

**Web Based Help Desk System for UUM CAS Postgraduate Help Desk**

**Department Based On Problem Tracking Technique**

**Fadi Shaar**

**UNIVERSITI UTARA MALAYSIA**

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**Web Based Help Desk System for UUM CAS Postgraduate Help Desk**  
**Department Based On Problem Tracking Technique**

**A thesis submitted to the Academic Dean Office in partial fulfillment**  
**of the requirement for the degree Master of Science**

**(Information Technology)**

**Universiti Utara Malaysia**

**By**

**Fadi Shaar**

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## **ABSTRACT**

The current traditional help desk mechanisms used in UUM CAS postgraduate help desk department at UUM are no longer enough to support the increase of the interactions between the users and the technical support employees because there is no standard and organized process for handling the users' requests. This paper proposes a technical support system that can help students, staff and even lecturers at UUM CAS Postgraduate department to freely interact with the customer service employees by sending their requests and inquiries through a web-based help desk system. In the other side, this proposed system also helps to increase the productivity of the employees in the customer service department since each specific ticket or problem is received by a specific group of the technical support employees. In order to achieve that, we suggest to use a problem tracking technique. This technique enables the users to send their inquiries to the proper person in the customer service department. Moreover, this technique aims to track the problem or ticket until it gets their direction to the proper person of the customer service employees who have the ability to solve it within a convenient time.

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## **LIST OF APPREVIATION**

<b>BLL</b>	Business Logic Layer
<b>CLR</b>	Common Language Runtime
<b>DLL</b>	Dynamic Link Library
<b>FAQ</b>	Frequently Asked Questions
<b>JIT</b>	Just-In-Time Compiling
<b>IL</b>	Intermediate Language
<b>IDAL</b>	Interface Data Access Layer
<b>OOP</b>	Object Oriented Programming
<b>SQL</b>	Structured Query Language
<b>T-SQL</b>	Transaction-Structured Query Language
<b>UML</b>	Unified Modeling Language

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.0. Background**

Nowadays, a technical support service plays a main role in a University's ability to assist their students who really need some information and technical support guides. In the meanwhile, Educational institutions face the challenge of providing technical support to faculty, staff, and students for answering their questions and responding to their inquiries and problems with a suitable solution and within a convenient time (Cruess, 2002 and Niedzwiecki & Peterson, 2002). Moreover, the main goal of customer service is to provide better overall service to the customer when they contact the customer service employees, either through email, or a phone call. The most important thing is to make sure that everyone is satisfied with the first answer they receive with a correct solution in a timely manner. In addition, technical support employees should be proactive and resolve as many issues as they can before the customer even notices that something may have gone wrong. The customer should notice an improvement in the turnaround time when a help request is submitted, as well as a reduction in the number of times they have to ask for help until he/she gets the solution (Schauer & Thompson, 2004).

This proposed study makes an enhancement in the current technical support mechanism used by the UUM Postgraduate technical support department. It is conducted based on Problem Tracking Technique which helps to ensure consistent and quality support, tracks the information and problems that come into the Help

The contents of  
the thesis is for  
internal user  
only

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