

TESIS[^] APPROVAL STATUS FORM

JUDUL: HELP DESK SYSTEM

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HELP DESK SYSTEM

YEOW SIAN LI

This report is submitted in partial fulfillment of the requirements for the Bachelor of Information Technology (Software Development).

**FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY
KOLEJ UNIVERSITI TEKNIKAL KEBANGSAAN MALAYSIA
2004**

DEDICATION

*To my beloved parents and friends who have
inspired me throughout my journey of education*

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ABSTRAK

Projek ini dibangunkan untuk menghasilkan satu sistem *Help Hesk* bagi membantu organisasi tertentu untuk berkomunikasi secara berkesan, menyelaraskan and membuat laporan tentang masalah pelanggan secara automatik. Masalah yang dikenalpasti secara kajian dilakukan adalah tiada pembahagian tugas kepada staf secara automatik; masalah pelanggan tidak disimpan untuk rujukan masa hadapan dan tiada menyediakan *website* untuk menyenangkan pelanggan membuat aduan tentang masalah yang dihadapi. Dengan adanya sistem *Help Desk* ini, pengguna dapat membuat aduan dan mendapat pertolongan melalui *website*. Pengguna juga boleh mengenalpasti masalah mereka dengan merujuk kepada informasi tentang cara penyelesaian masalah secara langsung. Dengan ini, beban staf pentadbiran syarikat dapat dikurangkan kerana pembahagian tugas kepada staf yang berkaitan dapat diselaraskan melalui e-mel. Selain daripada itu, masalah pelanggan akan disimpan untuk kegunaan rujukan pada masa hadapan. *Waterfall model* daripada metologi *SDLC* dan notasi untuk membuat analisis iaitu *Unified Modeling Language (UML)* telah digunakan. Secara umumnya, sistem ini mengandungi enam modul utama, iaitu Sistem pentadbiran, penyelesaian masalah, menghantar e-mel, penghasilan laporan, menambah pengguna dan menukar kata-laluan. ASP.NET, pangkalan data Oracle dan Crystal Report 9.0 digunakan untuk membangunkan sistem *Help Desk* ini.

ABSTRACT

The purpose of this project is to develop a help desk system in helping the organization effectively communicate, organize, track and report issues. This help desk system track the problems that users having and provide support to the user have purchased a particular product. The problems were identified during research some existing systems. The problems include no automatically task assignment; the problems are not recorded as reference for future use and can not log complaints via the provided website. The users can use the system to identify problems and ask for assistance. They can also identify and solve their own problems refer to the information provided at the website. With the help desk system, the burden of the administrator could be lessen, since the system will auto generate and assign the job by sending email to the technicians of the center. Users can log complaints or find solution via the system. The problems of the customers are recorded for the future references. This model has been developed using the waterfall model of SDLC methodology and the notation used during the requirement analysis is Unified Modeling Language (UML). This system consists of six major modules, System administration module, Solution mapping module, Send email module, Report Generating module, Add New User module and Change Password module. ASP.NET, Oracle database and Crystal Report 9.0 were used to develop the system. Lastly, this system is hoped to be able to benefits the users.

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LIST OF ABBREVIATIONS

ASCII	-	American Standard Code for Information Interchange
ASP	-	Active Server Pages
GUI	-	Graphical User Interface
HTTP	-	Hypertext Transfer Protocol
IIS	-	Internet Information Services
IMAP	-	Internet Message Access Protocol
MTA	-	Message Transfer Agent
MUA	-	Mail User Agent
PDC	-	Personal Digital Cellular
PSM	-	Projek Sarjana Muda
POP	-	Post Office Protocol
RFC	-	Request For Comments
SDLC	-	System Development Life Cycle
SMS	-	Short Message Service
SMTP	-	Simple Mail Transfer Protocol
SMPP	-	Short Message Peer to Peer Protocol
SMS	-	Short Message Services
SNMP	-	Simple Network Management Protocol
SNPP	-	Simple Network Paging Protocol
TDMA	-	Time Division Multiple Access
TCP/IP	-	Transmission Control Protocol/Internet Protocol
UML	-	Unified Modeling Language
USDP	-	Unified Software development Process
VB.NET	-	Visual Basic.NET

- WTS - Wireless Trucking Solutions
- XML - Extensible Markup Language

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CHAPTER I

INTRODUCTION

1.1 Preamble/Overview

Help Desk System for computer Service Center is a web-enabled Helpdesk Information Management System. A help-desk system allows a company to track the problems that users are having. The role of the help desk system is to provide support for employees within an organization, or to support users that have purchased a particular product.

The Help Desk System is developed to help the organization effectively communicate, organize, track and report issues. With web-based Helpdesk System, organizations can access information at anytime and anywhere.

The main problems were identified after having research for some existing systems. The assign task to technician by email is still done by administrator manually when customers make complaints. Assign jobs by email to technician is easy and cost saving, but it burden administrator a lot.

Besides, customer just can log complaints and incidents through phone call or by send email to the specific email address of the service center. The poor customer service problem occur when the administrator is too busy till forget to record the

customers' problems or forgot to assign the task to technician. Besides, no records are kept for future reference. As a result, it is not easy to see which kinds of problems arises occasionally or repeatedly and thereby take necessary action before problems become bigger.

1.2 Problem Statement(s)

The problems which organizations now facing include:

- i. Filing method still used to store customers information.
- ii. The job assignment is assigned to technician manually by the administrator when customers log complaints or problems.
- iii. The customer log complaints or problems to the service center by makes phone call, email or go to the center.

For this improved and newer version of the help desk system, customers' information will be stored in the database. The job assignment to technician will automatically send to the technicians. The customer can log for complaints or problem not only by phone call and email but also via the website.

Therefore, the Help Desk System may solve the problems which are encountered by the service center for its business improvement.

1.3 Objectives

The project objectives are to solve the problems of the existing system.

The system can benefit both customer and administrator of the system. The system to be developed can lessen the burden of the administrator to do job assignment. While the customer now can log complaints, problems or assist for assistance not only by phone call and email, but also via the website.

This project is developed to achieve the following objectives:

- i. Provide a helpdesk system application which can help the service center effectively communicate, organize, track and report issues to improve the current management system.
- ii. Allows administrator to maintain, manage, access and view reports for all the problems.
- iii. Allows administrators and customers to view the problem solution for the problems.
- iv. Allows customer to rises complaints, problems or assist for assistance easily via website.
- v. Analyze the problems of customer to provide better service to customer based on the monthly generated Crystal Report.
- vi. To provide better services for customer in the future.
- vii. To produce user friendly interface.