

**MANAGEMENT SYSTEM FOR E-LEARNING SIGN LANGUAGE USING
KINECT (E-SiLK)**

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I hereby declare that this project report entitled

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DEDICATION

Dear Parent

Thank you for your sacrifice and love.

Dear Lecturer and Supervisors

Thank you for all the knowledge and guidance

Dear Friends

Thank you for al the knowledge, guide, encouragement and love.

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Thanks a lot.

ABSTRACT

Management System for E-SiLK is a system that manage the sale of games E-SiLK products that are on the market. The E-SiLK game is an education games for deaf student or person that have hearing problem. Since it will be marketable to public, this system helps to manage for ordering and purchasing any of the application and hardware related to the E-SiLK. Among the main functions of this system is to manage game purchases through online, provide great package deals to customers, as well as to manage products and packages. In addition, this system provides a beneficial effect for the top management company in generating useful reports such as sales transaction, customers information and purchases, products information and packages information. Using these reports, the top management company can do statistical analysis to increase their profit sales.

ABSTRAK

Sistem pengurusan E-SiLK adalah satu sistem yang menguruskan penjualan permainan produk E-SiLK yang berada di pasaran. Produk E-SiLK adalah sebuah permainan yang berteraskan pendidikan untuk pelajar pekak atau orang yang mempunyai masalah pendengaran. Oleh kerana produk ini akan dipasarkan secara umum dan meluas, sistem ini dapat membantu menguruskan untuk pesanan dan pembelian aplikasi dan perkakasan yang berkaitan dengan E-SiLK. Antara fungsi-fungsi utama sistem ini adalah untuk menguruskan permainan pembelian menerusi dalam talian, menyediakan tawaran pakej hebat kepada pelanggan, serta bagi menguruskan produk dan pakej. Di samping itu, sistem ini memberi kesan yang baik untuk pihak pengurusan atasan syarikat di dalam menjana laporan berguna seperti transaksi jualan, maklumat pelanggan dan pembelian, maklumat produk dan maklumat pakej. Menggunakan laporan tersebut, pihak pengurusan syarikat boleh melakukan analisis statistik untuk meningkatkan jualan dan keuntungan mereka.

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LIST OF ABBREVIATIONS

DBLC	-	Database Life Cycle
DBMS	-	Database Management System
DDL	-	Data Definition Language
DML	-	Data Manipulation Language
ERD	-	Entity Relationship Diagram
E-SiLK	-	E-Learning Sign Language Using Kinect
GUI	-	Graphical User Interface

CHAPTER I

INTRODUCTION

1.1 Project Background

Inability is the result of a weakness that may be physical, psychological, mental, tangible, enthusiastic, formative, or some mix of these. An incapacity may be available from conception, or happen amid a man's lifetime. Disabled is covering all age categories and is not limited to specific groups.

According to the statistics released by the United Nations Organization in the official website, stated that:

“...the Disabled (Disabled) is 10 percent of the total population in the world. Eighty (80) percent of people with disabilities are in developing countries. The number of deaf people in Malaysia is small which 40,000 are registered with the JKMM until the end of December 2010 and by the amount of it being an easy job to do what we desire in our community development...”

Therefore, the government, society and parents play an important role in educating them to be a human being useful to society and state. Nor as a society set aside for people with disabilities today. Rather they are asking to be born disabled. Thus, early education is very important to them, such as basic sign language so they can communicate with the public using the harmonic language of sign language.

As is well known, in this era of globalization learning is a basic requirement in the form of advanced generation. Learning is done manually is considered inefficient and need reform in the delivery. This system will be developed on the Management System for E-Learning Sign Language Using Kinect (E-SiLK) in which these systems will be used by students with disabilities, school, parents or any interested students to learn sign language.

The main purpose of this system is to operate and manage the information and data relating to the sales among customers and managing the process for this sales. Among the scope of this system developed is composed of management students and parents, alphabet letters, numbers and shapes to use sign language.

Therefore a system of selling products E-SiLK was built for the purpose of managing all sales of products and packages that have been produced to the user. This system is a medium between buyer and management E-SiLK. In this system, a product that will sell is divided into two categories namely applications and hardware. Among the applications offered are E-SiLK game, notifications and e-craft. While for hardware, this system offers sales of Kinect v1, Kinect v2, computer, laptop, tablet and smartphone. Each product will have its own price and the price is based on the current market price and will be sold in Ringgit Malaysia (RM). Each product sold will be recorded for the purpose of sale to management.

Next for the sale of packages, is a combination of several products for the same in one package. Each packages offered can have more than one product at a time. What makes it more interesting, each packages offered keeps a certain discount based on a

percentage of the sale. Therefore, the customer will get greater savings if purchased in the form of packages.

1.2 Problem statement(s)

- **Record all the entry and sale of products and package manually using Microsoft Excel that are less effective.**

Increasingly today, sales data are growing and using manual system was no longer effective because the data would be redundant and slow to query and accessible to users.

- **Technical errors when admission and sales often happens the effect of a less systematic and system access.**

If all things done with manual, then as an ordinary human, we'll never run in making mistakes. For example the mistake while doing sales data entry is very important. If there is some mistake it will affect the profits of the company.

- **Do not have a detailed report about the sale of products and package makes it difficult for the management to do the data analysis.**

If you do not have a complete report and related product sales package, this will be very difficult for management to make a decision on determining product price and discount for each package because based on reports received sales analysis will be performed on it.

1.3 Objective

- **To record all purchases of products and packages offered for each clients.**

The system will record each sales products and packages that have been offered and the quantity of the product must be in adequate condition to perform the transaction. The record will include all the information the buyer, packages and products selected, payment accounts and transaction information.

- **Develop centralized sales system that can serve two different categories of users.**

These systems have developed to serve two different user categories, namely the management of E-SiLK and buyer. For the management of E-SiLK will do all entry and update the data relating to the package and product. While the buyers are able to see packages and products offered in turn perform the transaction.

- **Produce reports transaction achieved for each sales within a certain time period.**

This system will also produce a report relating to the transaction, the buyer, packages and products that were sold. The management may choose the period dates to produce the report. This report is to set up aims to provide useful information to management for the purpose of analysis.

1.4 Scope

The scope for this system divide by two categories which are user scope and system scope. The user scope explain about the users that will use the system directly or indirectly. While system scope explain about the functionality that is able to do by using this system.

1.4.1 User Scope

The user scope was divided into two which are Administrators and Buyers. Administrator explain about the management level while buyers explain about the end user level.

1.4.1.1 Administrators

For the scope of the use of the admin, is aiming to manage all information concerning the products, packages, buyers, the transaction, payment and reporting. Each scope includes insert, update, view and delete. Each new package has included selected products that will be available in the package. Each package can contain a lot of product in a same time. But if one of the products contained in the package has run out of stocks, then the whole package will no longer be available for the purposes of the transaction up to the quantity of product being added. The next admin will also create and view detailed reports regarding transaction ever done before. With the availability of the report, could the admin data for use in analysis and the importance of the company.