## UNIVERSITI TEKNOLOGI MARA

# E-COMMERCE SYSTEM FOR ANGELIC SCARVES

### **MUHAMMAD FIRDAUS BIN MURAT**

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

FEBRUARY 2023

#### **ACKNOWLEDGEMENT**

In the name of Allah, the Most Gracious and the Most Merciful.

Alhamdulillah, all praise and gratitude be to God for His blessings and guidance, which have enabled me to successfully complete the final project. Without His help, this achievement would not have been possible.

I would like to express my deepest appreciation and gratitude to my supervisor, Ms. Cik Ku Haroswati Che Ku Yahaya, for her invaluable support and guidance throughout my research project. Her expertise and insights have been instrumental in shaping my work. I would also like to extend a special thanks to my CSP600 and CSP650 lecturer, Madam Norulhidayah Binti Isa, for her encouragement and dedication to teaching. Her passion for the subject matter has been a constant source of inspiration and motivation for me.

Furthermore, I would like to express my appreciation to all the individuals who have supported me directly or indirectly in completing this project. Your contributions, whether big or small, have been invaluable in helping me achieve my goals. I am grateful for the encouragement, feedback, and assistance provided by my colleagues and friends, without whom this project would not have been possible. Once again, I am thankful to God for His blessings and guidance throughout this journey.

#### **ABSTRACT**

Advancements in technology and the internet have significantly transformed the business world, particularly within the e-commerce and e-business sectors. In the competitive fashion industry, companies must adopt new technologies and practices, including online purchasing systems, to stay ahead of the competition. This is important for businesses of all sizes. This paper focuses on the development of an online purchasing system called the E-Commerce System for Angelic Scarves, which aims to address the company's current issues with their purchasing process. By providing customers with the ability to order online anytime, the company can streamline their processes, reduce errors, and increase customer satisfaction. The system was developed using an adapted Waterfall model that consists of six phases, which was chosen for its better risk analysis and shorter initial operating time. The system was designed to improve the company's current processes, which were identified through interviews with the owner. Future improvements could include offering more payment options. The E-Commerce System for Angelic Scarves serves as an important solution to help the company remain competitive and provide high-quality services to customers.

## **TABLE OF CONTENT**

SUPERVISOR APPROVAL	i
STUDENT DECLARATION	ii
ACKNOWLEDGEMENT	iii
ABSTRACT	iv
TABLE OF CONTENT	v
LIST OF FIGURES	viii
LIST OT TABLES	X
LIST OF ABBREVIATIONS	xii
CHAPTER 1	1
1.1 BACKGROUND OF STUDY	1
1.2 CURRENT BUSINESS PROCESS	2
1.3 PROBLEM STATEMENT	4
1.4 OBJECTIVE	6
1.5 SCOPE	6
1.6 SIGNIFICANCE	8
1.7 CONCLUSION	9
CHAPTER 2	10
2.1 INTRODUCTION	10
2.1.1 E-Commerce	10
2.1.2 Types of E-Commerce	11
2.1.3 Advantages and Disadvantages of E-Commerce	15
2.2 JAKOB NIELSON USABILITY HEURISTICS	17
2.3 SOFTWARE DEVELOPMENT LIFE CYCLE	19
2.3.1 Proposal SDLC Model	19
2.4 SIMILAR EXISTING SYSTEM	20
2.4.1 Naelofar.com	20
2.4.2 TudungPeople.com	23
2.4.3 Sugarscarf	25
2.4.5 Comparison between Similar Existing System	28
2.5 IMPLICATION OF LITERATURE REVIEW	29
2.6 CONCLUSION	29
CHAPTER 3	

3.1	INTRODUCTION	30
3.2	PROJECT FRAMEWORK	30
3.3	PROJECT PLANNING	32
3.4	PROJECT ANALYSIS	34
3.4	User Requirement	34
3.4	Functional and Non-Functional Requirement	36
3.4	4.3 Business Model Canvas	38
3.5	PROJECT DESIGN	38
3.5	5.1 Context Diagram (CD)	39
3.5	Data Flow Diagram (DFD) Level 0	39
3.5	5.3 Entity Relationship Diagram	41
3.5	5.4 Site Map	44
3.5	Potential User Interface	45
3.6	IMPLEMENTATION	46
3.7	PROJECT TESTING AND EVALUATION	47
3.7	7.1 Test Plan	48
3.8	PROJECT DOCUMENTATION	49
3.9	CONCLUSION	49
CHAP	ΓER 4	50
4.1	INTRODUCTION	50
4.2	RESULT FOR OBJECTIVE 1	50
4.3	RESULT FOR OBJECTIVE 2	53
4.3	Develop an E-Commerce System for Angelic Scarves	53
4.3	3.2 Implementation of Jakob Nielsen Usability Heuristics Theory	55
4.4	RESULT FOR OBJECTIVE 3	63
4.4	System Developer Testing Result	63
4.5	CONCLUSION	70
CHAP	TER 5	71
5.1	INTRODUCTION	71
5.2	PROJECT SUMMARY	71
5.3	OBJECTIVE ACHIEVEMENT	71
5.3	3.1 First Objective	72
5.3	3.2 Second Objective	72
5.3	3.3 Third Objective	73
5.4	LIMITATION	73