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JUDUL: UTeM Traffic Department (UTD) SMS and Online System

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UTeM Traffic Department (UTD) SMS and Online System

WONG SIEW CHING

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

FACULTY OF INFORMATION COMMUNICATION AND TECHNOLOGY
UNIVERSITI TEKNIKAL MALAYSIA MELAKA
2010

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DECLARATION

I hereby declare that this project entitled

UTeM Traffic Department (UTD) SMS and Online System

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

STUDENT : _____ Date 25/6/2010
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DEDICATION

I would like to say a lot of thank to my beloved parents who always give me encouragement to finish this project. Besides that, I am appreciate to my supervisor, Dr.Abdul Samad bin Sibghatullah, for helping me by ensuring that I have been in the correct path all the way. Thank you very much.

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ABSTRACT

UTeM Traffic Department (UTD) SMS and Online system is build to manage the UTD daily work. Currently, UTD still use the manual system for their daily activities. Basically the system comprises of two import parts which are online application and SMS part. The goal of the project is to develop a web page which can use by admin and user of the UTD. Admin can update information, view information, send notification and send summon message. Whereas, people can register as a new user to update information and check their summon status. This system is developing by using Hypertext Pre-Processor (PHP) and Apache (MySQL). Besides that, the application of the system is build by using PHP, Apache (MySQL) and GSM Modem for this project is Ozeki Message Server. Software Development Lifecycle (SDLC/OOAD) will use as the methodology for this project and will be implemented along the system development process. This document will introduce the project in detail, starting from the system overview, analysis, design, implementation, testing and evaluation.

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ABSTRAK

Jabatan lalu lintas UTeM (UTD) masih menjalankan tugasan mereka dengan pengamalan kaedah secara manual walaupun teknologi semakin berkembang maju. Maka, Sistem Jabatan lalu lintas UTeM (UTD) SMS dan Aplikasi Web (*"UTeM Traffic Department (UTD) SMS and Online System")* merupakan sebuah sistem yang dibangunkan khas untuk UTD bagi memudahkan tugasan harian mereka. Sistem UTD ini terbahagi kepada dua bahagian iaitu SMS dan sistem dalam talian (mengunakan aplikasi web). Tujuan projek ini adalah untuk membinakan sebuah sistem SMS dan sistem dalam talian (mengunakan aplikasi web) yang boleh diguna oleh pegawai-pegawai UTD serta penggunanya. Pegawai UTD boleh mengemaskini maklumat para pengguna, melihat maklumat, menghantar SMS mesej dan menghantar saman mesej. Selain daripada itu, dengan menggunakan sistem ini pengguna baru boleh mendaftar sebagai pengguna sistem UTD bagi mengemaskini maklumat dan menyemak maklumat saman mereka. Sistem ini dibangunkan dengan menggunakan bahasa pengaturcaraan PHP: Hypertext Pre-Processor (PHP) dan pangkalan data MySQL. Aplikasi bagi menghubungkan PHP, MySQL dan "*GSM Modem(Global System For Mobile)*" adalah "*Ozeki Message Server*". Metodologi yang digunakan dalam membangunkan sistem ini adalah Sistem Pembangunan Semula yang terdiri daripada beberapa fasa merangkumi fasa Perancangan, fasa Analisis, fasa Reka Bentuk, fasa Implementasi dan fasa Pengujian.

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LIST OF ABBREVIATIONS

SMS	-	Short Message Services
PSM	-	Projek Sarjana Muda
GSM	-	Global System for Mobile Communications
UTD	-	UTeM Traffic Department
UTeM	-	UniversitiTeknikal Malaysia Melaka
SQL	-	Structured Query Language
PHP	-	Pre-Hypertext Processor
ASP	-	Active Server Pages
VB	-	Visual Basic
IIS	-	Internet Information Services
TDMA	-	Time Division Multiple Access
CDMA		Code Division Multiple Access
HTML	-	Hypertext Markup Language
HTTP	-	Hypertext Transfer Protocol
SDLC	-	System Development Life Cycle
DFD	-	Data Flow Diagram
ERD	-	Entity Relationship Diagram
PDA	-	Personal Digital Assistant
DBMS	-	Database Management System

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CHAPTER I

INTRODUCTION

1.1 Project Background:

Currently, the UTeM Traffic Department (UTD) is not supported by any system to run their daily duty. This department is still using manual system. The manual system is waste money, time, and unsystematic. Besides that, UTD staff will paste a summon paper at the transport of the users, but the summon paper is easier to lose then the users will not aware about their misdemeanors and will repeat their mistakes. By using the SMS system the UTD will send a summon notification to the user and made appointment with the user who has repeat their mistake more than one time. Other than that, users can send a feedback message to the UTD.

If the UTD staffs want to organize an activity then they can inform the users in the same time through broadcast the message to the users so that, they can save money and no need waste time to call them one by one, especially when UTD has internal emergency meeting. They can inform all the UTD staff who are on duty at different area in UTeM. As a conclusion, this system is used to send SMS notification, send broadcast message and send summon notification to the users and UTD staffs anywhere and anytime.

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1.2 Problems Statement:

- Currently, the UTeM Traffic Department (UTD) is still using the manual system to record their daily duty and use file system to save their record. Nowadays, there is a high technology life so the manual and file system need to be replace. Summon with paper also need to change with the SMS system which is most user friendly, faster and save cost.

- Besides that, if the users and the UTD do not have each other contact number then any notification cannot be informed. But after used the UTD system, users and UTD staffs can contact with each other. This can increase the awareness of UTeM safety rules and may solve some problems.

- Other than that, this system can replace with the current notice board in UTD office which is used to inform the urgent notification. Currently, UTD is using the notice board to inform the notice, for the staffs who do not observe with the notice board will do not know with the notification. By using this system, all UTD staffs will be informed with the notification at the same time.

1.3 Project Objective:

- The first objective of this project is to develop a SMS and online application system to UTD to easier the UTD daily duty. The system must be user friendly and easier to use.
- UTD can send notification to the users and UTD staff without accessing to the internet.
- This system can used to send broadcast message to user and admin. So the notice will be informed to the UTD staffs or users at the same moment, it is cheap and fast if compare with the existing notice board system. This system is useful for UTD which can systematic the daily duty, and change the manual system to the latest technology SMS system.

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- Next, is to enable the contact with each other between UTD and users. By using this system, UTD can contact or make appointment with the users who has misdemeanor problem and get the respond immediately without accessing to internet.
- Other than that, this system is to replace the existing summon system with the SMS system. UTD existing summon system is using paper work, the summon paper which is paste on the transport is easier to be lost so users may not aware with their mistake and will repeat the mistaken again. By using this system can solve these problems.
- Lastly, this system can also use to view data.

1.4 Scope:

- This system is developed for the UTeM Traffic Department and it will be used by the UTeM Traffic Department's staffs and users.
- For admin, this system can used to view the expired sticker, received message from users, send the notification, send broadcast message and summon notification through SMS. The targets of the system are UTD staffs, UTeM staffs and UTeM students. The UTD staffs can monitor the information from time to time for updating, deleting and adding the data.
- For the users, they can update their profile and check the summon status.
- After admin send notification through UTD website, then the users will automatically receive the notification from their mobile phone. Users can send /reply message to UTD.
- This system is developed for admin and user's usage only. The admin is responsible to manage the system. Admin and the registered users must enter the correct username and password before used the system.

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