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STOCK INVENTORY SYSTEM

LIM PEI TING

This report is submitted in partial fulfillment of the requirements for the Bachelor of Information Technology (Software Development).

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY KOLEJ UNIVERSITI TEKNIKAL KEBANGSAAN MALAYSIA 2004

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DEDICATION

To my beloved parents...

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As an acknowledgement of Project Sarjana Muda (PSM), I would like to thank Kolej Universiti Teknikal Kebangsaan Malaysia (KUTKM) for giving me this opportunity to carry out the PSM.

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Once again I thank you all who had helped me from the bottom of my heart.

Thank you very much!

ABSTRAK

Tesis ini dibahagikan kepada dua bahagian, iaitu, Projek I dan Projek II. Projek I dijalan semasa di Semester Khas selama 8 minggu, manakala Projek II dijalankan semasa Semester 7. Sistem yang dibangunkan ialah Sistem Merecod Stok: Sistem AS (Stock Inventory System). Sistem ini dibangunkan untuk syarikat Antire Solution Enterprise. Antire Solution Enterprise adalah sebuah syarikat yang mengamalkan cara merecod stok secara manual. Objektif projek ini adalah untuk membangunkan sistem yang mengamalkan proses merecod stok secara sistematik dan juga untuk menyelesaikan masalah yang dihadapi oleh Antire Solution Enterprise. Masalah-masalah yang dihadapi adalah seperti mencetak laporan, mencetak borang dan kesilapan dalam pengiraan seperti mengira jumlah bilangan stok dibeli oleh pelanggan, jumlah harga dan sebagainya. Kelebihan Stock Inventory System adalah Stock Inventory System membekalkan cara merekod stok yang lebih sistematik dan teratur kerana kesemua data atau maklumat akan disimpan ke dalam pangkalan data bagi meningkatkan prestasi pengurusan dalam Antire Solution Enterprise. Stock Inventory System dapat menjimatkan masa and tenaga pekerjapekerja syarikat tersebut untuk mencari maklumat. Selain daripada itu, Stock Inventory System juga berupaya mencetak laporan yang telah dirumuskan secara automatik and mencetak borang yang berdarjah. Justifikasi metodologi yang digunakan untuk membangunkan sistem ini akan memastikan sistem yang dibangunkan adalah betul dan boleh dipercayai. Maka dengan ini, model "Waterfall" digunakan sebagai panduan untuk membangunkan Stock Inventory System. Pendekatan teknik object-oriented dan unified modeling language (UML) digunakan dalam pembangunan Stock Inventory System. Skop yang terlibat adalah sepert login, mengubah kata laluan, pendaftaran, mengurus stok, mencetak report dan borong, mengurus alamat dan pengurusan (maintenance). Secara keseluruhannya, saya berharap bahawa Stock Inventory System telah meyelesaikan masalah yang dihadapi oleh Antire Solution Enterpris.

ABSTRACT

This thesis is divided into two parts; there are Project I and Project II. Project I will be carried out in Special Semester (8 weeks), while Project II is in Semester 7. The system that I'm working on is Stock Inventory System. This system is developing for Antire Solution Enterprise. The project objective is to perform a systematic recording stock process and to solve the problems that were facing by Antire Solution Enterprise. The problems that are mentions here are print report, print form and mistake occur in calculation such as to count the total quantity that was bought by customer, total price and so on. The Stock Inventory System significance is that it provides more systematic and organized ordering system because all data will be kept in database so it can increase the level of the management in Antire Solution Enterprise. Stock Inventory System can save staffs' time and man power to find record. Besides, Stock Inventory System is capable to print reports that were summary by Stock Inventory System automatically and print standard format forms. The correct choice of methodology plays an essential role for the delivery of reliable and correct software products. A "Waterfall" model is chosen to guide Stock Inventory System and OO approach technique and UML tool to develop Stock Inventory System. Scopes areas of Stock Inventory System are login, change password, register, manage stock, print report, print form, address book and maintenance. In conclusion, I hope that Stock Inventory System had solved the problems face by Antire Solution Enterprise.

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7.1

Test Organization

LIST OF ACRONYMS

Antire Solution AS

Rapid Application Development UML

Decision support system RAD

Object-Oriented 00

Object-Oriented Analysis OOA

Object-Oriented Design OOD

Object-Oriented Programming OOP

Personal Computer PC

GUI Graphical User Interface

GNU Public License GPL

Open Database Connectivity standard **ODBC**

D/O **Delivery Order**

Purchased Order P/O

Return Note RN

Kolej Universiti Kebangasaan Malaysia **KUTKM**

Projek Sarjana Muda **PSM**

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В	Classes
C	Activity Diagram
D	Interface Design
E	Output Design
F	User Acceptance Testing

CHAPTER I

INTRODUCTION

1.1 Overview

The final year project that had developed is Stock Inventory System for a new company there is Antire Solution Enterprise. Antire Solution Enterprise is selling machine, electronic and electric equipment. This company had chosen because it is a new company and do not have any existing system in this company so a new company has develop for this company to increase the level management of this company.

Besides, developer can give some recommend or suggestion to this company regarding to the interface design or flow of the system. Mean that develop had more chance to give opinion to this company as long as develop have fulfill the customer's requirements if compare with other company that already had existing system. The system name is Stock Inventory System. This system is regarding to the Antire Solution Enterprise's stock. The main purpose of this system is to store stock's data and print report and form for Antire Solution Enterprise.

The development methodology that had chosen to develop Stock Inventory System is "Waterfall" (also known as Traditional Method) model and the technique that had use is OO approach and the tool is Unified Modelling Language (UML).

1.2 Problem Statement(s)

After having an observation and interview with the chief of the Antire Solution Enterprise, Mr Lim Wai Pin, developer found out that all the company data is store by manually that is keeps in documents method and it was not systematic. As a result, this company do not buy many stocks to store in company because worry the stock will lost and do not know how many stock are lost when it is happen. Antire Solution Enterprise also does not know the total purchase that customer had made and the gross profit of this company. Besides, this company also do not have a standard form to print the quotation, delivery order, invoice, and cash bill. This company just print all the forms using Microsoft Word or Microsoft Excel.

In addition, it may occur calculation problem such as total price that customer need to pay, total quantity of stock customer has bought and so on. It may happen because of neglect of human for example press wrong calculator's button, enter the unit price twin times and so on.

All problems was list in above can be solve or reduce by develop a system there is Stock Inventory System. This system will be more systematic and easy to find record because all data will be store in database (MySQL). This company can know the stock balance, total customer purchase and company gross profit through print in reports.

Besides, all quotation, delivery order, invoice and cash bill will print in standard format through Stock Inventory System. Further, all calculation will count by Stock Inventory System automatically so that it can reduce the mistake occur in calculation.

1.3 Objective

The objective to develop Stock Inventory System is to perform a systematic of the management level for Antire Solution Enterprise. It will be more systematic and orderly because all record will be store in database. Besides, it will easy for

staffs to find record because user just needs to key-in the requirement data and press enter to get the information. Thus, it can save staff's time.

Further, all calculation will count by Stock Inventory System automatically therefore it can reduce the mistake occur in calculation.

Besides, all quotation, delivery order, invoice and cash bill will print in standard format through Stock Inventory System.

In addition, the purpose to develop Stock Inventory System is this system can print stock report there is activity status and taking list, total customer purchase report and gross profit report. Therefore, company can know the stock balance, total purchase that customer had made and the gross profit of Antire Solution Enterprise.

Besides, the objective of the developer to develop this system is to create a user-friendly system for this company.

1.4 Scope

The organization that will use Stock Inventory System is administrative department of Antire Solution Enterprise. The users of Stock Inventory System are the staff and the administrator of the company. Administrator can fully use the Stock Inventory System while staff just can partially use the system. The functions that staff cannot access are print total customer purchased and gross profit report, stock details and maintenance the system. Most of the function that Antire Solution Enterprise wants to create will combine and develop in Stock Inventory System. Stock Inventory System can divided into a few modules there are login, register, manage stock, printing, address book, and maintenance the system.

1.5 Contributions

The people that will get benefit from Stock Inventory System are staffs of Antire Solution Enterprise and owners of the company. The Stock Inventory System is more systematic and orderly so it can increase the level of the management in the Antire Solution Enterprise. User can add, retrieve, edit and delete data more efficient through Stock Inventory System because all data will keep in database. Besides, Stock Inventory System can save employee's time to find record if compare with find record through document(s) when they want check back the old record.

Through Stock Inventory System, this company can print out some report to get know the situation stock in the company. Besides, account department also will use Stock Inventory System. Worker in the account department can print cash bill to customer using Stock Inventory System after customer clear the debt. Account department also can know the gross profit for every item in this company through Stock Inventory System.

The Stock Inventory System is user friendly because the interface that develop design is simply and easy to understand. Besides, help file also will be provided in Stock Inventory System.

1.6 Expected Output

After Stock Inventory System implement, the Antire Solution Enterprise's organization will be more orderly and systematic. It can save employees' time to do the daily works. Besides, Stock Inventory System can solve the mistake that will occur in calculation. All the reports and standard forms will be print through Stock Inventory System. This company can know the company situation through the reports that print from Stock Inventory System. So, this company can take action as soon as possible when the reports show the company has facing some problems for example low profit, lose stock and so on.

1.7 Conclusion

As the conclusion, Stock Inventory System will be fully fulfill all basic requirements of the Antire Solution Enterprise and solve the problems that was stated before. More details in researches which have been done will be stated in literature review in next chapter.

CHAPTER II

LITERATURE REVIEW

2.1 Introduction

The purpose of the literature research is to perform a clearly imagination for the relevant topics that will be develop in the project. An interview with the chief of the Antire Solution Enterprise has done to collect information and to understand the user's requirements. Knowledge regarding to the stock also can be learn from observation and interview. It will be easier for programmer to develop Stock Inventory System.

Besides, research through Internet also has done. It will be more difficult to do research regarding to the inventory system in once company because stock information is a private data and it is confident in once company. In addition, Antire Solution Enterprise does not have existing stock inventory system so Internet is a main place to do research.

Researching to the inventory system that already in market also can give some idea to determine the function in new system and replace the weakness of the system. The information that gets from research was very useful to develop Stock Inventory System and to solve the problem that had faced by user.