

**TUTORIAL CENTRE MANAGEMENT SYSTEM (TCMS)**

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**UNIVERSITI TEKNIKAL MALAYSIA MELAKA**

TUITION CENTRE MANAGEMENT SYSTEM (TCMS)

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## BORANG PENGESAHAN STATUS TESIS

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SUPERVISOR: \_\_\_\_\_ Date: \_\_\_\_\_

(PUAN NORAZILAH BINTI DRAMAN @ MUDA)

## **ABSTRACT**

Tuition Centre Management System (TCMS) is a system which manages staff, student, subject and payment process in a tuition centre. Nowadays, there are many systems that already exist but it still not efficient and effectively to be used. The purpose of this system is to overcome the problem when the data lost and they need to reregister again to keep the same document. It will reduced the human effort and lighten work burden on managing the staff, student, subject and payment detail. By using this computerized system, all the data can be saved and backup to the computer so it can avoid and solved the lost of data problem. In addition, the existing system is very less secure because any users can easily see the secured data and the loss of the data can occur easily. Therefore, this TCMS project can help by providing two users authentication which is admin and staff to access the system. It also used computerized system and the loss of data can be trace easily.

## ABSTRACT

‘Tuition Centre Management System (TCMS)’ ialah satu sistem yang menguruskan pekerja, pelajar, mata pelajaran dan proses pembayaran di sesebuah pusat tuisyen. Pada masa kini, terdapat banyak sistem yang sedia ada tetapi masih tidak cekap dan berkesan untuk digunakan. Tujuan sistem ini dibangunkan adalah untuk mengatasi masalah apabila data hilang dan mereka perlu mendaftar semula untuk menyimpan maklumat yang sama. Ini boleh mengurangkan tenaga kerja dan mengurangkan beban kerja dalam menguruskan pekerja, pelajar, mata pelajaran dan pembayaran maklumat. Dengan menggunakan sistem berkomputer, semua data akan disimpan dan data boleh dibuat salinan ke dalam computer jadi dapat menghalang dan menyelesaikan masalah kehilangan data. Tambahan pula, sistem yang sedia ada adalah kurang selamat kerana mana-mana pengguna senang untuk mengetahui data yang sulit dan kehilangan data boleh senang terjadi. Oleh itu, projek ‘TCMS’ ini dapat membantu dengan menyediakan dua jenis pengesahan pengguna iaitu admin dan pekerja untuk menggunakan sistem tersebut. Ia juga menggunakan sistem berkomputer dan kehilangan data dapat senang dicari semula.

## **DEDICATION**

This report is dedicated  
to my beloved mother and father, sisters.

To my friends, and to my supervisor, Puan Norazilah Binti Draman @ Muda.

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## LIST OF ABBREVIATIONS

PSM	-	Projek Sarjana Muda
TCMS	-	Tuition Centre Management System
DFD	-	Data Flow Diagram
ERD	-	Entity Relationship Diagram
BITD	-	Bachelor of Database Management

## CHAPTER I

### INTRODUCTION

#### 1.1 Project Background

Tuition Centre Management System (TCMS) is a web-based system that will be used in tuition centre. This system is basically specializing on managing one tuition centre. The aim of building this system is due to the problem on existing manual system. This system is handled by staff and top management to manage on staff, student, subject and payment detail. In addition, this system has the one hold the responsibilities who we called admin to assigned and maintain the detail of staff, student, subject and payment. While the other staff only have responsibilities on registering and maintain the detail of student, payment and subject.

This system can keep huge data organized, secured and may reduce the uses of lots of paper. There are fifth modules to be developed in order to complete this TCMS system. This system is a client-server environment which will reduce the inefficient way that is currently being used.

## 1.2 Problem Statement(s)

The problem occurs when the system is managed manually. The data is recorded using papers and can cause the loss of important data, redundant data, difficult to trace data, increase cost and waste a lot of time. Physically, the used of manual system which using a lot of paper requires more space to put the paper and increase cost.

Therefore, when a new student register to the tuition centre they should fill up the form and this will need to deal more with time and effort. The problem is getting more complicated when the data or files lost. This will require time to get back the missing files and when the staff searching for one file it is difficult to trace as there got many files. The problem on duplication of data can also happen when the staff fills up more than one form.

## 1.3 Objective

The objective of building this Tuition Centre Management System (TCMS) is:

- To develop a web-based system that allows staff and top management to handle management business online.
- To help tuition centre to effectively manage their business.
- To minimize the redundancy and loss of important data.

## 1.4 Scope

There are two scopes involved in this project which are user scope and system scope. User scope is for the specific users that use the system while the system scope is the system modules involved in Tuition Centre Management System (TCMS).

i. User scope

- Staff
  - Users who will maintain the system by managing the subject, teachers, level, payment and register student.
- Admin
  - Users who will maintain the system by managing the subject, teachers, level, payment and register staff and student.

ii. Modules

1) Login Module

- Verify the user. Each user who logged in the system will be verified and will be directed to the specified pages for their role.

2) Register Staff Module

- Register the user of the system. The staff must be registered only by the admin of this system. This module also includes the management of the staff data and search function.

3) Manage Subject Module

- The module is managed by staff and admin. The staff can register the subject, level and teachers. They can also manage the subject level which subject, level and teacher will be combined into one table for example level is 1 , subject is mathematics and teacher is puan nora. The staff can view the existing data and can trace old data by using search function.

- 4) Manage Student Module
  - The module is managed by the staff and admin. The staff can register the students and able to manage the students with their required subject. The staff can view and search existing student details.
- 5) Manage Payment Module
  - The module is managed by staff and admin. The staff can manage the period for example July 2013. They are also able to manage student and payment together with the suitable period. The staff can view and search existing student payment detail.

### **1.5 Project Significance**

This system can be used to replace the manual system. This project will bring benefits to the staff as they are able to manage staff, student, subject, and payment detail easily without using papers or files. The management system involved add record, view record, delete record, edit record and search record functions. The management process can be centralized which means, the process of entering data and maintaining data can be done by one staff. This system will save time, effort and cost to the tuition centre. This system will improve the tracing of data by just typing the detail he or she want and within seconds the data needed are displayed. The information inside the system will be kept safely and secured. Only the staff can used this system as it requires username and password for each staff. This system can also avoid redundant data as it has the function which can detect if the same data existed in the database.

## **1.6 Expected Output**

This system will be able to make the management system secured and safe. This system should ease the management of this tuition centre too. This system will be able to handle basic system operations such as add, delete, update and search. This system will be user friendly with the use of menu bar and easy to understand. Staff can trace the data faster and save time and cost too.

The system also should be able to count payment and make some discount to consistent student. There will be some security to detect redundant data, staff login operation and wrong format detail insertion.

## **1.7 Conclusion**

The aim of this project is to design and develop a system that could give easy management to the tuition centre. This chapter is about the early view of what will be from the developer's view. Project background describe the introduction for the project and includes the problem has occurs from previous system, the aim of this system, the target user, module, the benefit of this system and the expected result from this project.

The problem statement describes the problem related to why should this system be developed. By replacing and improving the management system, less manual work will be required in the process of collecting, handling and maintaining of the data. The scope of the projects explains the module and target user for this system. While the project significance delivers what the system can provide based on developer's side. The expected output explains the system ability from user view.

The next chapter which is chapter 2 will be the literature review and methodology to be used in developing this project.

## **CHAPTER II**

### **LITERATURE REVIEW AND PROJECT METHODOLOGY**

#### **2.1 Introduction**

This chapter is about reviewing past researches that can be used as the material of this project. It is also define the methodology as the important phase that must be done in order to get a clear view of this project. Literature review presents a clear case and content of the project. The review includes the research on existing TCMS system. There is also research on related topic such as the fact and findings, domain, technique, project schedule and milestones and conclusion. The research on project requirement which are software, hardware and other are also reviewed in this chapter.

#### **2.2 Facts and findings**

Tuition Centre Management System is being developed to organize the tuition data. The management of data will be the main topic for this project. There are several systems that have been developed by the developer which is also about management of information system. Therefore, this topic will be discussed in existing system later.