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

FACULTY OF INFORMATION AND COMMUNICATIONS TECHNOLOGY
KOLEJ UNIVERSITI TEKNIKAL KEBANGSAAN MALAYSIA

2006

DECLARATION

I hereby declare that this project report entitled

ONLINE CAR SELECTION USING DECISION SUPPORT SYSTEM

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(PUAN SABRINA BT AHMAD)

DEDICATION

To my God, Allah SWT To my beloved parent, Ab. Muis Bin Hassan & Masitah Bt. Taib To my supervisor, Puan Sabrina Bt. Ahmad

ACKNOWLEDGEMENT

First of all, I would like to express my heartfelt thanks to my supervisor, Mrs. Sabrina Ahmad for her guidance and support to me. She has leaded me towards completing the tasks assigned to me during finish PSM (Projek Sarjana Muda) in this short semester for PSM I and last semester for PSM II. I appreciate her vast knowledge and skill in many areas and her assistant in writing and completing this report. . I would also like to thank my beloved parents who have been giving me support and motivation throughout my project. Last but not least, I also would like to thank my friends in and outside KUTKM for their exchanges of knowledge, skills, and venting of frustration while completing my final project program which helped enrich the experience.

ABSTRACT

The primary purpose of preparing this Projek Sarjana Muda 2 (PSM 2) is to fulfil Bachelor of Science Computer (Software Development) in Kolej Universiti Teknikal Kebangsaan Malaysia (KUTKM). This thesis contains a complete analysis about Projek Sarjana Muda 2. The Online Car Selection using Decision Support System (DSS) is a web-based application that allows users to access the web to get information and make to help potential buyer to make the best decision on selection of a desire car. This system is hope that can fulfill currently desire where it can prevent potential buyer from making the wrong decision on purchasing a new car. Besides that, this system can increase the utilization of ICT technology in the society of Malaysia. Some literature review has been done to determine the scope, technologies and approaches used in this project. Prototaip Model has been chosen as a methodology for this project and will be implemented along the system development process to ensure the objectives of the project can be fulfilled. The use of chosen methodology has helped to produce a better quality product, in term of software. With the implementation of the latest technology such as web services, the system was not only expected to be workable, but also efficient in terms of execution speed and response time. The design of the system was dynamic and was able to support concurrent users to interact with the system over the internet.

ABSTRAK

Tujuan utama dalam penghasilan Projek Sarjana Muda 2 (PSM 2) adalah untuk memenuhi program Ijazah Sains Komputer (Pembangunan Perisian Komputer) di Kolej Universiti Teknikal Kebangsaan Malaysia (KUTKM). Tesis ini mengandungi analisis lengkap mengenai Projek Sarjana Muda 2. Online Car Selection menggunakan DSS adalah system berdasarkan laman web yang member maklumat kepada pengguna dan membantu pembeli yang berminat untuk membuat keputusan dalam pemilihan kereta. System ini diharapakn dapat memenuhi kehendak semasa di mana ia dapat mengelakkan pembeli membuat kesilapan apabila ingin memilih dan membeli kereta baru. Selain itu, system ini diharapkan dpt meningkatkn penggunaan teknologi ICT di kalangan masyarakat Malaysia. Di dalam ulasan kuliah, telah diterangkan tentang skop, teknologi dan pendekatan yg digunakan dalam system ini. Bagi memenuhi objektif projek ini, Model Prototaip telah digunakan sebagai sebuah kaedah kerana model atau cara sebegini dapat menolong pembangun system untak keluarkan system yang berkualiti. Dengan pelaksanaan teknologi terbaru seperti perkhidmatan web, system ini akan lebih pantas dari segi tindak balas dan paparan. Rekabentuk system ini adalah dynamic dan menyokong pengguna untuk menggunakan system ini melalui Internet.

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CHAPTER 1

INTRODUCTION

1.1 Project Background

Nowadays, most parents send their children to the tuition to get extra class. E-Tuition Management can help tuition centre to control the management. This system is a web based application system. It can be accessed online by user. Beside that, this website can help parents to keep track their children improvement in the tuition class. This website also helps students and teachers to get their information. Students also can discuss their problem with their teacher in forum site.

This website is managed by administrator. Only admin can update this system. Beside that, student and their parent can view student information but cannot update this website. With this website, students can register their application online without need to go to the tuition centre. Parents also can pay the fee with the credit card through this website. Therefore, this website gives lot of benefit to users that use this website.

1.2 Problem Statements

Nowadays, lots of problems occur in tuition centre without using the computerized system:-

- Tuition centre does not have any computerize system to manage their business. So, the data are easy to lose and not safe.
- II. Usually, teachers and students find it is hard to remember their time table and which class to go. It is because time table that written on the paper has a big risk to lose.
- III. Students always facing with problem to get note for references. They also not have much time to discuss with their teacher when they have problem in the study.
- IV. There are student misuses the tuition fee for unknown purpose to pay their tuition fee.
- V. Difficulties in giving the information to the students about the tuition centre.

1.3 Objectives

The general objectives of developing this website are to help the user easy to get their information. Beside that it can help to manage the data at the tuition centre:-

- This website can help the tuition centre to manage with controlling the data. The data also safer with the security and not easy to lose because admin can backup the data.
- II. To help students and teachers arrange their time table and find the class. This website prepares the time table and which class they have at a particular time.
- III. To allow students to access the references for their studies. Student can download the note from this website for their reference. Beside that, they can discuss with teacher in forum site.
- IV. To help parents make sure their children follow the class. Parent can check the attendant every month and pay the fee with online payment. From online payment, parent can make sure that the fee paid compare with pay manually.
- V. To help the tuition centre informing the students by email.

1.4 Scopes

1.4.1 User

- a. Tuition centre staff
 - > Manage the website as an administrator.
- b. Students
 - > To get the information about study.
 - For online registrations.
- c. Teacher
 - > Check their timetable and upload notes.
- d. Parent or guidance.
 - > To pay the fee and check their children attendance.

1.4.2 Functions

- a. Admin site
 - Manage this website. Only admin can update or delete the important data in this website.
- b. Access data
 - Student, teacher and parent can access the data that viewed at this website. Student can download the note from this website. They can also do online registration. Furthermore, user can give their feedback for the website in feedback section. Teacher can upload notes to this website. Beside that, student and teacher can check their time table and class.

c. Forum

> Student can discuss with their teacher online. So they can discuss about their problem in studies without see the teacher.

d. Online payment

> Parent can pay the fee online with credit card.

1.4.3 Operation System

For this project, Window XP is use because this operation system is easy to handle. Beside that, majority users use this operation system. It is compatible with other software.

1.5 Project Significant

e-Tuition Management can improve the business of the tuition centre. It can help to manage the data and the data are safer with this website. User cannot update the data in this website. Only administrator can login and update the data at the admin site. They also can avoid the lost data. They can make backup for the database.

Students also have privilege from this website. They can download the note for their reference. So, they can refer the uploaded notes by a teacher and not waste their time to find the reference to study. They also can register online to enter the tuition centre without go to that place. Beside that, student can discuss with their teacher at forum site. So, they can refer their problem to the teacher although see their teacher. It follows for the time table that teacher online on this site.

Teachers can upload the notes for student's references. They also can check the time table for the class. They can give exam tips, exercise or note through forum. All users have their own benefit when use this website. So, tuition centre can improve their business and help students to get the excellent result.

1.6 Conclusion

From this chapter, e-Tuition Management can give more benefit to users that use this website. It can help the tuition centre to improve their business. The data can control by this website. So, they have a small risk to lose the data and more safety. Students also can improve their skill in studies and easy to get the reference from this website. Teachers have their own advantage to teach more effective for their student. They can communicate with their student to discuss about the studies.

CHAPTER 2

LITERATURE RIVIEW AND PROJECT METHODOLOGY

2.1 Introduction

This chapter will describe in detail the case study that is mention on the chapter 1. The characteristic of the previous system as module flow and process should be improve and enhance from the previous system. The project methodology also will be discussed in this chapter. It is the best explanation to give the developers to understand the right method will be used in order to bring project progress in the right track. . Since, there are many type of methodology, it is vital to select appropriate methodology that will be used.

The main concept in this system is to improve the business of tuition centre and help their student to get the excellent result. Literature review in methodologies, strategies and project analysis should be done in order to gain mare understanding on the project implementation study. It is important to establish solid principles first before design and constructing of the system.

2.2 Fact and Finding

The idea to develop this system comes after some research has been made about tuition centre management. Tuition is the place where student get their extra knowledge and learn new things about their studies. To get the fact about this project, interview in conducted with the parent, teacher and student has been done. From the interview, usually in tuition management still used a manual system to manage all the process flow. Students have some problem when they want to get the information such as note for their reference.

After an interview, it is confirmed that no computerized system is use in their management. All the process is done manually and not systematic.

2.2.1 Current System Analysis

From the interview, tuition centre need to have their own system to manage and give benefit to all teachers and students. They have some system for certain process but more process has been done in manually. When the new semester begin the registration place busy with the new student. Staff at tuition centre also have the problem to get the data when their want to revise student data.

Student have the problem to get the note for their reference or when their lost the note. They always lost time table for their class. They also have problem to discuss with their teacher after the class. Their only can ask question in the class. So, they not have any chance to ask the problem at the other time.

The guidance has a curiosity for their child attendance at tuition centre. Beside that, there are problems for a student that miss use their fee money. Therefore, this website must be developed to overcome the problem arise.

2.2.2 Case Study to Review of Existing System

For this study, the researches are based on the contribution and outcomes from previous study. Those have two webs base that develop for the student. The URL for this website is www.tutor.com.my and www.mts.mendaki.org. These website have their advantage and their own weakness.



Figure 2.1 www.tutor.com.my