

## **I-KOOP MANAGEMENT SYSTEM**



**UNIVERSITI TEKNIKAL MALAYSIA MELAKA**

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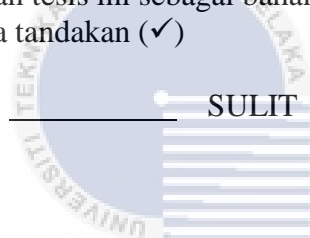
JUDUL: I-KOOP MANAGEMENT SYSTEM

SESI PENGAJIAN: [2020/ 2021]

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# I-KOOP MANAGEMENT SYSTEM

AININ SOFEA BINTI AZAHARI



This report is submitted in partial fulfillment of the requirements for the Bachelor of Computer Science (Database Management) with Honours.

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

FAKULTI TEKNOLOGI MAKLUMAT DAN KOMUNIKASI

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

2020/2021

**DECLARATION**

I hereby declare that this project report entitled

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this project report is sufficient in term of the scope and quality for the award of

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## DEDICATION

To my beloved parents, family and all my 3 BITD friend whose support, encouragement and inspired me to complete this project. Next, big thank you go to my supervisor, Ts. Abdul Razak Bin Hussain for this project for helping me doing my PSM 1. I also would like to thank for his kind great advice and brilliant ideas. Not forgetting to all the lecturer that involve directly or indirectly, the Universiti Teknikal Malaysia Melaka especially Faculty Information Technology and Communication for giving me chance to study here.



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## ABSTRACT

The i-KOOP Management System is designed to help facilitate the school cooperative management system, process of buying and selling goods in schools and how to generate the report in the system. The irregular and neglected staff attendance record where staff have to take turns to manage or looking after the school cooperative without any fixed schedule. This problem is caused by difficulty in allocating time or schedule for staff who will manage the school cooperative. To solve the problem, system admin will be able to maintain comprehensive human resource records that includes details of staff and supplier. Next, rely on visual inspection of what product to replenish that may cause over stocking. The staff and supplier need to record the product or items using paper. This problem also may cause missing data and duplicate. To solve the problem is the staff need to facilitate product inventory that includes product sales, product re-ordering and product disposal. It is crucial to have an online cooperative. Finally, the staff also able to obtain the reports easily to save time.

## ABSTRAK

Sistem pengurusan i-KOOP dirancang untuk membantu memudahkan sistem pengurusan koperasi sekolah, proses jual beli barang di sekolah dan bagaimana menghasilkan laporan dalam sistem tersebut. Pertama, rekod kehadiran kakitangan yang tidak teratur dan diabaikan di mana kakitangan perlu bergilir-gilir mengurus atau menjaga koperasi sekolah tanpa jadual yang tetap. Masalah ini disebabkan oleh kesukaran dalam memperuntukkan masa atau jadual untuk staf yang akan menguruskan koperasi sekolah. Untuk menyelesaikan masalah tersebut, pentadbir sistem akan menyimpan rekod sumber manusia yang menyeluruh yang merangkumi perincian kakitangan dan pembekal. Seterusnya, system secara manual bergantung pada pemeriksaan visual produk yang akan diisi semula yang mungkin menyebabkan stok berlebihan. Kakitangan dan pembekal perlu merekodkan produk atau barang menggunakan kertas. Masalah ini juga boleh menyebabkan kehilangan data dan pendua. Untuk menyelesaikan masalah tersebut, kakitangan perlu memfasilitasi inventori produk yang merangkumi penjualan produk, pesanan semula produk dan pelupusan produk. Akhir sekali, kakitangan dapat memperoleh laporan dengan mudah untuk menjimatkan masa.



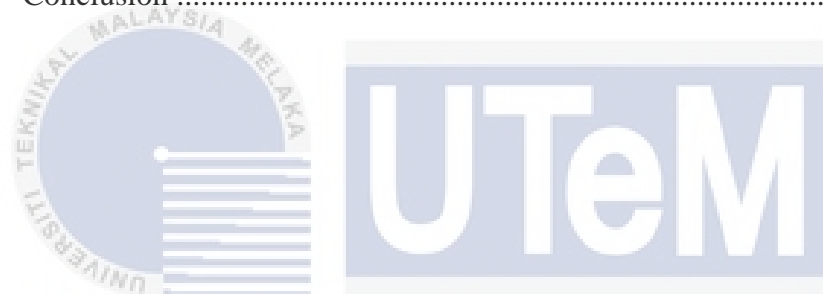
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## LIST OF ABBREVIATIONS

<b>FYP</b>	-	<b>Final Year Project</b>
<b>DFD</b>	-	<b>Data Flow Diagram</b>
<b>ERD</b>	-	<b>Entity Relationship Diagram</b>
<b>XAMPP</b>	-	<b>Cross-Platform (X), Apache (A), MariaDB (M), PHP (P) and Perl (P).</b>
<b>PHP</b>	-	<b>Hypertext Preprocessor</b>
<b>HTTP</b>	-	<b>Hypertext Transfer Protocol</b>
<b>HTML</b>	-	<b>Hypertext Markup Language</b>



## Chapter 1: INTRODUCTION

### 1.1 Introduction

The i-KOOP Management System is a system that developed to help the school shop to manage the stock more efficiently. This system is pleasant automated system for stock management. The objectives are to help industry to manage inventory competently, improve performance and efficiency in handling inventory. It will help users collect and store key-in data for their products and services.

The i-KOOP Management System is invent to help ease the process of buying and selling goods in schools, school cooperative management system and how to calculate the total stock of goods accumulated. Besides, with the school cooperative system, it can help facilitate the affairs of employees as well as can save time and reduce errors.

The project is to improve the school cooperative management system to be more efficient. It is crucial to have an online cooperative management system to help improvised the current manual system because the data can be missing or duplicate. Using the manual management make the data is not stored properly and it can be lost.

### 1.2 Problem Statement

- i. Irregular and neglected staff attendance record.
  - The staff have to take turns to manage or looking after the school cooperative without any fixed schedule. This problem is caused by difficulty in allocating time or schedule for staff who will manage the school cooperative.

- ii. Rely on visual inspection of what product to replenish that may cause over stocking.
  - The staff and supplier need to record the product or items using paper. This problem also may cause data redundancy and it will be able to be duplicate.
- iii. Staff difficult to manage or view the sales in higher quantity.
  - The staff are difficult to summarize the highest sale in month because the report is recorded by manually using the book or paper. The manual system also does not able to display the sales in higher quantity in chart.

### 1.3 Objective

- i. To maintain comprehensive human resource records that includes details of staff and supplier.
- ii. To facilitate product inventory that includes product sales, product re-ordering and product disposal.
- iii. To generate a report of the sales.

### 1.4 Scope

The scopes are functionality, user system and the database. The system can be accessed by teacher, system admin and supplier where the teacher can make order for the cooperatives products or items. The scope can be divided into target user and modules.

### 1.4.1 User Scope

(a) Teacher

The teacher is a staff that will manage the system related to the list of products where teacher can insert, view, update and delete the product. Teacher also can make order and manage sales at the end of the day. After that, teacher can view the time table and view the sales inventory report.

(b) System admin

System admin is responsible to manage the schedule or time table for the teacher to decide the staff that will manage the cooperative based on predetermined schedule. System admin also will be able to register new staff and view the sales inventory report.

(c) Supplier

The supplier is people that supplies the product for the cooperative at the school. The supplier can view, insert, update and delete the product. Next, supplier also will be able to view the history of order time table.

### 1.4.2 Module Scope

(a) Product modules

Product modules will be able to view all the product by name or category. It will display the details of the product name, description, category and price.

(b) Order modules

Order modules will be able to track the total or quantity of the items or product in the system. The order modules will display the product name, quantity and price. Order can be made by choosing the list of supplier.

(c) Schedule modules

Schedule module will be able to display the schedule of staff that will manage the cooperative at school based on predetermined schedule. Furthermore, the schedule also created so that suppliers have a regular schedule to come check the inventory products easily.

(d) Report modules

Report modules will be able to display the sales of the product or items in line graph and pie chart. The line graph will display the report selling by weekly while the pie chart will display the list quantity of the product based on category.

### 1.5 Project significance

The system helps the staff to control and monitor the goods in stock. It also allows them to keep track of the inventory and make sure that the goods are well-organized. The i-KOOP Management System is developed to manage the stock efficiently. This can solve the problem of staff to order the product or items and calculate the stock of the product easily and save a lot of time. Also, it will help to determine financial position because it is very important to have the correct valuation.

Furthermore, the system of i-KOOP Management System also assists the schedule or time table to make sure the staff will follow the schedule that has been given so that they are more organized in managing the cooperative at school.

### 1.6 Expected Output

The project aims is to provide an inventory tracking for the product or item in school shop. Furthermore, the staff can place order for the stock or item and manage the stock using the system. The system will help the user to increase the performance of the work. After that, the system will be able to view or display the report of sales by graph.

The i-KOOP Management System is developed to provide the system to reduce cost and improve the service level from using the manual system. The system is to focus on the inventory management to help the user to manage the stocks or product efficiently. The database system that are using to develop the i-KOOP Management System is SQL.

## 1.7 Conclusion

Online services play an important role in today's daily life. The i-KOOP Management System is facing technological changes, and the current system is still using the old traditional methods to manage its services. A central platform for employees and suppliers to manage inventory and even make payments. This system will very effectively avoid problems such as information errors or loss of registry. Using this system, data is easy to use and securely stored in the system and database.



## CHAPTER 2: LITERATURE REVIEW AND PROJECT METHODOLOGY

### 2.1 About Figures

A project methodology is basically a process that integrates scientific approaches to systems, supported by systems thinking and simulation methods, implemented by people with appropriate systems and experience in the application. It is a standard process that is followed to perform all the steps required to analyze, design, implement and maintain information systems.

As a software methodology, it is the framework for planning, organizing and managing system development processes, an appropriate system development methodology is needed. With the right methodology, it can lead to more effective and profitable software development.

### 2.2 Project Methodology

To develop i-KOOP Management System, Database Life Cycle (DBLC) has been chosen as the project methodology. It includes six phases in the Database Life Cycle (DBLC) which are database initial study, database design, implementing and loading, testing and evaluation, operating and maintenance and evaluation.

#### a) Database Initial Study

Analysis the scope, user groups involved and required data. It is necessary to collect facts whose authority include interview, investigation and other related archives.

- i. Identify the objective, project aim, scope of the project and the boundaries project of i-KOOP Management System.
- ii. Analyze the project system and identify the problems.

## b) Database Design

Based on database initial study, carry out the database design process or model that will support the operations. There are two database design approach which is top-down uses an entity-relationship (ER) model and bottom-up design uses the process of normalization.

- i. Create and identify logical database design, physical database design and conceptual data modelling.
- ii. Define entities, attributes, relationship, process, identification and requirements.
- iii. Identify the Database Management System (DBMS), the language and framework for the project.

## c) Implementing and Loading

Implement all design specifications from previous phase. The output of the database design phase is a series of guidance detailing the establishment of tables, attributes, views, indexes, security constraints, storage and achievement guidelines.

- i. Install the required software for the improvement process.
- ii. Database system design.

## d) Testing and Evaluation

The database used to prototype application and occurs with the programming. The integrity to enforced via proper use of primary, foreign key rules.

- i. Run or test the database to ensure the integrity and security of data.
- ii. Evaluate the database.

## e) Operating

It is considered to be usable once the database has passed the assessment stage. The process of system evolution inevitably begins at the beginning of the operating period.

- i. If there is any problem, it has to resolved according to severity.