UNIVERSITI TEKNOLOGI MARA

USAHAWAN AINAA E-COMMERCE SYSTEM USING NIELSEN'S USABILITY HEURISTICS

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TABLE OF CONTENTS

CONTENT	PAGE
SUPERVISOR APPROVAL	ii
STUDENT DECLARATION	iii
ACKNOWLEDGEMENT	iv
ABSTRACT	v
TABLE OF CONTENTS	vi
LIST OF FIGURES	xi
LIST OF TABLES	xvi
LIST OF ABBREVIATIONS	xviii
CHAPTER ONE: INTRODUCTION	
1.1 Background of Study	1
1.2 Current Business Process	3
1.3 Problem Statement	5
1.4 Objectives	8
1.5 Project Scope	9
1.6 Project Significance	10
1.7 Project Framework	11
1.8 Gantt Chart	15
1.9 Conclusion	18
CHAPTER TWO: LITERATURE REVIEW	**19**
2.1 Introduction	19
2.2 Overview of E-Commerce	19
2.2.1 Definition of E-Commerce	20
2.2.2 Benefits of E-Commerce	21
2.2.3 Types of E-Commerce	22
2.3 Online Shopping System	23
2.3.1 Features of Online Shopping System	23

5.4 Recommendation and Future Enhancement 164
5.5 Conclusion 165

REFERENCES 167
APPENDICES 171
APPENDIX A: Approach The Businesses 171
APPENDIX B: Review the Prototype Session 172
APPENDIX C: System Testing using Test Plan 173
APPENDIX D: User Evaluation Questionnaire 174
APPENDIX E: System Usability Scale (SUS) Score Calculation 177
APPENDIX F: Turnitin Similarity Result 178
APPENDIX G: Turnitin AI Result 179

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ABSTRACT

The rapid growth of e-commerce in Malaysia, particularly during the COVID-19 pandemic, highlights the need for a centralized e-commerce system to improve sales efficiency and business management for agent-based skincare businesses such as AINAA Beauty. The existing business process for agent AINAA Beauty relies on manual product stock updates, the use of social media platforms that lack essential e-commerce functionalities, and the absence of analytics or visual sales tracking. To solve these problems, the objective of this project is to develop Usahawan AINAA E-Commerce System using an Agile approach of Evolutionary Prototyping model, which was applied during the design phase, and Nielsen's Usability Heuristics were incorporated to improve system usability. System testing was conducted to verify system functionality, followed by system usability testing with user evaluation. There are 39 respondents involved in usability testing. System Usability Scale (SUS) used to measure usability testing. The evaluation results showed a SUS score of 86.03%, indicating excellent usability and high user satisfaction with the system. The integration of Nielsen's Usability Heuristics and positive usability evaluation results demonstrates the system's effectiveness in enhancing usability, operational efficiency, and user satisfaction, while also offering a strong foundation for future improvements and research in e-commerce system design. In conclusion, the Usahawan AINAA E-Commerce System successfully achieves its objectives by providing a centralized, user-centered e-commerce solution for an agent-based business model. For future improvement, the system can be enhanced by adding mobile optimisation, advanced sales analytics, and real-world performance and security testing to support business growth and wider user adoption.