

**Universiti Teknologi MARA**

**Inventory Management System  
for Department Store Starvilion**

**Amir Faiz bin Aminorashid**

**Thesis submitted in fulfilment of the requirement for  
Bachelor of Information System (Hons.) Business Computing  
Faculty of Computer and Mathematical Sciences**

**January 2022**

## **ACKNOWLEDGEMENT**

Alhamdulillah, praises and thanks to Allah because of His Almighty and His utmost blessings, I was able to finish this research within the time duration given. Firstly, my special thanks go to my supervisor, Dr. Gloria Jennis Tan. Special appreciation also goes to my beloved parents Mr Aminorashid bin Ibrahim and Mrs Halimah binti Sidin. Last but not least, I would like to give my gratitude to all dearest friends.

## **ABSTRACT**

The implementation of inventory management system can increase efficiency in the organization. Starvilion Sdn Bhd is associate with successful textile retailers. Conducting a project development methodology, System Development Life Cycle (SDLC) has been chosen as a process and the flow to be done. Therefore, the theory of inventory management system has been used to solve the problem area. The results of the entire system's testing are also reported. information system development at a company in a department store. In project management development, every phase involved in project framework. System development life cycle (SDLC) has been used for the project framework. It is also a boutique company that sells men's and women's clothing and children's clothing. Starvilion also works with the popular company such as Jakel company in Malaysia.

## **TABLE OF CONTENTS**

<b>CONTENT</b>	<b>PAGE</b>
<b>SUPERVISOR APPROVAL</b>	ii
<b>STUDENT DECLARATION</b>	iii
<b>ACKNOWLEDGEMENT</b>	iv
<b>ABSTRACT</b>	v
<b>TABLE OF CONTENT</b>	vi
<b>LIST OF FIGURES</b>	ix
<b>LIST OF TABLES</b>	xi
<b>LIST OF ABBREVIATIONS</b>	xii
<b>CHAPTER 1</b>	1
1.1 Background of Study	1
1.2 Current Business Process	2
1.3 Problem Statement	4
1.4 Objectives	4
1.5 Scope	4
1.6 Significance	5
<b>CHAPTER 2</b>	6
2.1 Introduction	6
2.2 Area of Interest	6
2.3 Domain and Problem Area	8
2.4 Theory	9
2.4.1 Periodic Inventory System	10
2.4.2 Perpetual Inventory System	11
2.4.3 Barcode Inventory System	11
2.4.4 Radio Frequency Identification (RFID)	13
2.5 System Development Model(s)	14

2.6	Similar Existing Systems	16
2.6.1	Mobile Inventory FREE	17
2.6.2	Smart Inventory System-Mobile & Web Development	22
2.6.3	Comparison of Similar System	28
2.7	Implication of Literature Review	29
<b>CHAPTER 3</b>		30
3.1	Introduction	30
3.2	Project Development Methodology	30
3.3	Phase 1: Planning	32
3.4	Phase 2: Analysis	33
3.5	Phase 3: Design	36
3.6	Phase 4: Implementation	43
3.7	Phase 5: Testing	45
3.7.1	Test Case for Staff	45
3.7.2	Test Case for Manager	49
3.8	Phase 6: Documentation	53
<b>CHAPTER 4</b>		54
4.1	Introduction	54
4.2	Business Process Improvement	54
4.3	System That Has Been Developed	55
4.3.1	System for Staff	55
4.3.2	System for Manager	61
4.4	System Testing	66
4.4.1	Test Case for Staff	66
4.4.2	Test Case for Manager	71
4.5	Discussion	75
4.6	Project Summary	75
4.7	Conclusion	76