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Tesis dimaksudkan sebagai Laporan Projek Sarjana Muda (PSM)



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E-DRIVING SCHOOL

NOR AQILAH BT BAHARUDIN

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 **E-DRIVING SCHOOL SYSTEM**

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, Baharudin Muhammed & Suriani Abdullah thank you for always being there for me.

To my all colleagues, thank you for the support.

ACKNOWLEDGEMENT

Projek Sarjana Muda (PSM) is one of the partial fulfillments for bachelor program. In order to design the project we must first identify the background of current system, the problem in current system then we proposed a solution for problem that becomes our project. For that reason, I would like to express my gratitude to all who have been contributing information, help, support and guidance while I'm doing my design for E-Driving School.

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Last but not least, to all who have been contributing in my final year project whether directly or indirectly, it be my pleasure to thank you all.

ABSTRACT

E-Driving School is implemented to a driving school to cater large scale of students. E-Driving School has two approached to user, the Website and the Administration System. The website meant for student and also potential student. Student can check their information, check schedule and make booking. While the administration system has all access to data and function to manage schedule and booking. At the moment, driving school is having problem in communicating with student because of the number of student registered to them. Driving school has to schedule student driving lesson. In current system using filing need more than one staff to manage the data of students. Therefore, a better solution is proposed in E-Driving School to manage all information related to E-Driving School. Second, this project helps to support daily operation of driving school with booking and online registration function. With E-Driving School, it provides easy access to student's information. So if student want to check their own lesson progress then they can check it online without going or calling the driving school. The methodology use in developing this project is RUP, where it implements OOAD in analysis and design phase. At the end of this project, it is hope that E-Driving School can contribute to driving school operation to make it better and to cater best service.

ABSTRAK

E-Driving School di aplikasikan kepada sekolah memandu yang mahu menyediakan servis dengan jumlah pelajar yang ramai dalam satu-satu masa. E-Driving School mempunyai dua pendekatan kepada pengguna, iaitu Laman web dan Sistem Administrator. Laman web adalah direka untuk pelajar dan mereka yang berpotensi untuk menjadi pelajar. Pelajar boleh menyemak informasi masing masing, menyemak jadual dan membuat tempahan. Manakala, untuk Sistem Administrator mempunyai akses kepada semua data dalam sistem ini. Ia boleh mengurus jadual dan tempahan yang telah dibuat oleh pelajar. Pada masa ini, sebuah sekolah memandu menghadapi masalah perhubungan dengan pelajar untuk meguruskan pengajaran memandu mereka. Sistem semasa menggunakan sistem fail yang memerlukan lebih dari seorang staff untuk menguruskan data-data yang terlibat. Oleh itu, penyelesaian yang lebih baik dicadangkan untuk meguruskan data-data berkaitan dengan sekolah memandu. Projek ini membantu operasi harian sebuah sekolah memandu dengan tempahan, dan pendaftaran secara on-line. Dengan E-Driving School, ia menyediakan akses mudah kepada informasi pelajar. Sekiranya pelajar mahu menyemak perkembangan pengajaran mereka, pelajar boleh menyemaknya secara online tanpa perlu pergi atau membuat panggilan ke sekolah memandu mereka. Methodologi yang digunakan dalam pembangunan projek ini adalah RUP, dimana ia mengaplikasikan OO dalam fasa analisa dan rekabentuk. Diakhir projek, E-Driving School diharap untuk menyumbang kepada sekolah memandu agar dapat beroperasi dengan lebih baik dan dapat menyediakan servis yang terbaik.

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LIST OF ABBRIEVIATIONS

Abbreviations	Description
ASP	Active Server Page
EDS	E-Driving School
ERD	Entity Relationship Diagram
HTML	Hyper Text Markup Language
LAN	Local Area Network
OOA	Object Orient Analysis
OOD	Object Oriented Design
OOP	Object Oriented Programming
OOAD	Object Oriented Analysis and Design
RUP	Rational Unified Process
SMS	Short Messaging System
WAN	Wide Area Network
WYSIWYG	What You Is What You Get

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CHAPTER I

INTRODUCTION

1.1 Overview

This chapter is an introduction of the project. An introduction chapter explains in general the objective for the project performed and gives sufficient background to understand the rest of the report. This chapter consist the Project Background, Problem Statement, Objectives, Scope, Project Significance and Expected Output.

Firstly, the project background discusses background of this project with relation to topic that becomes a case study. Other than that, it also explains specific purpose of this project. For this project, looking into the general process of gaining driving license is important to understand the project background.

Secondly, the problem statements section to identify problems found in current system. So that, solution can be designed. Thus, for E-Driving School, problems are identified from the general process of gaining driving license and also the daily operation of a driving school.

Thirdly, the objective of this system helps to identify the outcome of this project. At the end of this project an objective will become a measurement of project successfulness. Next, a project must have a scope to define the system's boundary. Scope explains the boundaries and constraints of E-Driving School.

1.2 Project Background

In Malaysia, public transportation does not serve best to the public. Thus it is important to have own transportations. Driving licenses become compulsory in today life style to most people in Malaysia. For that reason, numerous driving schools are competing to offer most excellent service and facilities. In order to cater the needs, a systematic driving school management develops to support daily operation of a driving school. Thus, E-Driving School is an alternative solution to the problems.

E-Driving School is implemented for driving school to handle a large numbers of students at one time. Involving with large scale of data in daily operation make numbers of student registered and pass become lower. Thus, this system will support the administration to manage the daily operation as well as the data involve everyday. In addition, this system communicates directly to students with the integration of SMS alert. This alert inform student of any important date.

Mainly this system will support the management of a Driving School. This system serves into two types of approach to user. The website, to view (company information, checking student information, exam booking, practical session booking and also test tutorial). While the second approach, the Administration System will manage all the data.

1.3 Problem Statement

While doing observations, there are few problems found in current system of a driving school:

i) Communicating with numbers of students at one time

A driving school in which handle many student at one time face problem communicating with student for their driving class schedule or exam. Normally, driving school call student when have practical session. If student is available then staff assign instructor to fetch the student. Looking at this scenario, driving school have problem in communicating with their student if the number of student more than the available instructors.

ii) Tracking student progress

Each student has own driving progress. Tracking student of student takes times if staff handling many student at a time. Beside, staff can't easily remember each student progress.

iii) Managing daily data

Managing daily data is a basis of a system. Daily data of a driving school involve government procedures, policies and laws. Staff cannot neglect any single file or data. Besides, every student is assigned with serial number based on the first course they attend, the number will be the reference number until they pass or obtain driving license.

1.4 Objectives

The objectives of this system include:

i) To manage data of driving school

Manage the process of registering and update information involve in driving school daily operations that include Student, Instructor and Vehicle info.

ii) To support the operation of driving school

Support daily operation start from the day a student registered until the student pass. It includes scheduling teaching session, exam and practical session booking, payment history and also vehicle service.

iii) To provide easy access of driving information

Student will have easy access to their own information; can check payment history, driving progress, exam result, exam and practical session booking.

1.5 Scope

E-driving school is implemented for a driving school to support daily operation. As for the user, there are three categories of user:

i) Staff

Driving school staff, can access all data related to the student, instructor and vehicle information.

ii)Student

Driving school student, can access their own data. Only registered student can have access to the system. Student access data from the web site.

iii)Instructor

Driving school instructor, can have access to the student lesson record.

E-Driving School divides into two type of approach to user. First, the Website meant for students and also potential student. Student can have access to all function in the website. The function of a website is described below:

i) Provides Company Information

Include company information, driving class info, fees, session and facilities offer.

ii) Enables Checking Student Information

Registered student can check their info and schedule via website that include payment history, attendance history, exam result.

iii) Enables Exam and Practical Session Booking

Student can book for driving examination via the website.

The second approach, the Administration System. The Administration System is used by staffs of a driving school and also instructors. Staffs have the authority to all information and function. As for the instructors, they can only have access to Lesson Record from the Student Information and Listing.

Administration System manages the overall data of this system. Whether it input from the Administration System itself or from the website. The data is stored in a same database platform so that information can be kept up to date between the two approaches. The function of Administration System is described below:

i) Booking Control

Enable booking the driving examination. To define the practical booking session that include instructors name, vehicle to be used and location of the session.

ii) Student / Candidate Information

To add in, delete and edit the existing student information, existing payment of driving practical courses,

iii) Instructor Information

To add in, delete, and edit the existing instructor information that include government certifications.

iv) Vehicle Information

To add in, delete and edit existing vehicle information. Register new vehicle.

vi) Listing

Exam Result, listing numbers of passing and fail, report of the exam booking Generate the government document such as Borang SM4.

1.6 Project Significant

The importance of establishing this software project is to overcome existing problems that occurred during the manual system usage. As stated earlier, the current system having trouble in tracking and communicating with students. Therefore E-Driving School is developed in order to ensure student progress are always up to date, plus it also manage all information involve in daily operation of the driving school. Furthermore, it will make the process of accessing and manipulating data related with the flow of E-Driving School more convenient to the user.

Compared to E-Driving School, manual system is unsystematic and ineffective for school with large scale of students because the process of retrieving information consumes a long and wasteful time. In E-Driving School, all information involving students, instructors, vehicle, exam, government procedure is stored in a same database platform. Each of information achieves high security. Moreover, E-Driving School ensures a development of system with user-friendly interface where it can prevent data redundancy.

1.7 Conclusion

E-Driving School is a system that does not only manage the information involve in daily operation of driving school. It supports managing daily operation that dealing with students, instructors and vehicle. The three main function, Scheduling, Booking and SMS alert will integrate with student to help in making daily operation faster and more reliable.

To wrap up this chapter, it is hope that E-Driving School is will be a system to cater the need of a driving school that want to provide better facilities to the students and also to get more customers registered for their service.