BORANG PENGESAHAN STATUS TESIS^

JUDUL: <u>HKT ICT MANAGEMENT SYSTEM FOR COMPLAINT AND REQUEST (HKTIMS)</u>

SESI PENGAJIAN: <u>SEMESTER 1 TAHUN 4(2006)</u>

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Tesis dimaksudkan sebagai Laporan Projek Sarjana Muda (PSM)

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HKT ICT MANAGEMENT SYSTEM FOR COMPLAINT AND REQUEST

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This report is submitted in partial fulfillment of the requirements for the
Bachelor of Computer Science (Software Engineering)

FACULTY OF INFORMATION AND COMMUNICATIONS TECHNOLOGY
KOLEJ UNIVERSITI TEKNIKAL KEBANGSAAN MALAYSIA
2006

DECLARATION

I hereby declare that this project report entitled

HKT ICT MANAGEMENT SYSTEM FOR COMPLAINT AND REQUEST (HKTIMS)

is written by me and is my own effort and no part has been plagiarized without citations.

STUDENT   : _____   Date: 24/11/2006

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DEDICATION

To my God, Allah SWT
To my greatest Idol, Rasulullah SAW

ACKNOWLEDGEMENT

In the name of Allah the Almighty and most Merciful

First and foremost, I would like to praise upon Allah for letting me complete my PSM I project on time and with success. Next, I would like to express my gratitude to my supervisor for Projek Sarjana Muda (PSM). Pn Zarita Bt Kosmin, for helping and guiding me to understand the details for report writing and also the development of my project. I would also like to thank my beloved family for giving me support at all times.

Last but not least, I would like to convey my special thanks to all my friends and everyone involved for helping and giving me advice and cooperation throughout my project.

ABSTRACT

Hospital Kuala Terengganu ICT Management System for Complaint and Request (HKTIMS) is a system that is developed to enhance the current manual systems. By referring to its requirement, this system is developing to the Hospital Kuala Terengganu. .Using this system gives much more advantage when compared to using manual system. Actually ICT Unit of Hospital Kuala Terengganu doesn't have the suitable system to record and verify the complaint and request status. Most of HKT Staff make complaint and request by phone and staff ICT unit only used whiteboard to take note the user's complaint and request. .Not to mention, the interfaces are more user-friendly, thus saves time to manage the staff complaint or request. HKTIMS provides straight forward approach that does not require users to manage and attend to many steps involved as was in the manual method used before. Instead, HKTIMS eases the business process by providing GUI interfaces such as buttons, dropdown lists and inserting input in text boxes. The methodology that will use to develop HKTIMS is (Rational Unified Proses) RUP and Rational Rose will use as tool. HKTIMS is client-server system that allow user from Hospital Kuala Terengganu to access and use this system in Hospital Kuala Terengganu.

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LIST OF ABBREVIATIONS

HKTIMS	-	HKT ICT Management System
HKT	-	Hospital Kuala Terengganu
IT	-	Information Technology
KUTKM	-	Kolej Universiti Teknikal Kebangsaan Malaysia
LAN	-	Local Area Network
GB	-	Giga Byte
GHz	-	Giga Hertz
PC	-	Personal Computer
PSM I	-	Projek Sarjana Muda I
PSM II	-	Projek Sarjana Muda II
RAM	-	Random Access Memory
RUP	-	Rational Unified Proses
URL	-	Uniform Resource Locator
OOAD	-	Object Oriented Analysis And Design
IP	-	Internet Protocol
PSM	-	Projek Sarjana Muda

CHAPTER I

INTRODUCTION

This chapter will discuss about the project in brief. They include discussions on project background, problems statement, objectives, scopes, project significance, expected output, and conclusion.

1.1 Project Background

Unit Teknologi Maklumat (ICT) *Hospital Kuala Terengganu* (HKT) is a department in HKT which has responsibility to manage and handle computer, networking, hardware, system and other things related to ICT. ICT Unit is a new department in HKT and has been established in December 2003. There are only four staffs in the ICT unit. They are the manager (Pn.Rogayah Hasim), the assistant ICT manager (Al- Kamal Taib), and two technicians (Shahril and Suriani)

During the industrial training in *Hospital Kuala Terengganu*, it has been seen that most of the systems used are by networking (Client- Server) and web-based system.

For example the system such as SPPP (*Sistem Pendaftaran Pesakit-Pesakit*), E-Perolehan and *Sistem Penyerahan Ubat Pesakit* (SPUP) are client-server systems. This situation is an advantage because HKT has a server and client networking infrastructures. From previous observation, the ICT Unit in HKT doesn't have a system to record and manage HKT staff's complaints. They only use white board to write down the complaints.

In this project, a new system will be developed and will be named "*HKT ICT MANAGEMENT SYSTEM FOR COMPLAINT AND REQUEST*" (HKTIMS). This system will help the ICT unit to manage and detect ICT related problems in HKT. There are two types of user that will use this system .First is the administrator or ICT staff, who has responsibility to manage user information and their complaints. Second is the user that files complaint to the ICT unit. User-friendly pages will be created for admin to manage the user and complaint information. The administrator also has responsibility to handle or give feed back to the user.
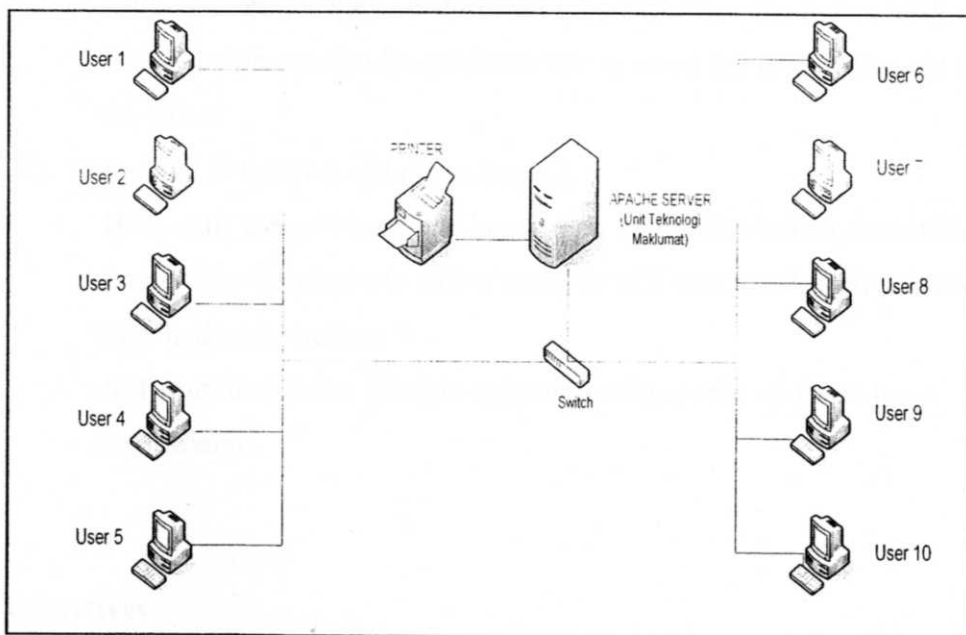
Figure 1.1: Deployment Diagram for HKTIMS

1.2   Problem Statements

Currently, the ICT unit of HKT doesn't have a system that can receive and manage HKT's staff complaint. The idea to develop this system comes from observation during industrial training in ICT unit of Hospital Kuala Terengganu. The problems seen are:

i.   ICT unit doesn't have a computerized system that can manage user complaint
   -    The current manual system being used cannot check the status of complaint whether it has been solved or not.
   -    Beside that, the manual system doesn't keep the record of previous complaints.
ii.   Problem complaint by phone
   -    Most of the complaints by HKT staffs problems are made by phone calls. Sometimes they need to wait longer because the line is busy.
   -    Using the phone also has problem that is when the ICT staff is not in the office.
iii. Checking complaint and request status
   -    HKT staff cannot check and know their complaint and request status. Sometimes they have to call or come to ICT unit to ask their status of they had make before.
   -    ICT unit don't have suitable system to manage the user's status information.

1.3   Objectives

The HKT ICT Management System (HKTIMS) will be developed in order to achieve certain objective and goal. The objectives to be achieved at the end of this project are:

i. To improve the previous manual system by providing more details information and function such as complaint, request, checking status and question.

ii. To help ICT Unit to manage well user's complaint, request and question such as record information, give respond and generate report.

iii. To allow user / HKT Staff to complaint directly to ICT Staff. This means that HKT Staff can complaint, request and question directly using the client-server system. They also can check the status of complaint, request and question directly.

1.4   Scopes

Target User

➤ There are two target users that will use this system. First is ICT Unit Staff as the administrator and second is HKT staff as the complainer.

Where to be implemented

➤ This system will be used in the ICT unit of Hospital Kuala Terengganu to handle and manage the complaint and request from staff in Hospital Kuala Terengganu.

Platform

➤ This system is a client-server system using Windows XP as its operating system, Mozila Firefox or Internet Explorer as web browser and apache as its server.

Modules List of Functions

➤ Modules for the system are as follows:
  - User / HKT Staff modules:
  • User's Staff Complaint
  • User's Request / Application
  • Question

- Admin (Unit ICT) modules
- Manage User's Complaint
- Manage User's Request / Application
- Manage User's Question
- Checking Status
- User / Admin Registration
- Report

1.4.1 Project Functionality

Generally, the system contains six main functions which are complaint, user request / application, question, checking status, registration and report.

1.4.1.1 User / HKT Staff:

i. User / Staff Complaint

There are four types of complaints:

a) Computer

This category is for making complaint about computer hardware and devices.

b) Printer

Complaint about printer problem and printer sharing problem.

c) Networking / Internet

Complaint about networking or internet problem.

d) System

Complaint about problems with several current system they use in HKT. For example "Sistem Pendaftaran Pesakit-Pesakit" (SPPP), "Sistem Penyerahan Ubat Farmasi" and etc.

ii. User Request / Application

There are three types of request / application:

a) Computer

Request for new computer or computer device.

b) Printer

Request for the new printer by HKT staff.

c) Networking / Internet

Apply internet or networking.

iii. Question

Under this function, user can ask anything about ICT. Admin will reply to their question as soon as possible.

iv. Checking Status

Under this function, user can check their status of complaint, application or question.

1.4.1.2 Admin (Unit ICT)

i. Manage User Complaint

This module is for admin to manage the user complaint. Admin has responsibility to manage complaint information and verify the status of user complaint.

ii. Manage User Request / Apply

This module is for admin to manage the user request. There are four type of their request such as computer, printer, networking and system. User have to apply first to use this system.

iii. Manage User Question

This module is for admin to manage the user question. Admin also has responsibility to respond to user's question.

iv. Checking Status

This module is for checking user complaint status. ICT staff can check the status of the complaint whether it has been solved or not.

v. User / Admin Registration

This module demand admin / user register before signing into the system. The system will verify the status of the log-in whether it's successful or not by user's username and password.

vi. Report

This module will provide report on the usage of this system and their information. These reports can be divided into monthly report and user information report.

1.5 Project Significance

This project will bring benefit to the ICT Unit in Hospital Kuala Terengganu. As a unit that manages IT field in an organization, it must have a suitable system to manage the user complaint. Upon completing this project, ICT Unit will have a much more user friendly way to control their work.

The features of the to-be system will be friendly to users in order to help them easily and efficiently communicate with the ICT department. Furthermore simple and centralize system that has many functions can help them to complain directly to the ICT unit.

1.6   Expected Output

The aim of this system is to provide an easy complaint and request service for the u HKT users and easy management for the ICT unit. The expected outputs of this system are:

1.   Easy Complaint System.

   User can complaint directly to ICT department by using this system. Complaint using this system also safe time than by using phone.

2.   Easy Request System.

   A registered user is also allowed to select the types of service, internet, networking, computer and hardware. An easy request system can help them to make request without delay.

3.   Easy to manage.

   The admin or ICT department who has responsibility to manage user complaint and request can manage them more dynamic, smoothly and effiently compared to the manual system that they are currently using.

1.7   Conclusion

In future, the system can be extensible for more usage. Upon completing the project, it is expected that the system will be widely used as the main way to complain to the ICT unit. With its friendly and dynamic system, it will surely offer the users a more convenient and efficient way, totally different from the manually system that they are currently using.

CHAPTER II

LITERATURE REVIEW AND PROJECT METHODOLOGY

Literature study is essential to make sure the deployment of the system is reliable and logical. The report that is written is based on real situation and new finding. Literature review is the way to improve existing system and use the technology studied to develop new system. This literature review obtained by searching on the internet, books and paperwork. The collected information is analyzed to make sure all the information is useful.

2.1 Introduction

The literature review and project methodology is a chapter that describes the analysis and finding on the case study or passed research that relates with this project, HKT *ICT MANAGEMENT SYSTEM FOR COMPLAINT AND REQUEST* and it also review the selected approach or methodology to be used in developing this system in detail.

2.2 Fact and Finding

An effective complaint management system is an essential part of quality public-sector service. Complaints and request are valuable sources of information that organizations can use to improve program delivery and service, (Maria C. Moya Acting Ombudsman, Alaska November 1998).

To set complaints in context, government departments exist to serve the public and the public has a right to expect quality programs and services. Most

people agree on some basic principles of good public-sector service, including economy, efficiency, effectiveness, fairness, impartiality, prudence, responsiveness and, more recently, continuous improvement.

Effective complaint management benefits an organization in four important ways it identifies areas that need changing and allows clients to provide input to service improvement; it gives the organization a second chance to serve and satisfy dissatisfied clients; it provides an opportunity to strengthen public support for the organization; and it helps reduce an organization's workload. (Holden, 2005.

Research suggests that relatively few dissatisfied clients bother to complain. As a result, every complaint received may provide a window into a much larger pool of dissatisfaction. By dealing with the causes of complaints, the organization can further reduce both the number of complaints and dissatisfaction with its program delivery or service. Dissatisfied clients often speak poorly of an organization. The reputation and credibility of the government, and the public sector generally, may suffer as well organization handles complaints will depend on the resources available and on other government and departmental priorities.

Organizations with limited resources must deal with complaints efficiently. Using a system to manage complaints is more effective than providing ad hoc responses, which can lead to more serious complaints. A complaint system also allows you to feed information into the continuous improvement process, so that the organization can prevent similar future complaints.

2.2.1   Current System and Technology Study

From observation and knowledge about It field, it is seen that open sources in programming, database and operating system is suitable to develop client-server system. This is because these open sources are free, easy to learn and make programming more easily. PHP is one of the popular programming languages today. It is very user friendly and helpful to support client-server system in web browser.