BORANG PENGESAHAN STATUS TESIS

JUDUL: **INDUSTRIAL TRAINING PROGRAMME MANAGEMENT SYSTEM**

SESI PENGAJIAN: **2006/2007**

Saya **SITI ADURA FARIDAH BINTI ISMAIL**
(HURUF BESAR)

mengaku membenarkan tesis (PSM/Sarjana/Doktor Falsafah) ini disimpan di Perpustakaan Fakulti Teknologi Maklumat dan Komunikasi dengan syarat-syarat kegunaan seperti berikut:

1. Tesis dan projek adalah hakmilik Kolej Universiti Teknikal Kebangsaan Malaysia.
2. Perpustakaan Fakulti Teknologi Maklumat dan Komunikasi dibenarkan membuat salinan untuk tujuan pengajian sahaja.
3. Perpustakaan Fakulti Teknologi Maklumat dan Komunikasi dibenarkan membuat salinan tesis ini sebagai bahan pertukaran antara institusi pengajian tinggi.
4. ** Sila tandakan (/)

_____ SULIT (Mengandungi maklumat yang berdarjah keselamatan atau kepentingan Malaysia seperti yang termaktub di dalam AKTA RAHSIA RASMI 1972)

_____ TERHAD (Mengandungi maklumat TERHAD yang telah ditentukan oleh organisasi/badan di mana penyelidikan dijalankan)

_/_ TIDAK TERHAD

(TANDATANGAN PENULIS) (TANDATANGAN PENYELIA)

Alamat tetap : No 2306-2, Jln Renggas, Cik Nuridawati Bte Mustafa

Kg. Mak Chili Paya, 24000, Kemaman, Nama Penyelia

Terengganu.

Tarikh : 21 November 2006 Tarikh : 22/11/06

CATATAN: ** Jika tesis ini SULIT atau TERHAD, sila lampirkan surat daripada pihak berkuasa.
^ Tesis dimaksudkan sebagai Laporan Projek Sarjana Muda (PSM)

INDUSTRIAL TRAINING PROGRAMME MANAGEMENT SYSTEM

SITI ADURA FARIDAH BINTI ISMAIL

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

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

DECLARATION

I hereby declare that this project report entitled

INDUSTRIAL TRAINING PROGRAMME MANAGEMENT SYSTEM

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

STUDENT : _____ Date : 21/11/06
(SITI ADURA FARIDAH BT ISMAIL)

SUPERVISOR : _____ Date : 22/11/06
(MS. NURIDAWATI MUSTAFA)

DEDICATION

To my beloved parents, En. Ismail b. Mamat and Pn. Azizah Deraman, my whole family, my supportive supervisors, Pn. Norashikin Ahmad and Cik Nuridawati Mustafa, and all my understandable friends. Thank you for the support and guidance given throughout the completion of my PSM.

ACKNOWLEDGEMENTS

For PSM, I had developed the Industrial Training Programme Management System for the use of five different users. PSM is divided into two parts that are PSMI and PSMII. At this stage I had finished both of the parts and I would like to thank many people that had helped me in completing this PSM.

First of all, I would like to thank Pn. Norashikin Ahmad and Ms. Nuridawati Mustafa, my caring and understandable supervisors for PSM. They had given me much knowledge and guided me throughout the completing of my PSM. Therefore, I would like to thank them for all their support and guidance.

I also would like to thank Pn. Safiza Suhana bt Kamal Baharin for all her ideas and comments on my PSM system. Not forgetting her help regarding my PSM report writing.

I also want to thank all my friends that had helped me in many ways and for all the support that they had given.

Lastly, I would like to thank all the people around me that had given me support and the help that I need. Thank you.

ABSTRACT

The project that had been develop is going to be concerning about the Industrial Training Programme management by the department of University Industry Centre (UNIC), KUTKM. The project will be known as the Industrial Training Programme Management System (ITPMS). There are five major modules included in the ITPMS that are the Organization module, Student module, UNIC module, Faculty Industrial Training Programme Coordinator module and Faculty Supervisor module. This report contains the introduction, methodology, analysis, design, implementation, testing and the project conclusion of the project that is developed. The project methodology used is the Database Life Cycle (DBLC). Problems of the current system of the Industrial Training Programme management had been analyzed and from that, requirement analysis had been made. ITPMS is going to be online using the Wide Area Network (WAN) and going to be used by five different users. ITPMS is developed using ASP as the programming language and SQL Server 2000 as the database. To develop the real system, designs had been made that covers the system architecture, user interfaces and database designs. This system is hoped to help the UNIC management team in handling the Industrial Training Programme Management.

ABSTRAK

Projek yang dibangunkan adalah merangkumi pengendalian Program Latihan Industri yang dikendalikan oleh Pusat Universiti Industri (UNIC), KUTKM. Projek ini dikenali dengan nama Sistem Pengurusan Program Latihan Industri (ITPMS). Terdapat lima modul di dalam ITPMS iaitu Modul Organisasi, Modul Pelajar, Modul UNIC, Modul Penyelaras Latihan Industri Fakulti dan Modul Penyelia Faculti. Laporan ini mengandungi pengenalan, metodologi, analisis, rekabentuk, pelaksanaan and kesimpulan bagi projek yang dibangunkan. Metodologi projek yang digunakan adalah *Database Life Cycle* (DBLC). Masalah-masalah yang dihadapi oleh sistem semasa yang mengendalikan Program Latihan Industri telah dianalisa dan hasil dari itu, analisa keperluan telah dilakukan. ITPMS yang dibangunkan adalah *online* yang menggunakan Wide Area Network (WAN) dan akan digunakan oleh lima pengguna yang berbeza. ITPMS dibangunkan menggunakan ASP sebagai bahasa pengaturcaraan dan SQL Server 2000 sebagai pangakalan data. Untuk membangunkan sistem sebenar, rekabentuk yang merangkumi senibina sistem, antaramuka pengguna dan pangkalan data telah dibina. Sistem ini diharapkan akan dapat membantu pihak pengurusan UNIC dalam mengendalikan Program Latihan Industri.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATION

TERM	EXPLANATION
UNIC	University Industry Centre
KUTKM	Kolej Universiti Teknikal Kebangsaan Malaysia
ITPMS	Industrial Training Programme Management System
SMP	Sistem Maklumat Pelajar
DBLC	Database Lifecycle
WAN	Wide Area Networking
DBMS	Database Management System
DBA	Database Administrator
DFD	Data Flow Diagram
PLIF	Faculty Industrial Training Coordinator
IIS	Internet Information System
RDBMS	Relational Database Management System
ASP	Active Server Pages
HTML	Hypertext Markup Language
ERD	Entity Relationship Diagram
3NF	Three Normal Form

LIST OF APPENDICES

CHAPTER I

INTRODUCTION

The project that going to be developed is going to be concerning about the Industrial Training Programme management by the department of University Industry Centre (UNIC), KUTKM. As an overview, the system will be use by the organization in applying student for industrial attachment, and then UNIC will view all the organizations' applications and submits it to the Faculty Industrial Training Programme Coordinator according to each faculty. The Faculty Industrial Training Programme Coordinator will then assign available students for the applications. In the meanwhile, students have to submit their resume for the use of the Faculty Industrial Training Programme Coordinator. Student can then check their industrial placement status online using the system. After the student evaluation had been made, the marks will be recorded into the system.

1.1 Project Background

The project is developed for the University Industry Centre (UNIC) of Kolej Universiti Teknikal Kebangsaan Malaysia (KUTKM). KUTKM is a government high education institution while UNIC was established to further enhance the contribution of KUTKM in the area of engineering and technology, through smart-partnership between university and industry. UNIC was also the department that handles the

Industrial Training Programme for the KUTKM students. Currently, there is no computerized system in managing the Industrial Training Programme.

The system to be is going to be known as the Industrial Training Programme Management System (ITPMS). The system is going to be concerning about the Industrial Training Programme management. The main reason of developing the system is to overcome the problems that are faced using manual way. The groups of users that are going to use the system are the UNIC staff, faculty industrial training programme coordinator, faculty supervisors, organizations and students.

1.2 Problem Statement(s)

a) No Computerized System

This portal is developed to 'upgrade' the manual system into computerized system. Currently, UNIC is still using manual system in recording some data. If the data are not managed carefully and efficiently, it will cause problems to UNIC where the loss of data and data redundancies may occur.

b) Data Growth

As we know, data increase by day. So, it is very difficult to store and maintain all the data manually. Therefore, proper and systematic database must be use to afford these data growth and to allow user to update/maintain data efficiently.

c) Current Operation Required More Time and Money

The industrial training program that was handled by UNIC is involving with many interactions with other people. Even though each UNIC staff have their own contact number, by using manual operations, there is a lot of documentations that have to made and sent to the groups of people that are involving directly in the industrial training program. All of these processes will require more time and money.

1.3 Objectives

The main problem that is examined is in upgrading the manual way of managing the Industrial Training Programme into a web-based application and making the interaction of each user that involved with the Industrial Training Programme more effective and faster. The objectives of ITPMS are:

a) To develop an 'online system' that can manage the processes of the industrial training programme. Therefore, interaction between different groups of users can be faster and effective. Furthermore, the system to be will going to save cost and time.

b) To develop sending email function for the user so that user can send information easily without wasting time and money.

c) To let organizations register and apply for students through the website to let faster industrial attachment process.

d) To develop functions that can automatically count the number of organization applications, number of students that had been confirmed of their industrial placement and number of organization application per faculty.

e) To let the Faculty Industrial Training Programme Coordinator key in the student placement status using the system for the convenient of the student and organization to check the placement status online.

f) To develop a proper storage for the data that are associated with the industrial training program such as the students' information and the organization's information.

g) To produce reports associated with the Industrial Training Programme such as the students' evaluation marks.

1.4 Scopes

The title of the system is Industrial Training Programme Management System (ITPMS). It is going to be use by organizations, UNIC staff, Faculty Industrial Training Coordinator, faculty supervisors and students. There are five major modules included in the project that are the Organization module, Student module, UNIC module and Faculty Industrial Training Programme Coordinator module. Below are the major modules that are included in ITPMS:

a) Organization Module

Organizations are one group of users that going to use ITPMS. The sub modules that included in the Organization Modules are Organization Registration, Login, Trainee Application, Status Checking, profile and password update and Marks Submission.

b) UNIC Module

The sub modules those are included in the UNIC module are Organization Registration Confirmation, Organization Password Retrieval, viewing Organization Applications, viewing Student Placement and uploading students' marks.

c) Faculty Industrial Training Programme Coordinator Module

While the Faculty Industrial Training Programme Coordinator module included sub modules of viewing Organization Application, assigned student to available organization, provide the full industrial placement information for students and UNIC and record the student evaluation marks.

d) Faculty Supervisor Module

While the Faculty Supervisor module included sub modules of viewing students under the faculty supervisor supervision and record the student evaluation marks.

e) Student Module

In the student module, it included sub modules such as resume submission where student have to submit their resume for the use of the faculty industrial training programme coordinator and placement viewing where student can view their placement info without having to see the faculty industrial training programme coordinator.

The system is a multi user system since it is used by different groups of users. It is developed to be used on the Windows platform. The database system that is going to be built for the system is using SQL Server 2000. The methodology that is going to be used in developing the database is the Database Lifecycle (DBLC).