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JUDUL: INSURANCE MANAGEMENT SYSTEM

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^ Tesis dimaksudkan sebagai Laporan Projek Sarjana Muda (PSM)

INSURANCE MANAGEMENT SYSTEM

PHOO CHUN FEI

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

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

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I admitted that this project title name of

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STUDENT : _____ Date : 19/10/04

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SUPERVISOR : _____ Date : 19/10/04.

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DEDICATION

Specially dedicated to

My beloved parents and brothers who have

encouraged, guided and inspired me throughout my journey of education

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Projek Sarjana Muda (PSM) is compulsory for a KUTKM student before being awarded the degree. Through this project, PSM will enhance the students' ability and skills in literature research, ability to analyze problems in various views and able to propose alternative solutions or models, ability to manage and utilize available resources in accomplishing the project and present the output effectively.

First of all, I would like to express my deepest appreciation to my PSM supervisor, Encik Mohd Fuad Ahmad for his valuable guidance and supervision. He always been very helpful and share his knowledge when I encounter problem in the project.

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ABSTRAK

Perniagaan insurance pada masa kini melalui pembangunan yang sangat cepat. Cara manual dalam menguruskan perniagaan insurance memberikan banyak masalah the agen insurance. Apabila perniagaan agen bertambah, ini akan mengakibatkan agen tidak mempunyai cukup masa untuk menguruskan perniagaan mereka secara sistematik. Oleh itu, IMS dibangunkan. IMS adalah satu sistem untuk menguruskan aktiviti harian agen insurance. Fungsi utama dalam IMS adalah pengurusan polici dalam bentuk hayat dan motor, pengurusan pembeli insurance, penghasilan laporan untuk analisis serta pembaikan sistem IMS. Kajian ini telah dijalankan untuk mencari metodologi yang digunakan untuk membangunkan IMS, kajian mengenai sistem semasa, fasa pengurusan untuk IMS, fasa analisis untuk IMS, fasa rekabentuk untuk IMS, fasa implementasi untuk IMS dan fasa ujian untuk IMS.

ABSTRACT

The insurance businesses nowadays have been developing very fast. The use of manual ways of handling insurance management has been a problem for the insurance agents. As the agent's businesses increase, this could result in failure of organizing their business systematically. Therefore, IMS is developed. IMS is a system to handle the basic task and activities for the insurance agents. The main function in IMS is policy management, customer management, motor insurance management, report generation and the IMS maintenance. This research have been carried out to find out the methodology used to develop IMS, the literature review of existing system, the project planning for IMS, analysis phase for IMS, design phase for IMS, implementation phase for IMS and testing phase for IMS.

TABLE OF CONTENT

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

ABBREVIATION	DESCRIPTION
ADO	ActiveX Data Objects
AIA	American International Assurance
ASP	Active Server Pages
ERD	Entity Relationship Diagram
HTML	Hypertext Markup Language
IMS	Insurance Management System
IC	Identification Card
IT	Information Technology
JAD	Joint Application Development
JSP	Java Server Pages
KUTKM	Kolej Universiti Teknikal Kebangsaan Malaysia
NT	New Technology
ODBC	Open Database Connectivity
OS	Operating System
PSM	Projek Sarjana Muda
RAD	Rapid Application Development
RMIS	Risk Management Information System
SDLC	System Development Life Cycle
SQL	Structured Query Language
UML	Unified Modeling Language
WFM	Workflow Management
XML	Extensible Markup Language
VB	Visual Basic

LIST OF APPENDICES

CHAPTER 1

INTRODUCTION

1.1 Preamble/Overview

Nowadays, insurance have been widely accepted by the public. There are many type of insurance such as car insurance, accident insurance, property insurance, life insurance and many others. If you pick 10 people to be on a survey and ask whether they are covered by insurance, I am sure most of them give a positive answer.

The users that will benefit from IMS are the insurance agent from various insurance companies such as AIA Insurance, Prudential Insurance, ING Insurance, Kurnia Insurance and others. For this project, AIA insurance company will be my reference organization. The insurance packages offers by AIA will be integrated into the IMS. The insurance rate calculation is based on the rate given by AIA. Other insurance packages from other companies can also integrate into the system. The IMS administrator can set the rate into IMS.

IMS is a system to help the insurance agent to manage their business and will automatically notified the agent regarding the insurance premium date line.

I intend to design and develop a system which is more systematic and effective. I will handle the tasks of interview, information gathering and management, interface layout, database design, network set, implementation and testing. The system will have the following function:

a) Insurance Premium Management
b) Customer Details Management
c) Motor Insurance Management
d) Report Generation
e) Maintenance

In order to develop IMS, choosing the correct methodology is very important. I have chosen waterfall model as the software development methodology. There are six phases in the development life cycle, which are Preliminary Investigation, Analysis, Design, Development, Implementation and Maintenance. This methodology will provide me a deep understanding before develop the IMS, and thus produce an IMS that is efficient, stable and user friendly.

1.2 Problem Statements

The current Insurance Management System for the insurance business is done by using the Data Management Software such as Microsoft Excel, Microsoft Word and others. The more advance system for the insurance agent to manage their insurance business is using database software. Therefore, IMS will be developed so that the management of insurance can be more systematic.

1.3 Objective

In order to success in this project, I have to achieve the following objectives which mention as below:

a) **To produce user friendly interface**

To make interaction between the user and the system become more interactive and dynamic

b) **To create a stable system**

To minimize the risk of system failure

c) **To create a systematic Insurance Management System**

To minimize the workload of the insurance agent. This system will save agent's time while doing the same procedure. The agent can check their profit using this system.

d) **To create an easy retrieve database**

Data manipulation procedure like data add, update, delete and modify can be done easily with a well-designed architecture, which can maintain the data validation.

e) **To generated a precise report**

The monthly report such as total insurance premium and agent's profit does not produce error.

f) **To create a maintenance easy system**

The system will be maintained by the agents itself. Most of the agents are not computer literate. Therefore, the system maintenance should be easy to use.

1.4 Project Scope

IMS will be developed using Microsoft VB.net. The database use to develop IMS is Microsoft SQL Server 200 Personal Edition. The combination of VB.net and SQL Server 2000 where chosen to develop IMS because they integrate well and does not cause integration problem. For report generation, IMS will be using Crystal Report 9.0. Crystal Report is a user friendly computer aided tools and integrate well with Microsoft SQL Server 2000.

The target user for IMS is the insurance agent. IMS can help to minimize the work load of the agent. IMS provide a paperless work environment to the agent because all the customer information is save into IMS.

Agent insurance can easily find the customer record the needed by searching the database. IMS will calculate the insurance premium for a particular customer based on insurance package the customers choose. Besides that, IMS can calculate the profit for the insurance agent. IMS will also automatically inform the agent regarding customer premium due date so that the agent will not forget to collect the premium from their customers. IMS will also generated a monthly analysis report for the insurance agent, thus they can monitor their monthly business. The update, delete and insert record function will also be available in IMS.

IMS should a standalone application. IMS must be installed into a personal computer before it can be used by the target user.

As the conclusion, this system is very useful to the insurance agent. The increasing of people who join the insurance field nowadays hopes for a system that can easily manage their insurance activity. Thus, the development of IMS sure can help the insurance agent to manage their record systematically.

1.5 Contributions

The growing of insurance business has become popular among the Malaysia citizen. Everyone has seen insurance as a need in their life that can protect them. The important of insurance has become significant.

IMS is a record management application for the insurance agents. The agent can save their time for search, add, insert, delete and remove their customer information. The information can be easily found with just some simple click. Besides that, the correctness of customer information is more consistency compare if the agents store the information using the paper recording. Human error will always be there such as wrong searching information, customer information enter incorrectly and others. To solve all this human error, IMS will prompt to the agents if the information they enter are not valid.

Besides that, IMS also serve as the insurance premium management for the insurance agents. IMS will store type of policies available. All the policies will have different insure rate. The agents can choose type of policies their customers want. IMS will calculate the monthly insure information for the particular policies.

IMS will also serve as a tool for the agent to calculate their monthly profit based on their insurance sales. The profit calculation is calculated when the agents record the policies into the IMS.

IMS will be a tool for report generation for the agents. IMS will generate monthly policies sales analysis report, agent's profit report and policies type sales analysis report. The generation of report can let the agents understanding their insurance business situation such as what type of policies are most popular, their current profits and the sales for the particular date range. The agents can analyze the

information provided and make some improvements in their insurance business strategy.

1.6 Expected Output

After the end of the development process, a complete system for managing the businesses for the insurance agents will be developed. This software will be ready to use by the agents and help the agents to manage their business. The main functions that will serve the agents are customer management, life and motor insurance management, and report analysis.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

IMS is one of the systems for the insurance agent to manage the insurance systematically. Like thousands of program that exists nowadays, IMS tends to part of the problems face by the insurance business.

Therefore, a research on the problem domain is required. With the advancement of Internet as a source to gather information, it is easy to find out the existing system, technology, protocols and methodology use to develop the system. Beside that, information gathering can be from another university student's thesis, journals and reference books. All the information is used as the guide to develop the system.

Literature research is important to find out the advantages and disadvantages of the existing systems, problem solutions and system designs. Besides that, it also gives a good grasp of the knowledge and concepts before develop the IMS. The technology that used to develop the existing system can be known.