LECTURE ASSESSMENT SYSTEM (MANAGE STUDENT ATTENDANCE MODULE AND MANAGE MARKS MODULE)

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LECTURE ASSESSMENT SYSTEM
(MANAGE STUDENT ATTENDANCE MODULE AND MANAGE MARKS MODULE)

MOHD ZAINURI BIN SARINGAT

A thesis submitted in fulfillment of the requirements for the award of the
MSc of Real Time Software Engineering

Centre for Advance Software Engineering
Faculty of Computer Science and Information System
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SEPTEMBER 2003

"I hereby declare that I have read this technical writing and in my opinion this technical writing is sufficient in terms of scope and quality for the award of the MSc in Real Time Software Engineering."

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DECLARATION

" I declare that this technical writing entitled "Lecture Assessment System (Manage Student Attendance Module And Manage Marks Module)" is the result of my own research except as cited in the references. The technical writing has not been accepted for any degree and is not concurrently submitted in candidature of any other degree."

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"Praise the Name of Allah, the Most High, Who Creates and Proportions Well, Who Determines and Guides"

Special Dedication Of This Grateful Feeling To My Beloved Family

My Mother Misnah Bte Haji Taib,
My Father Haji Saringat bin Ethnin.

For Their Love And Support.

Also This Special Appreciation To

My Loving Wife Maznah Bte Haji Ismail,
My Daughter Nuranisah Bte Mohd Zainuri,
My Son Muaz Bin Mohd Zainuri,
And
My Newborn Firhan Ali Bin Mohd Zainuri.

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ABSTRACT

Kolej Universiti Teknologi Tun Hussein Onn (KUiTTHO) had been awarded the Quality Management System Standards ISO 9001: 2000. Unfortunately, there are still some problems on its student's assessment. At the end of a semester, mostly happen certain students had no marks but they had registered on the Student Information System. When comes to the end of the semester, there is too late to solve this problems. Its happens because of the students register the subject but they did not attend the class and sometime they attended on other class which is the same subject. In certain case, the lecturer miss transfer the students mark to the computer form. The management had introduced a general format to the lecturer to keep the students assessment record. After implement this format, the same problem still happened but the number of cases is reducing. The Lecture Assessment System becomes an alternative way to overcome this problem. Through this system, the management can monitor the students' progress marks with their attendance. Furthermore, the Lecture Assessment System is a web-based application.

ABSTRAK

Kolej Universiti Teknologi Tun Hussein Onn (KUiTTHO) telah dianugerahkan Piawai Kualiti Sistem Pengurusan ISO 9001: 2000. Namun begitu masih terdapat kelemahan dalam pengurusan penilaian pelajar. Terdapat diakhir semester segelintir pelajar yang mendaftar matapelajaran dalam Sistem Maklumat Pelajar tetapi tidak mempunyai markah. Ia tidak seharusnya berlaku bila sampai diakhir semester. Keadaan ini berlaku kemungkinan disebabkan pelajar tersebut hadir ke kelas lain atau disebabkan kecuaian pensyarah ketika mengisi borang komputer. Pihak pengurusan telah memperkenalkan format yang sama untuk semua pensyarah dalam menyimpan penilaian pelajar tetapi ia masih tidak dapat mengatasi masalah tersebut. Namun ia dapat mengurang bilangan kes yang berlaku. Sistem Penilaian Syarahan boleh dijadikan satu langkah bagi mengatasi masalah tersebut. Penggunaan sistem ini pemantauan terhadap permarkahan dan kehadiran pelajar dapat dilaksanan dari masa ke semasa. Sistem Penilaian Syarahan adalah berorentasikan laman web.

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CHAPTER 1

INTRODUCTION

1.1 Company Background

This part will give brief descriptions about the company background. It includes the type of company business, its organization structure and its experience in software development, software engineering technology and so on.

1.1.1 Introduction of KUiTTHO

Kolej Universiti Teknologi Tun Hussein Onn (KUiTTHO) is formally known as Polytechnic Staff Training Center or Pusat Latihan Staf Politeknik. It is formed and managed jointly by the Universiti Teknologi Malaysia and the Ministry of Education to train engineering lecturers for the Polytechnic under the 6th Malaysian Plan.

Due to its significant role and contribution in producing qualified polytechnic lecturers as well as the government's trust towards the capability of the organization, the training center was officially upgraded to Institut Teknologi Tun Hussein Onn (ITTHO) on 12th April 1996 by Minister of Education, Dato' Seri Najib Tun Abdul Razak. It is named after the third Prime Minister of Malaysia, the late Tun Hussein Onn.

With the government's trust as a motivation, ITTHO kept on moving ahead with excellent creative and innovative programmes. Thus, on 27th September 2000, the cabinet decided to award the status of ITTHO to full pledge public university under the Section 20 of the University and University Colleges Act 1971 to fulfill the demand of producing highly qualified professionals and technocrats in the fields of engineering and technology. The inaugural announcement of Kolej Universiti Teknologi Tun Hussein Onn (KUiTTHO) was made on 30th September 2000 by the Minister of Education, Tan Sri Dato' Seri Musa bin Mohammad.

Information of KUiTTHO is in the website in way to introduce KUiTTHO to the world. Its can be surfed at http://www.kuittho.edu.my.

1.1.2 Introduction of Information Technology Centre

The Information Technology Centre was established at KUiTTHO with a mission to coordinate the integration computerization planning for each faculty, department, unit and center. It's had started operation in December 1994 and until now, its had a wide campus link with based on a Fiber Optic Backbone, the UTP and Coaxial cable. This link is also interrelated with the outside world through a leased line with 512 KBPS speed and was upgraded to 2 MBPS speed at the end of 2001.

There is a network server system running through a backbone fiber optic line which is able to support data until 100 MBPS by using the Fast Ethernet Technology and it is in the process of upgrading to GBIT technology which is able to reach a maximum of 1000 MBPS speed. The development of the high-speed link system is essential to implement the video streaming Technology and online which needs highly recommended specifications in order to be effective.

As the coordinator for the integration of computerization for all staffs at KUiTTHO, Information Technology Center had defined their major objectives to achieve. There are:

i) Provide facilities and technology services to the KUiTTHO.

ii) Handling and give basic training to the community of KUiTTHO especially on office automation such as Word, Excel and PowerPoint.

iii) Give support and advice on computer technology and related fields including on purchasing computer equipments for faculty, department and unit.

iv) Provide computer services to all staffs including the supporting and academic staffs at ration of 1 to 1 and the students at a ratio of 1 to 5.

1.2 Organization Structure

Information Technology Centre consists of tree main unit with 41 staffs. There are Technical and Operation Unit, System Development Unit and Administration Unit. Most of each unit has subunit to support main unit. Its organization structure is illustrated as below:

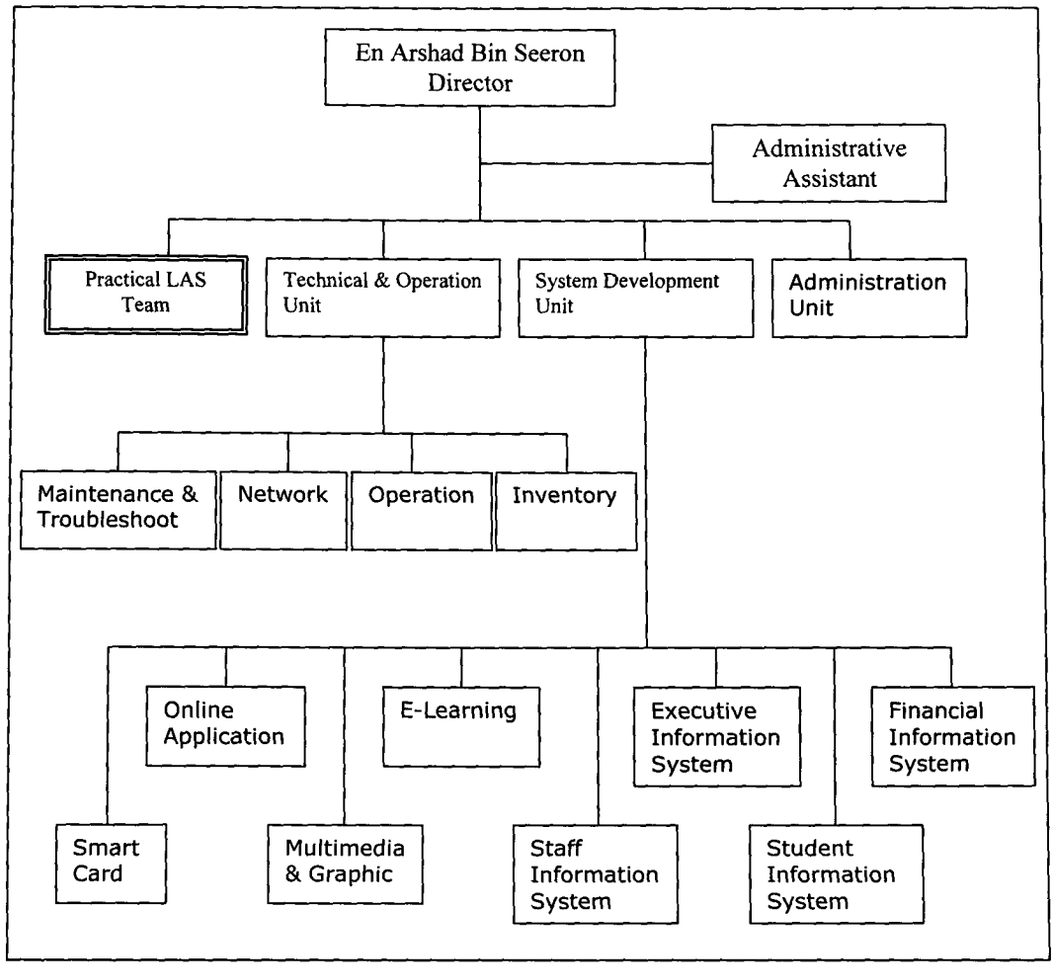

Figure 1.1: The Organization Structure for ITC

Practical team for developing Lecturer Assessment System is assigned directly under director of Information Technology Center as shown in figure 1.1. This unit is created as temporary just for this project. This unit has three members, which is the writer as the leader for this practical team and assist by the Norhanim Bt Selamat and Noraini Bt Ibrahim. They are practical student from the Centre for Advanced Software Engineering, Universiti Teknologi Malaysia (CASE, UTM)

CHAPTER 2

OBJECTIVE

2.1 Project Overview

This part will give brief descriptions about current system and the Lecture Assessment System.

2.1.1 Total Campus Management System for KUiTTHO

KUiTTHO had decided to implement Total Campus Management System (TCMS) that will have availability for managing the resources effectively through accurate distribution information to the users. It is a campus management system that gives advantages to management of university as a whole through data integration, an optimum resources management and preparing an efficient information technology service. This system was setup and managed by Information Technology Center.

Currently, Total Campus Management System for KUiTTHO consists of 10 subsystems. They are as listed below:

i) Student Information System
ii) Online Academic Advisor System
iii) Staff Information System
iv) Financial Information System
v) Executive Information System
vi) Online Student Information System
vii) Online Senate Meeting System
viii) Lecturer Teaching Evaluate System
ix) E-Learning
x) Library Virginia Technology System

2.1.2 Lecture Assessment System

Lecture Assessment System is a new required system to support current Student Information System and becomes one of Total Campus Management System. It is a web-based application. It provides user to access from anywhere through web. The LAS input are from Student Information System, Lecturer and Room Time Table System. Student Information System will supply information of students registered, academic advisor and subject offered. Lecturer is the main user that will retrieve list of registered students on his subject taught and took its as his attendance sheets. After class, the lecturers need to input their students' attendance to Lecture Assessment System. The lecturer also must input his student assessment. For monitoring purpose, the user such as academic management office, academic advisor or head of department can view report to see progress of attendance and assessment from time to time.