BORANG PENGESAHAN STATUS TESIS*

JUDUL: e-Parcel Delivery System (e-PDS)

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Saya NOOR SYAIRAH BINTI MOHD YUSOFF

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E-PARCEL DELIVERY SYSTEM (E-PDS)

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This report is submitted in partial fulfillment of the requirements for the
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UNIVERSITI TEKNIKAL MALAYSIA MELAKA
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DECLARATION

I hereby declare that this project report entitled

E-PARCEL DELIVERY SYSTEM (e-PDS)

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

STUDENT : NOOR SYAIRAH BINTI MOHD YUSOFF Date: 14/04/2008

SUPERVISOR : PUAN SYAHIDA BINTI MOHTAR Date: 14/04/2008

DEDICATION

My special appreciation goes to Puan Syahida Binti Mohtar, my supervisor of Universiti Teknikal Malaysia Melaka (UTeM) for the continuous motivation, support and guiding me throughout this project. Thanks also to all individuals who involve directly or indirectly in this project and those who truly support my work.

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ABSTRACT

The project that will be developed is e-Parcel Delivery System (e-PDS) using interactive web-based application. e-PDS will be developed and used especially for Nationwide Express Courier Services Bhd branches in Malaysia. At the moment, the parcel delivery information is very important for searching process and kept information much better. e-PDS can upgraded the current system and more effectiveness. It also manages all management about parcel delivery process by staff and gives information that customers needed. Based on the research at Nationwide Malacca Express Courier Services Bhd, the current system still has the weaknesses and must be solve it by e-PDS. The e-PDS will be divided into two levels of users that are the 'Administrator' and 'Customer'. This project will be built using Macromedia Dreamweaver MX 6.1, XAMPP 1.6.3a, MySQL 5.0 as database and other software which includes Adobe Photoshop CS, Microsoft Visio 2003 and etc. The project methodology of this project will be based on SDLC (Systems Development Life Cycle) which will be integrated with DBLC (Database Management Life Cycle). The phases are Planning, Analysis, Design and Implementation. The expected output of this project is to being interactive web-based that will be solved problems for staff of Nationwide branches and their customers. It will be user friendly and easy to use.

ABSTRAK

Projek yang akan dibangunkan ialah secara laman web interaktif iaitu e-Parcel Delivery System (e-PDS). e-PDS ini dibangunkan khas untuk cawangan Nationwide Express Courier Services Bhd di Malaysia. Pada masa kini, maklumat penghantaran barang sangat penting bertujuan memudahkan proses pencarian dan simpanan maklumat dengan baik. Dengan adanya e-PDS ini, ia dapat membantu menambahbaik serta lebih efektif berbanding dengan sistem sediada. Ia juga dapat membantu pihak pengurusan cawangan Nationwide dalam menjalankan pengurusan penghantaran barang disamping memudahkan pengguna untuk mendapatkan maklumat-maklumat yang dikehendaki. Hasil kajian yang dijalankan di Nationwide Express Courier Services Bhd cawangan Negeri Melaka, sistem yang sediada masih mempunyai kelemahan yang perlu diatasi segera melalui e-PDS. Sistem ini dibahagikan kepada dua pengguna iaitu 'Pentadbir' dan 'Pengguna'. e-PDS dibangunkan dengan menggunakan perisian Macromedia Dreamweaver MX 6.1, XAMPP 1.6.3a, MySQL 5.0 sebagai pangkalan data serta beberapa perisian lain seperti Adobe Photoshop CS, Microsoft Visio 2003 dan lain-lain. Projek ini dibangunkan menggunakan SDLC (Kitar Pembangunan Hayat Sistem) dan diintegrasikan dengan DBLC (Kitar Hayat Pangkalan Data) sebagai metodologi. Fasa-fasa yang terlibat ialah Perancangan, Analisis, Rekabentuk dan Perlaksanaan. Hasil akhir projek yang diharapkan adalah satu laman web interaktif yang dapat membantu menyelesaikan masalah pihak cawangan Nationwide Express Courier Services Bhd dan para pelanggan. Projek ini juga adalah mesra pengguna dan mudah untuk diguna pakai.

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Afta	-	Asean Free Trade Area
DBLC	-	Database Life Cycle
DBMS	-	Database Management System
DFD	-	Dataflow Diagram
e-PDS	-	e-Parcel Delivery System
ERD	-	Entity Relationship Diagram
GUI	-	Graphical User Interface
JAD	-	Join Application Development
kgs	-	kilogram
MIS	-	Management Information System
NECSB	-	Nationwide Express Courier Services Bhd
OLAP	-	On-line Analytical Processing
OLTP	-	On-line Transaction Processing
RAD	-	Rapid Application Development
RPCs	-	Remote Produce Calls
SDLC	-	System Development Life Cycle
SQL	-	Structured Query Language
UML	-	Unified Modeling Language
UTeM	-	Universiti Teknikal Malaysia Melaka
WTO	-	World Trade Organization

LIST OF ATTACHMENTS

CHAPTER I

INTRODUCTION

1.1 Project Background

Logistic industries are being demanded lately in Malaysia. Nationwide Express Courier Services Bhd (NECSB) is one of the private organizations that handle the logistic operations. They process a lot of parcel per day and used a lot of vehicles for delivery and pick-ups.

The modernization and new approach through internet makes the logistic industries become more important. e-Parcel Delivery System (e-PDS) is the project that will be developed as a web based database application. This project will be used by NECSB branches to manage all of information that related to the parcels delivery. E-PDS system has two levels of users; staff of NECSB branches as administrator and customer.

With this e-Parcel Delivery System (e-PDS), the administrator can manage all of information about the parcel, make new customer registration, generate annual report, check parcel status, update parcel status and make data backup in a short time.

e-PDS also has a function for customer to check the status of the parcel, make customer registration and view general NECSB information. Regular customer can view their parcel history list, update profile, check parcel status and view general information of NECSB.

One of the features that will be added is user privilege. There will be an authentication password before to access and manipulate the data in this system. Password encryption perhaps will avoid unauthorized user from accessing the system and make any changes that make conflict of data in this system.

Thus, this system will be an integrated system that can link all departments like staff department, transport department, parcel information and others to avoid from redundancy of data.

Though this system, the database will be more efficient and safely for used. It also can reduce the data loss and damage through the backup process. Besides, it can make the entire daily job easier than before.

1.2 Problem Statements

There are number of problems that have been identified from the current system. The problems occurred from the database aspect, the time consuming, security (levels of users) and other aspects. One of the problems is time and cost constraint. For example, the customer can check the status of the parcel by calling the NECSB branches or go to the NECSB branches during business hours. So, it can waste their time and cost to get information.

Another problem is difficult to view parcel history for regular customer to make references. If they want to know the parcel history, they must go to the NECSB branches.

Besides, the current system is not integrated with each other where each department has its own file to keep the information. So, all data may be redundant and not reliable. e-Parcel Delivery System (e-PDS) will be developed to solve the problem of the current system and to upgrade the company services efficiently.

1.3 Objective

There are several objectives for e-Parcel Delivery System (e-PDS):

i) To arrange parcels information in the database effectively.
ii) To make system security with different level of users.
iii) To provide a web-based checking application.
iv) To retrieve data easily.
v) To ease report generation.

1.4 Scope

e-Parcel Delivery System (e-PDS) is a web based system and can be access through internet. e-PDS were fully used by staff of NECSB branches as the administrator to manage record about parcel delivery. The customers can view the general information such as checking status of parcel, make customer registration and view general NESCB information but they cannot manipulate data.

i) Target User

- **Administrator**

The Administrator of NECSB branches includes Administrator, Clerk, HR Station Manager, HQ Manager and Transporter. This system will be controlled by Administrator of NECSB branches. Before they can access this system, they must insert the valid of password and username.

If the password and username are valid, they can manipulate data from database based on their levels. For example the Transporter can insert, delete or update information about the parcel information like update status for parcel, check the status of parcel and others.

- **Customer**

Customer of NECSB branches divided by two (2) levels of customer there are Normal Customer and Regular Customer.

For the normal customer, they can access this system directly without key in the password and username. They can view information about NECSB, check parcel status and make registration to be a member of NECSB.

Regular customer must to insert the valid username and password to access this system. They can update profile, check parcel status, view parcel history information and view information about NECSB.

ii) Module

e-PDS will be developed include all of the major aspects about this logistics agency. Among the major modules that are enclosed this system is:

- **Security Module (Login the e-PDS System)**

There are two levels of users, which are the administrator and the customer. This module will ensure the security of the system by providing password for the user before entering the system.

- **Sending Parcel**

This module will be managed by Clerk of NECSB branches to key in data of parcel information that were sent by customer. The clerk also can insert, update or delete the parcel information. Besides, the clerk also can check parcel status, view list of parcel and update their profile.

- **Customer Account Registration Module**

This module will manage by the Administrator and Clerk of NECSB branches to register the new customer to be a member of NECSB. The Regular Customer can get Nationwide Account Number after make registration. The benefit of Regular Customer is get 3% discount from total price and can view their parcel history. The normal customer also can make registration to be a member of NECSB.

- **Check Parcel Status Module**

The user of e-PDS can check parcel status by insert the Parcel Code. This system will be displayed the status of parcel whether delivered or in progress.

- **Update Parcel Status Module**

This module will managed by the Transporter of NECSB branches. They must to update the status of parcel when the parcel already delivered to the receiver.

- **Backup e-PDS Module**

The Administrator is responsible to make data backup of e-PDS data from database. The administrator also can add new backup, restore, and delete data backup as needed.

- **Report and Analysis Module**

The report that can be generated is the Monthly Income Report, Parcel Status Report and List of Regular Customer Report to know the reputation of this company. This module will be viewed by Administrator, HR Station Manager and HQ Manager of NECSB only.