



VIT[®]

Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)

OBJECT ORIENTED ANALYSIS AND DESIGN PROJECT REPORT

TOPIC: COMPLAINT MANAGEMENT SYSTEM IN
COLLEGES

BY

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ABSTRACT

Online complaint system basically comprises the use of electronic communications technologies such as the internet, in enhancing and advancing the user access to services. In most developing countries are going for online complaint services in all accepts. One of the identified problems is the poor quality of service in managing user complaints. This study proposes an online complaint system Model as a solution. In this study, a case study of a complaint management system at VIT UNIVERSITY has been used as a reference to prove that online complaint system Model can enhances the access of services. The objective of this study is the development of an Online compliant system that can enhances the process and the management of user's complaints at VIT UNIVERSITY. The system has been developed using PHP as front end, Apache as web server, MySQL as database. The obtained results after testing the system shows that all the functionalities of the developed system worked properly. Thus, the SMS and web based complaint management system developed is considered to be effective.

INTRODUCTION ABOUT ONLINE COMPLAINT MANAGEMENT SYSTEM

Now-a-days the world is moving towards the brand new technologies and are getting adopted by the people. as now so far very few instructions or organizations are using this online complaint management in India .and as the ages rise upon we should update to online mode of complaint filing .so the online complaint management system is the one which enables us to file complaint online, complaint status and the admin or any authority who handles this can make note of complaints and manage them accordingly. This enables the time saving without roaming around the cabins for problem solving.

There by the online complaint management system is one of the useful tool for an organization with huge population to get to know about the problems. Present system in a college (vit university hostels) now the present system that exist or running in the university is offline mode of complaint registry. Where the respective hostel block holds its own register for the complaint filing .here the system is an offline and here the once the complaint is filed no one is responsible for that one. As if the in charge come to know that a new complaint has registered and he/she should then go for the complaint processing. If at all the in charge is not going to recognize that the problem will not be resolved.

RESEARCH METHODOLOGY

The research methodology comprises 2 phases; the first phase is the data collection which consists of collecting all relevant information to determine the user and system requirements; the second is the system design.

Data collection

Data collection has been done by two methods: literature study and interviews. Literature study has been carried out by studying various literatures related to this research topic such as scientific journals, research reports, magazines and books. Interviews has been conducted by means of questioning people who have the capacity and required information related to this research. The users of the present system are questioned to get the data.

Analysis of the user requirements

PRESENT SYSTEM ADVANTAGES AND DISADVANTAGES

ADVANTAGES

- ❖ The present complaints are offline and managed by that respective blocks supervisors.

DISADVANTAGES

- ❖ Maintaining a register for each block is somehow difficult.
- ❖ Emergency of the complaint is not identified.
- ❖ May be the block supervisor is not aware of the complaints.
- ❖ Student have to query many time does the issue is resolved or not.
- ❖ the student can't write the compliant properly
- ❖ If the complaint register is lost.
- ❖ Other students can make a fake complaint in place of others.
- ❖ Maybe it will be late to reach to the corresponding department.
- ❖ no one is accountable for the complaint

POSSIBLE MEASURES TO AVOID THE ABOVE PROBLEMS

- ❖ making available of online complaint registration
- ❖ which uses the unique user id and password
- ❖ can directly file our complaint to admin
- ❖ admin login also included

- ❖ status for a complaint filed can be seen
- ❖ the status of the complaint can only be changed accordingly by the admin
- ❖ the admin assigns the work to the respective department
- ❖ the student can post the time he is available in the room for service
- ❖ the student can make a notification again by clicking the “notify”
- ❖ student can view his previous complaints with the help of logger
- ❖ once the problem is resolved you get the notification
- ❖ The time for processing is also shown in problem details.

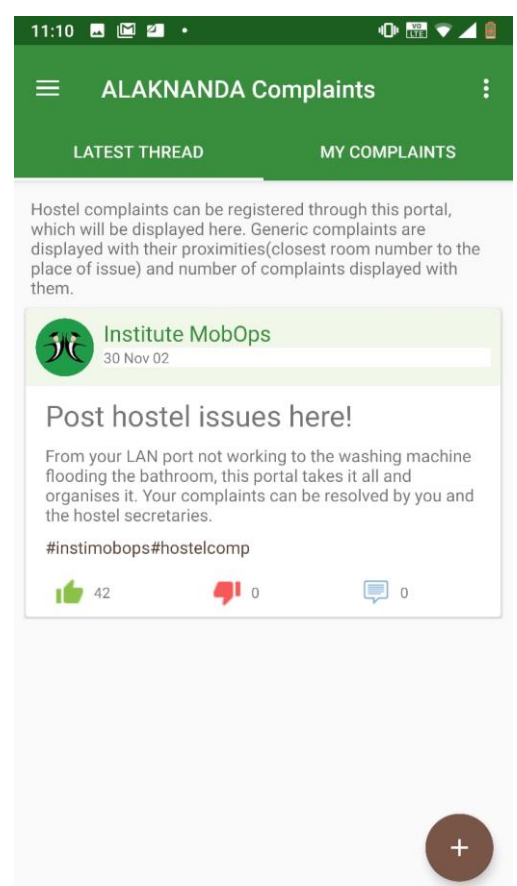
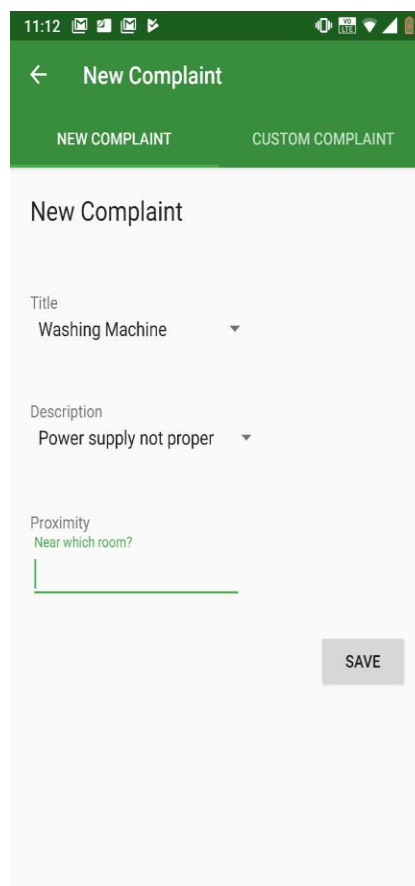
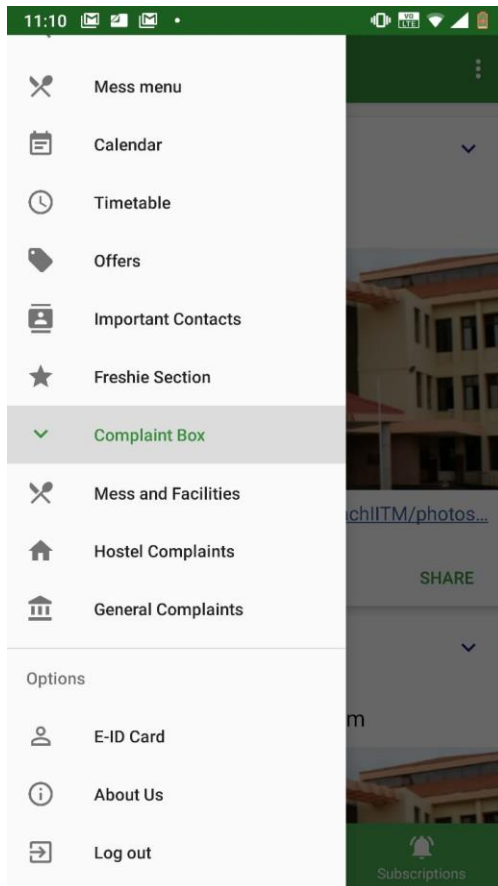
Requirements analysis

Based on the conducted interviews, it can be concluded the functional requirements are as follows:

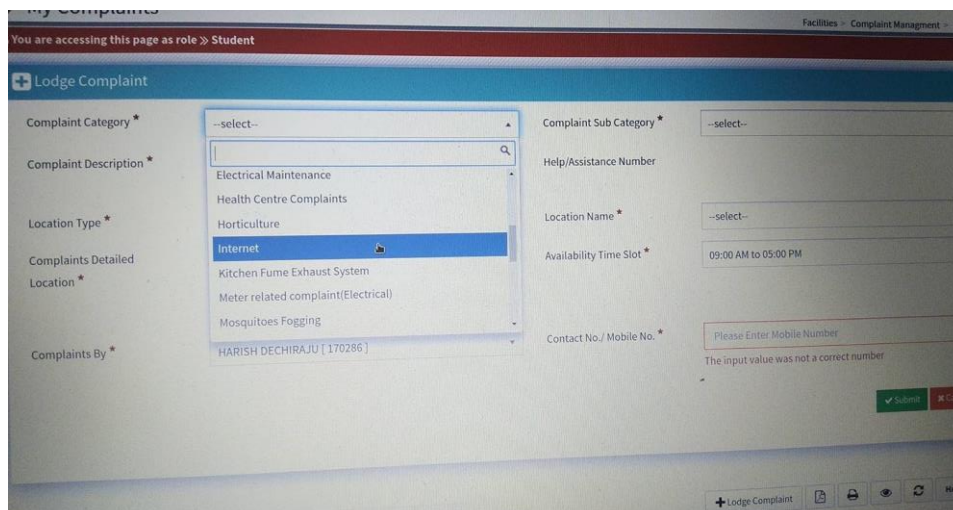
- ❖ The user should be able to access his account at any time.
- ❖ The application should be portable , it should run under different web-browsers
- ❖ The user Interface design should be simple, logical and useable by the user.
- ❖ There should be different user privilege roles.
- ❖ The application usability should be highly the result of user requirements analysis is the determination of the business process of the proposed system.

SOME COLLEGES THAT USE THE OINE COMPLAINT SYSTEM

❖ IIT MADRAS



❖ iit Kanpur hostels



National Institute Of Technology Tiruchirappalli

राष्ट्रीय प्रौद्योगिकी संस्थान तिरुचिरापल्ली

தேசிய தொழில்நுட்பப் பல்கலைக்கழகம் திருச்சிராப்பள்ளி

Save Energy, Save Water, Save Environment and Save India

Power Shutdown Notice: Every 3rd Saturday is power shutdown across

Warning

After 3 consecutive visits complaints will be cancelled./If the occupants are not available in the given time
Dampening to institute property will attract to penalty
Replacement of lamps will be made only when old lamps are handover

COMPLAINT FORM

Complaint Area*	Electrical	Dial	Air Conditioner
Student Id	<input type="text" value="114171552"/>		
Student Name	<input type="text" value="S V S LAKSHY / HANU BALU"/>		
Department	<input type="text" value="Mechanical Engineering"/>		
Date of Complaint	<input type="text" value="15-07-2019"/>		
Phone No.	<input type="text" value="98651080181"/>		
E Mail	<input type="text" value="svslakshy@gmail.com"/>		
Complain With Request To*	<input checked="" type="checkbox"/> Please select -		
Street No./Department/Household	<input type="text"/>		
Name Of Room*	<input type="text"/>		
Floor No./ Department Rooms	<input type="text"/>		
No./ Hostel Room No./ Lab Room	<input type="text"/>		
Mechanism*	<input type="text"/>		
Complaint Type	<input type="text" value="Please Select"/>		
Complaint Nature	<input type="text" value="Please Select"/>		
Name of the An	<input type="text" value="Please Select"/>		
Available Date*	<input type="text" value="Select Emergency"/>		
Available Time*	<input type="text" value="Electrical/Electronics/Electrical/Electrical"/>		
Remarks	<input type="text"/>		

[Submit] [Cancel]

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Light frame Inbox



Ajay Gokul S 5 May

Sir, The light frame in Room no 104, A part ,
Hostel 1B is suddenly hanging. Please check



callbob@snu.edu.in 5 May

to me ▾



Dear Ajay Gokul S,

Thank you for contacting callBob.

Ticket has been created for Service Request / Incident - 2019050529000214.

We have recorded your request as under:

Your request number is:	2019050529000214
Request Creation Date & Time:	05/05/2019 22:40
Contact number: *	7904652049
Issue Reported / Request for:	Show quoted text

*** Please contact IT Helpdesk in case your Contact Number is not correct or updated.**

The service request will be assigned to the concerned team. We will contact you in case we require any further information.

ANALYSIS OF EXISTING ONLINE SYSTEM

- ❖ unique userid and password for each user
- ❖ in some systems login was a fingerprint authentication
- ❖ category of the complaint so that the concerned department can handle the problem
- ❖ description of the problem
- ❖ student availability timings
- ❖ hostel room details
- ❖ workers contact details
- ❖ the complaint date and time are logged and a time estimate is given
- ❖ the logger logs the past complaints
- ❖ feedback form for after the problem is solved

System Design

- ❖ System design is the process of defining the architecture, components, modules, interfaces, and data for a system to satisfy specified requirements. The unified modeling language (UML) has been used as modeling language to provide the visualization of the system design.

User Interface Design

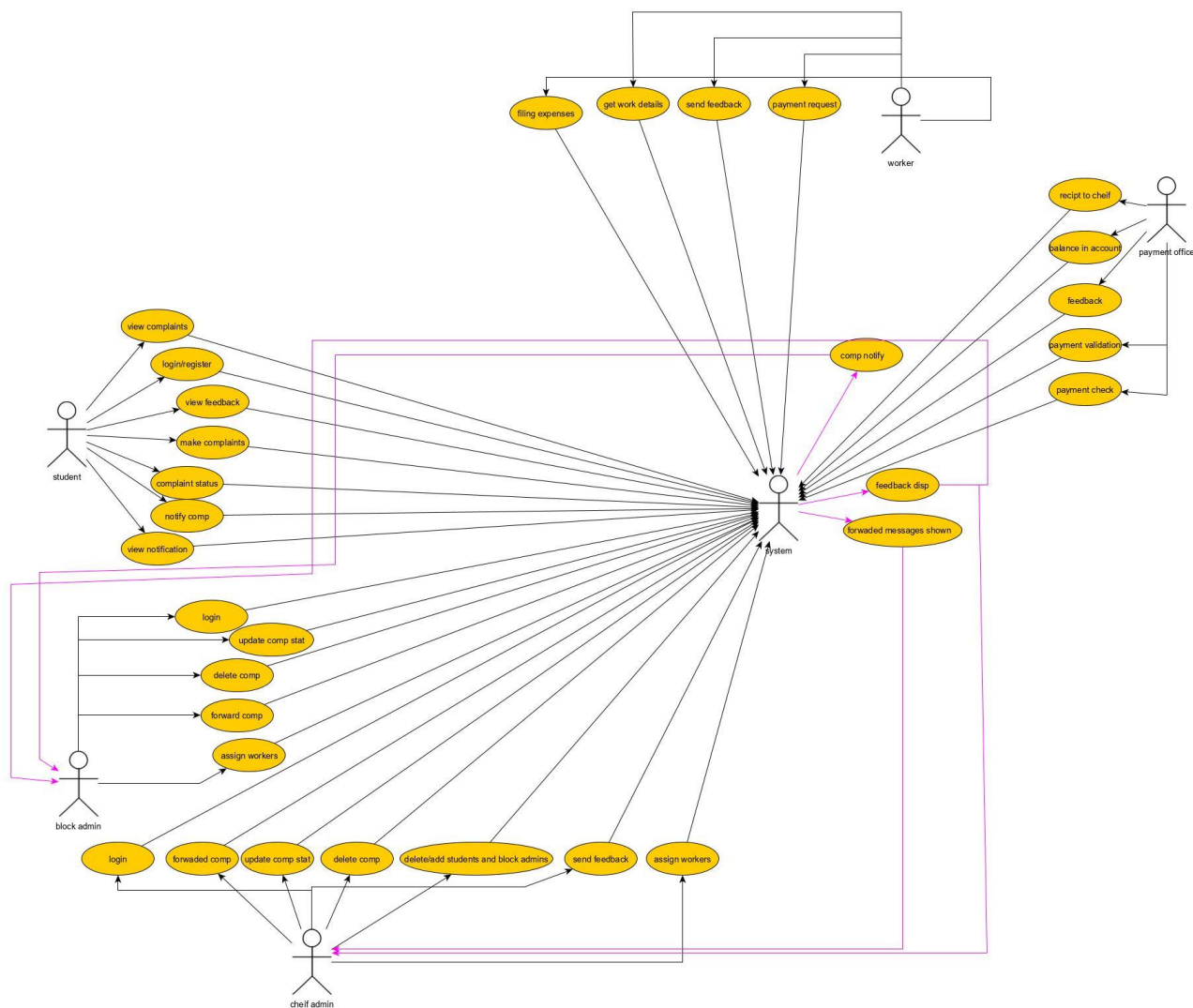
- ❖ User interface (UI) design focuses on anticipating what users might need to do and ensuring that the interface has elements that are easy to access, understand, and use to facilitate those

actions .The user interface design consist mainly in designing the forms used by users while using the system

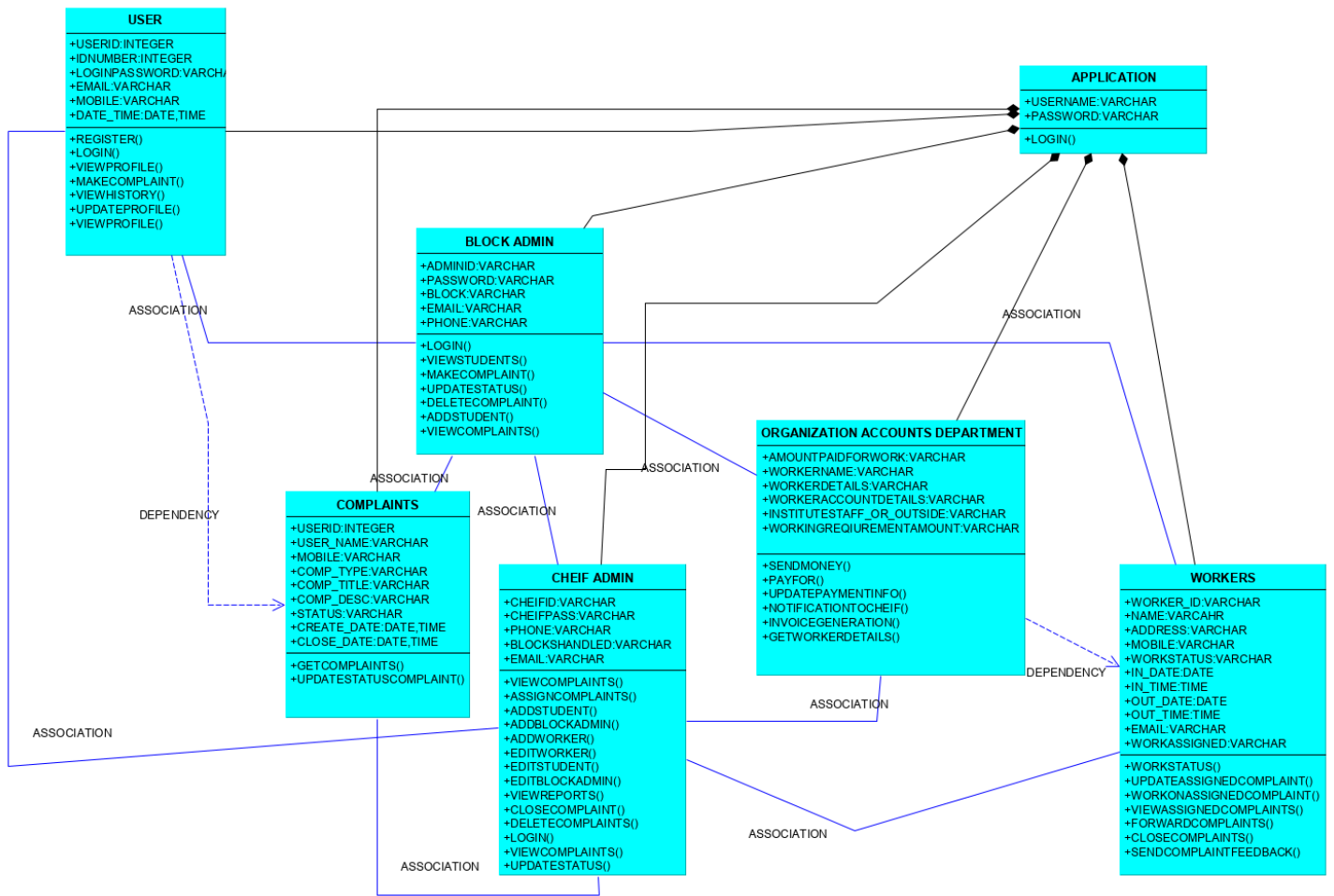
Database design

- ❖ Database is used to store user complaint and the answers to the complaints, the user's identification data and the transactions between citizens and admin in charge of replying their complaints. Database design also describes the system architecture to be built.

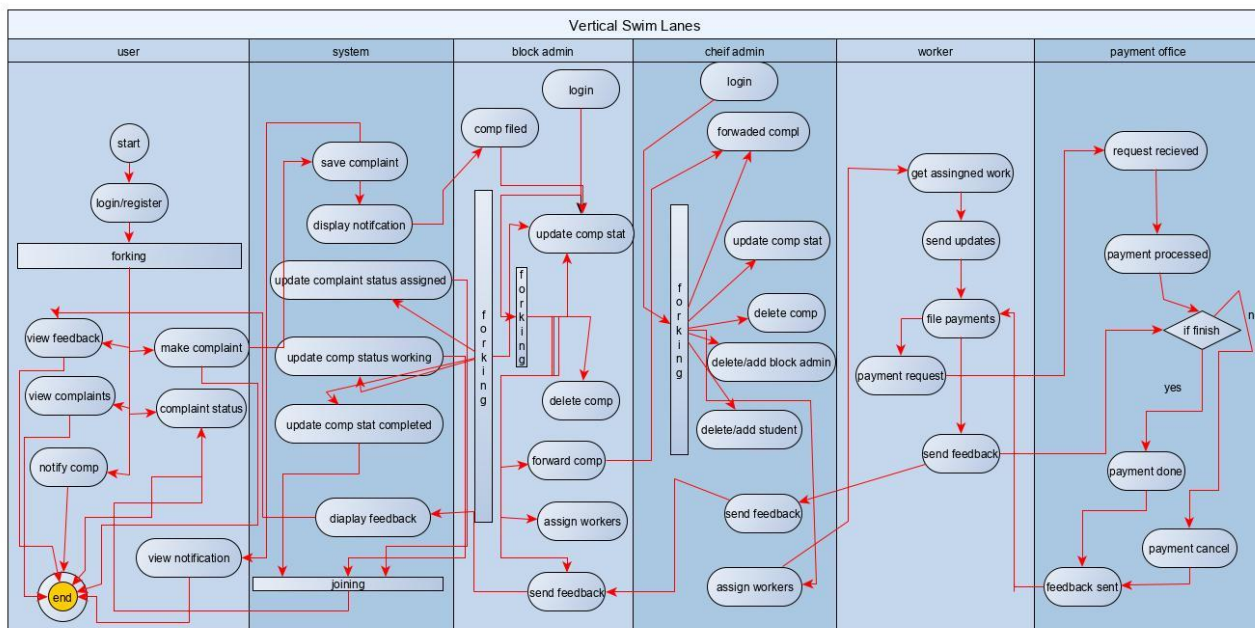
USECASE DIAGRAM



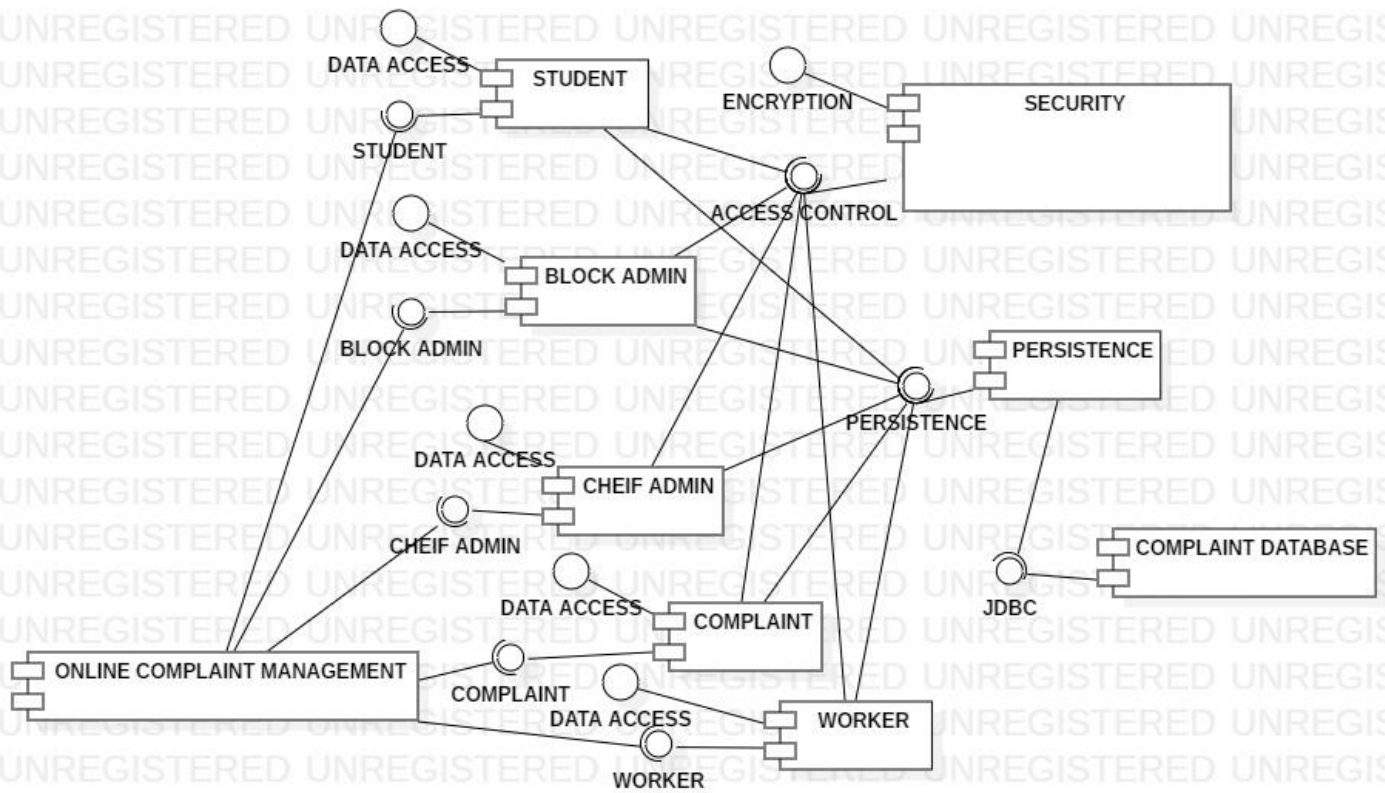
CLASS DIAGRAM



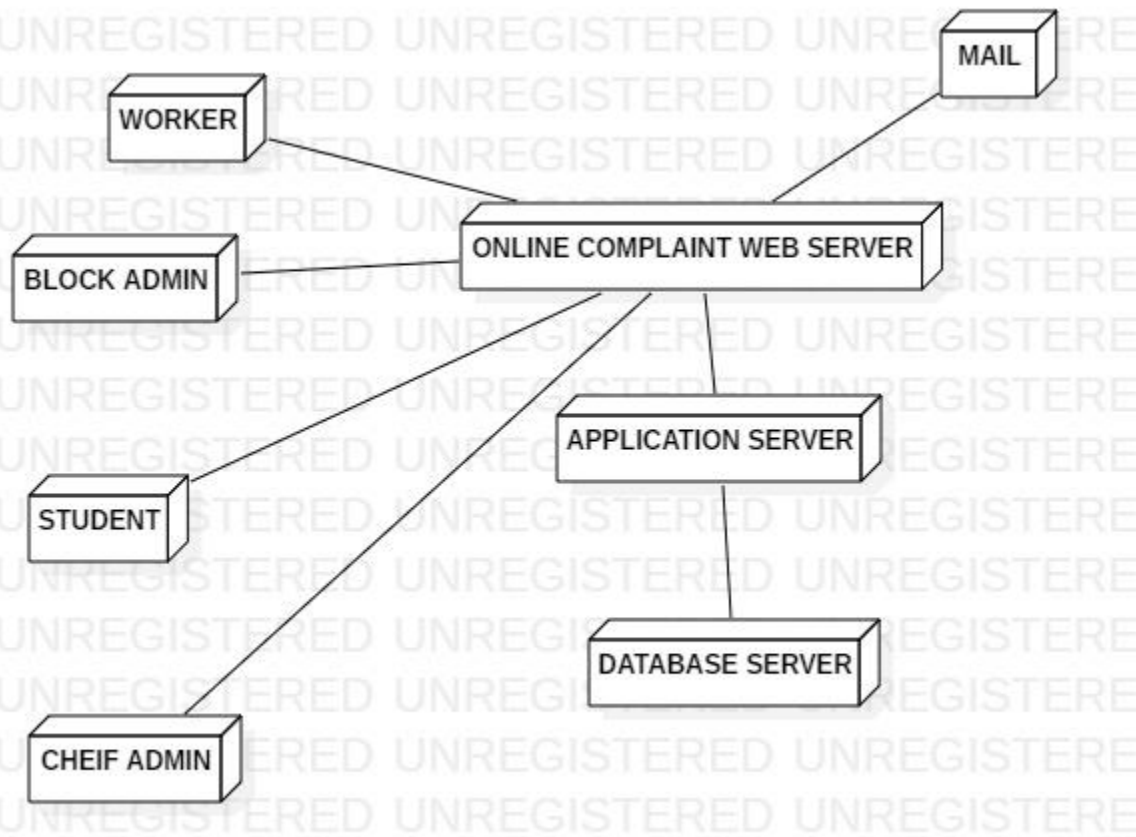
SWIM LANES ACTIVITY DIAGRAM



COMPONENT DIAGRAM



DEPLOYMENT DIAGRAM



Implementation

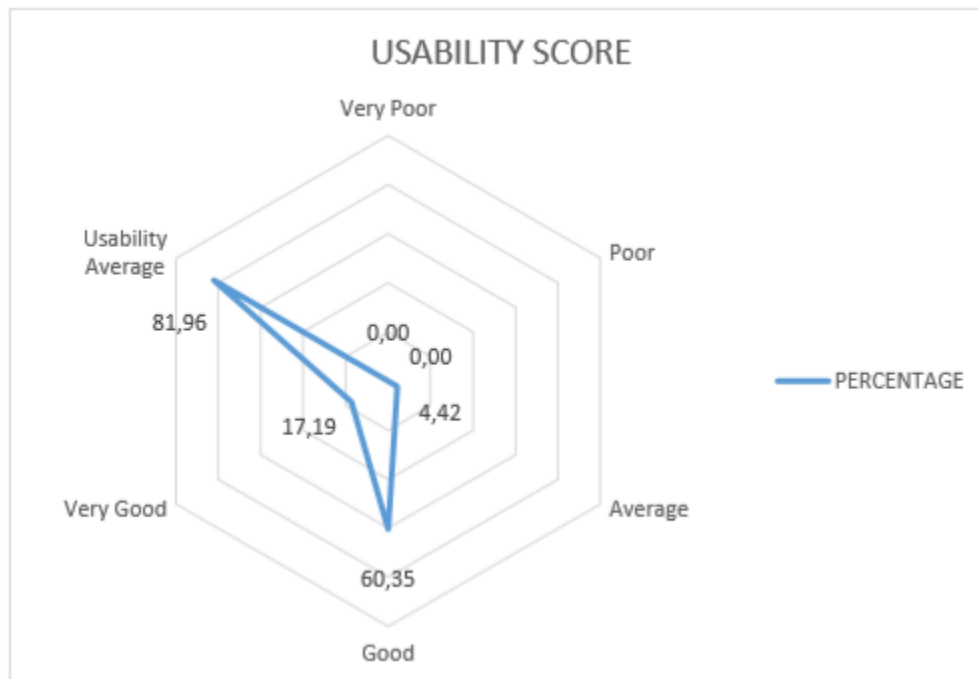
As mentioned earlier in the System design, a web based complaint management prototype has been built to support this research. The proposed system has been developed using PHP as front end, Apache as web server, MySQL as database.

RESULTS AND DISCUSSION

The developed system has been tested, according to the scope of the study and the objective of this research which mainly focus on the functionality and usability of the developed prototype of the student's complaint management system based on web, only functionality, portability and usability test has been carried out. The functionality testing consists of testing all the links in web pages, database connection, forms used in the web pages for submitting or getting information from user. The result of functionality testing is shown in

Database connection	Link : config.php	Connection to complain_db	success
Database testing	Link : functions.php	queries are executed correctly, data is retrieved correctly and also updated correctly	success
Accessibility to the proposed system	http://localhost/cms2	welcome page	success
Make complaint via SMS	Link : functions.php	Complaint registered	success
Make complaint online	Link: makeComplain.php	Make complaint form	success
Send feedback to citizen	Link: autoreply.php	Feedback SMS sent to citizen	success

USABILITY SCORE VIEW



CONCLUSION

Based on the result of the study that has been carried out, it can be concluded that:

1. The web based application for managing students complaints at VIT has been designed and built using html, CSS, and PHP as programming language, apache server, and MySQL database.
2. The obtained result after the testing phase shows that all the functionalities of the built system run properly, the built prototype of system is portable and highly usable with a rate of usability of 81.9%.
3. The proposed and built system's prototype is a web based e-government model and through this model the access to services by the students of the VIT could be enhanced.
4. Based on the result of the study that has been carried out, it can be concluded that the objective of this research has been achieved successfully with the best practices in designing and building a usable prototype of a web based application for managing and handling student's complaints at VIT.

REFERENCE

- [1] Susanto, T.D. & Goodwin, R.D., 2006, An SMS-based e-Government model. Proceedings of the Eighth International Conference on Enterprise Information Systems, 185-188.
- [2] United Nations (UN) E-Government Survey, 2014, <http://publicadministration.un.org/egovkb/en-us/Reports/UN-E-Government-Survey-2014>, accessed on 28th April 2016.
- [3] Dennis, A, Wixom B, Roth R., 2012, System Analysis and Design. Fifth Edition.
- [4] Garrett's, J. J., 2011, The Elements of User Experience: User-Centered Design for the Web and Beyond (2nd Edition).
- [5] Morville, P and Rosenfeld, L, 2006, Information Architecture for the World Wide Web: Designing Large-Scale Web Sites. (3rd Edition).
- [6] Gemino, A. and Parker, D., 2009, Use case diagrams in support of use case modeling: Deriving understanding from the picture", Journal of Database Management, 20(1), 1-24.
- [7] Bell, D., 2004, An introduction to structure diagrams in UML 2, <http://www.ibm.com/developerworks/rational/library/content/rationalEdge/sep04/bell/accses sed on16th May 20016>.
- [8] UML activity diagram, 2014, http://www.tutorialspoint.com/uml/uml_activity_diagram.htm, accessed on 13th May 2016.
- [9] Dumas, J.S. & Redish, J.C., 1999, A practical guide to usability testing. Exeter: intellect.
- [10] Lewis, J.R., 1995, IBM Computer Usability Satisfaction Questionnaires: Psychometric Evaluation and Instructions for Use. International Journal of Human-Computer Interaction 7(1), 57-78
- [11] Schach, S. R., 2008, Object-oriented software engineering, index. ISBN 978-0-07-3523330