concerned authority will login to the system using the mobile number and password provided by the admin.



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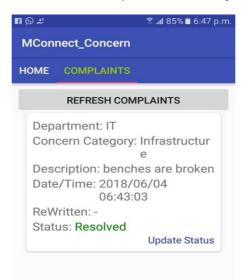
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⊡ ¤ ≄ MCon	
HOME	COMPLAINTS
	REFRESH COMPLAINTS
Dep	artment: IT
Con	cern Category: Infrastructur e
Des	cription: benches are broken
Date	e/Time: 2018/06/04 06:43:03
ReV	/ritten: -
Stat	us: Under Review
	Update Status

Screenshot 9: The "Complaints" is where the Authority can view the complaints of its concerned department.



Screenshot 10: The Authority can also update the status of the complaint registered.



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VII. CONCLUSION

This paper presents the overview of the analysis and development of the complaint management system of college. There will be a remarkable result will be obtained by the implementation of this project and also they help in encouraging the development of this type of complaint management systems or more complex systems. It reduces users waiting time to know what the status of system is. In less time work will be more.

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- 1. Fornell C., Westbrook A. Robert, The Vicious Circle of Consumer Complaints, journal of Marketing, (summer)(1984), 68-78.
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