

## BORANG PENGESAHAN STATUS TESIS\*

JUDUL: THE DEVELOPMENT OF ONLINE SHORT SYSTEM (SCS) FOR FTMK

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**THE DEVELOPMENT OF ONLINE SHORT COURSE SYSTEM (SCS) FOR  
FTMK**

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

**FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY  
UNIVERSITI TEKNIKAL MALAYSIA MELAKA  
2008**

**DECLARATION**

I hereby declare that this project report entitled

**THE DEVELOPMENT OF ONLINE SHORT COURSE SYSTEM (SCS) FOR  
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is written by me and is my own effort and that no part has been plagiarized  
without citations.

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## **DEDICATION**

To my beloved parents whose give me full support, encourage and inspire me during the difficult time to complete this project.

To my supervisor, Miss Nor Mas Aina Md Bohari whose guide, assist and advice gave me the strength to develop this project.

To all my friends, who always give me the moral support and been there whenever I am in need.

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## ABSTRACT

Online Short course system (SCS) is a web-based database system. SCS will manage all the student short course registration data as well as the admin site. SCS will only manage record for the registered student. The main user for the SCS are the Database Administrator (DBA) and System Administrator (SA). All the system interfaces was developed to help the backend process, this features make the SCS more special than others common online registration system. The process that can be done by the SCS is able to manage all records based on the tables in the database. Next features is SCS can provide the backup and recovery process for the SCS database and tables. SCS also focused on the access control management where the grant and revoke privileges to other users included as one of the main module. SCS can use the report management module to assist users to answer the add-hoc request. Lastly, SCS system interfaces can assist the DBA in creating the new table into the database. Even all the above process were done using system interface, SCS still have others back-end implementation process. There were stored procedures and triggers that have been implemented directly to SCS database for the better system performances. The SCS will be developed using PHP 5.0 programming language to create the dynamic web page helping by the Apache 2.0 as the web server to serve SCS interface on the Mozilla Firefox 1.8.1 web browser with the data from MySQL 5.0.45 database. The methodology used is Structures System Analysis and Design Method (SSADM), while SCS is done under the principle of iterative Software development Life Cycle (SDLC). The final output for this project is an Online Short Course system for FTMK.



## ABSTRAK

Sistem Kursus Pendek atas-talian (SCS) adalah satu sistem pangkalan data yang berasaskan web. Sistem ini akan mengendalikan semua data bagi pendaftaran kursus pendek pelajar dan juga bahagian pentadbiran. SCS hanya akan menguruskan data pelajar yang berdaftar sahaja. Pengguna utama sistem ini ialah Pentadbir Pangkalan Data dan Pentadbir Sistem. Kesemua sistem antaramuka yang dibangunkan bertujuan untuk membantu proses belakang, di mana proses inilah yang menjadikan SCS lebih istimewa berbanding dengan sistem kebiasaan atas-talian yang lain. Proses yang boleh dilaksanakan oleh SCS ialah mengurus kesemua rekod berdasarkan jadual di dalam pangkalan data. Ciri –ciri seterusnya ialah SCS boleh membekalkan proses salinan dan pembaikpulih jadual dan pangkalan data. SCS juga focus terhadap pengurusan kawalan akses kepada pengguna sistem yang lain sebagai salah satu modul utama. SCS boleh menggunakan modul pengurusan laporan untuk membantu pengguna menyediakan laporan untuk permintaan orang atasan. Akhir sekali, SCS boleh juga membantu pengguna untuk menghasilkan jadual baru di dalam pangkalan data. Walaupun kesemua proses di atas dilakukan dengan sistem antaramuka, namun SCS masih ada proses belakang yang lain yang telah diimplementasikan. Proses itu adalah Prosedur Simpan dan juga Pemicu yang telah diimplementasikan secara langsung di pangkalan data. Dengan menggunakan bahasa pengaturcaraan PHP 5.0 untuk menghasilkan helaiian web yang dinamik di bantu oleh Apache 2.0 sebagai pelayan web untuk memaparkan antaramuka SCS di Mozilla FireFox 1.8.1 iaitu pelayar web bersama-sama dengan data dari MySQL 5.0.45. Bagi pembangunan projek, metodologi Teknik Analisa Struktur Sistem dan Rekabentuk (SSADM) digunakan manakala SCS disiapkan dibawah prinsip iteraktif Kitar Hayat Pembangunan Perisian. Hasil dari projek ini adalah sebuah Sistem Kursus Pendek atas-talian.

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## LIST OF ABBREVIATION

DBA	--	Database Administrator
DBMS	--	Database Management System
DCL	--	Data Control Language
DDL	--	Data Dictionary Language
DFD	--	Data Flow Diagram
DML	--	Data Manipulation Diagram
ERD	--	Entity Relationship Diagram
LAN	--	Local area network
PSM	--	Projek Sarjana Muda
PHP	--	Hypertext Preprocessor
RAM	--	Random Access Memory
RDBMS	--	Relational Database Management System
SCS	--	Short Course System
SA	--	System Administrator
SCM	--	Software Configuration Management
SDLC	--	Software Development Life Cycle.
SSADM	--	Structures System Analysis and Design Method
SQL	--	Structured Query Language
UTeM	--	Universiti Teknikal Malaysia Melaka

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## **CHAPTER 1**

### **INTRODUCTION**

#### **1.1 Project Background**

Nowadays, many universities offer to their student the short course as one of choices that can be taken by the student in order to help their studies. First of all the student must register the course he wants with the administrator of the university. This manual registration required a long time to process the administration activity such as to get an approval as the faculty member and the course schedule management. As the result some of the university has already used the function of internet to manage student registration. The web-based database Short Course System (SCS) for FTMK will be developed in this project.

The specialty of SCS is more focused on the back end process. It is not likely the current web site on the internet which is the end user such as the student can access the portal for the common purpose but this page is develop only for Database Administrator (DBA) and System Administrator (SA). The DBA and SA can use this system to manage and handle the entire data trough the system interface. The SCS provide the back end process like table creation for Data Definition Language (DDL). The DBA and SA can also retrieve record, added new record, update record, or delete unnecessary data for the Data Manipulation Language (DML). Granting and revoking the privileges from the user for the Data Control Language (DCL) will be provided. Other processes that include in this system are the backup and recovery, reporting, database trigger and many more.