LECTURE ASSESSMENT SYSTEM (REPORT MODULE)

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#### UNIVERSITI TEKNOLOGI MALAYSIA

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# LECTURE ASSESSMENT SYSTEM (REPORT MODULE)

# NORHANIM BINTI SELAMAT

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

Centre for Advanced Software Engineering Faculty of Computer Science and Information Technology Universiti Teknologi Malaysia

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 MSc in Real Time Software Engineering."

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# **DECLARATION**

"I declare that this technical writing entitled "Lecture Assessment System (Report Module)" is the result of my own research except as cited in 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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In the Name of Allah, the Most Generous and the Most Merciful.

Special Dedication of This Grateful Feeling to My Beloved Family... Abah, Mak, Along and Her Family's, Iyah, Ina and Adik for Their Love and Support

and

to my special one, thank you for being always with me.

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#### ABSTRACT

Nowadays, basically software development for web-based assessment system is based on user requirements in a university or institution. Mostly, the existing system provided for test evaluation for a programming language or on-line assessment. But, to find a web-based system that fulfill the requirements such as able to assist the lecturers input assessment mark, to manipulate calculation automatically, to provide a list of attendance student, to produce a warning letter for an absence student and to monitor the teaching and learning progress in a university is difficult. Therefore, Lecture Assessment System (LAS) were developed to fulfill the requirements for the users in Kolej Universiti Teknologi Tun Hussein Onn (KUiTTHO) that are administration and lecturers.

## ABSTRAK

Dewasa ini, sistem penilaian pengajaran dibangunkan secara talian terus mengikut keperluan pengguna di sebuah institusi pengajian. Namun, kebanyakan sistem yang sedia ada hanya menjalankan penilaian berbentuk pengujian ke atas projek atau matapelajaran tertentu. Sistem penilaian pengajaran berasaskan talian terus yang memenuhi keperluan seperti membenarkan pensyarah memasukkan markah penilaian pengajaran, memanipulasikan pengiraan secara automatik, menghasilkan senarai kehadiran pelajar yang berdaftar, mengeluarkan surat amaran bagi pelajar yang tidak mencukupi 80 peratus kehadiran dan memudahkan pengawasan prestasi pengajaran dan pembelajaran di sebuah institusi adalah sukar ditemui. Justeru itu, Sistem Penilaian Pengajaran (SPP) dibangunkan berdasarkan kehendak pengguna setempat iaitu pihak pengurusan dan pensyarah di Kolej Universiti Teknologi Tun Hussein Onn (KUiTTHO).

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# LIST OF ACRONYMS

## ACRONYM

### DESCRIPTION

ASP		Active Server Page
API	-	Application Programming Interface
CASE	-	Centre for Advanced Software Engineering
CGI	-	Common Gateway Interface
COM	-	Component Object Model
DOM	-	Document Object Model
HTML	-	HyperText Markup Language
HTTP	-	HyperText Transfer Protocol
LAS		Lecture Assessment System
ODBC		Open Database Connectivity
OOP	-	Object Oriented Programming
PASS		Peer Assessment System
PERL	-	Practical Extraction and Reporting Language (Unix)
POP3	-	Post Office Protocol version 3
SDD	-	Software Description Design
SNMP	-	Simple Network Management Protocol
SRS	-	Software Requirement Specification
TCMS		Total Campus Management System
TCP/IP		Transmission Control Protocol and Internet Protocol
XML	-	Extensible Markup Language
SAX	-	Simple API for XML
WWW		Worl Wide Web

e

# LIST OF ACRONYMS

## BAHASA MELAYU

## **BAHASA INGGERIS**

e-Pembelajaran	e-Learning
Sistem Maklumat Akademik Pelajar	Student Academic Online System
Online	
Sistem Borang Penilaian Pengajaran	Lecturer Assessment Form System
Pensyarah	
Sistem Maklumat Eksekutif (SME)	Executive Information System (EIS)
Sistem Maklumat Pelajar (SMP)	Student Information System (SIS)
Sistem Penasihat Akademik (Online)	Academic Advisor System (Online)
Sistem Perpustakaan Virginia Teknologi	Library Virginia Technology System
(SPVT)	(LVTS)
Sistem Mesyuarat Senat Online (e-Senat)	Senate Meeting Online System
	(e-Senate)
Sistem Maklumat Staf (SMS)	Staff Information System (SIS)
Sistem Maklumat Kewangan (SKEW)	Financial Information System (FIS)

PART ONE INTRODUCTION

#### CHAPTER 1

#### **INTRODUCTION**

#### 1.1 Company Background

Kolej Universiti Teknologi Tun Hussein Onn (KUiTTHO) is the first technical college university in Malaysia located at Parit Raja, Batu Pahat, Johor. Previously, Kolej Universiti Teknologi Tun Hussein Onn well known as Polytechnic Staff Training Center or Pusat Latihan Staf Politeknik. This center formed and jointly by Universiti Teknologi Malaysia and Ministry of Education to train the polytechnic engineering lecturers under 6<sup>th</sup> Malaysian Plan.

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. The upgraded is due to its major role and involvement in producing qualified polytechnic lecturers as well as the government's trust towards the capability of the organization. It is named after the third Prime Minister of Malaysia, the late Tun Hussein Onn bin Jaafar.

ITTHO kept on moving ahead with excellent creative and innovative programs with the government's trust as a motivation. Hence, 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 Minister of Education, Tan Sri Dato' Seri Musa bin Mohammad was made first announcement of Kolej Universiti Teknologi Tun Hussein Onn (KUiTTHO) on 30th September 2000.

Currently, KUiTTHO have three faculties and a centre to produce potential graduated students towards the industrial prospect. There are Faculty of Engineering, Faculty of Engineering Technology, Faculty of Technology Management and a Post-Graduate Studies Centre. Seven organizations were structured to support management in KUiTTHO such as Humanities Studies & Communication Centre (PPK), Science Studies Centre and Information Tecnology Centre (PTM).

#### **1.2 Total Campus Management System (TCMS)**

The Information Technology Centre started its operation in December 1994 to provide training, guidance and technical service for the administration and learning purpose to the community of KUiTTHO. This centre also commits training skill for the campus staffs and students on computer technology usage with the new and advance facilities. Mostly, the Information Technology Centre staffs provided the systems that integrate in TCMS.

TCMS, KUITTHO will prepare availability for managing the resources effectively through accurate distribution information to the specific user. It is a campus management system that giving an advantages to management of university as a whole through data integration, an optimum resources management and preparing an efficient information technology service. Currently, TCMS KUiTTHO consists of 10 items. They are:

- i. Student Information System (SIS)
- ii. Academic Advisor System (Online)
- iii. Staff Information System (SIS)
- iv. Financial Information System (FIS)
- v. Executive Information System (EIS)
- vi. Student Academic Online System (SAOS)
- vii. Senate Meeting Online System (e-Senate)
- viii. Lecturer Assessment Form System
- ix. e-Learning
- x. Library Virginia Technology System (LVTS)

The campus management system will become more efficient, effective, productive and interactive by integrating all the above systems for the university administration and the whole campus community. PART TWO OBJECTIVE

# **CHAPTER 2**

#### **OBJECTIVE**

#### 2.1 **Project Overview**



Figure 2.1: Lecture Assessment System (LAS) Overview

Lecture Assessment System (LAS) is an assessment prototype system for teaching and learning requirement. This system uses the web-based to simplify the student evaluation, recording the marks and attendance and produce assessment report. LAS will be used by various types of user in the organization these are