FRONT END DEVELOPMENT OF A TRACEABILITY WEB APPLICATION FOR STINGRAY LEATHERCRAFT SUPPLY CHAINS: ORISTINGRAY

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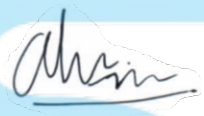
STATEMENT BY THE AUTHOR

I hereby declare that this submission is my own work and to the best of my knowledge, it contains no material previously published or written by another person, nor material which to a substantial extent has been accepted for the award of any other degree or diploma at any educational institution, except where due acknowledgement is made in the thesis.



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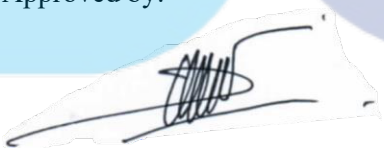

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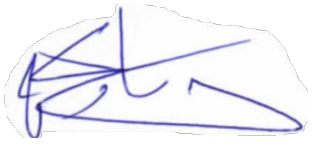

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ABSTRACT

FRONT END DEVELOPMENT OF A TRACEABILITY WEB APPLICATION FOR STINGRAY LEATHERCRAFT SUPPLY CHAINS: ORISTINGRAY

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Stingray leathercraft products has become quite popular in recent years in some countries and many countries has since been exporting them. But stingrays are also a legally protected species, and their trade is regulated by the government and international laws. To prevent traders from illegally poaching stingrays or selling fake imitations, an idea for a web-based application to monitor and determine the authenticity of stingray leathercraft products is proposed, and it is called OriStingray. OriStingray works by comparing the data of the product with the data from the application's blockchain ledger which consist of product data from certified stingray leathercraft companies. This study is focused on developing the front-end of the application, where the users can interact with the web application. The front-end is designed using React JS framework and Python for the back-end. After the front-end has been developed, it is tested to multiple different handcraft product companies and the test data is gathered using a User Experience Questionnaire (UEQ). The test results reveal that from the graph scale of –3 to 3, the mean value of each scale that was used to measure the user experience (Attractiveness, Perspicuity, Efficiency, Dependability, Stimulation and Novelty) rests between ~1,6 and ~1,9. Which indicates that the user experience (UX) on the front-end is, on average, a good experience, with none of the scales stand out from each other.

Keywords: Stingray, Front-end, Application, Blockchain, User Experience

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DEDICATION

I dedicate this works to my parents, my sister, both who had supported me all this time, my friends and my country, Indonesia. Whoever reads this thesis, I hope it would be beneficial for them.

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I would first like to thank my Lord and Savior, Jesus Christ, for everything that has happened in my life and for giving me the strength to go on in this life.

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TABLE OF CONTENTS

Page

STATEMENT BY THE AUTHOR 2

ABSTRACT 3

DEDICATION 5

ACKNOWLEDGEMENTS 6

TABLE OF CONTENTS 7

LIST OF FIGURES 10

LIST OF TABLES 11

CHAPTER 1 – INTRODUCTION 12

1.1 Background 12

1.2 Research Problem 13

1.3 Objective 14

1.4 Research Questions 14

1.5 Hypothesis 15

1.6 Research Scope 15

1.7 Research Limitations 15

1.8 Significance of Study 15

CHAPTER 2 - LITERATURE REVIEW 16

2.1 Theoretical Definition 16
2.1.1 ReactJS 16
2.1.2 User Experience Questionnaire 16
2.1.3 Stingray 17
2.1.4 Front-end Development 18
2.1.5 Supply Chain 20
2.2 Previous Studies 20
2.2.1 Design and Develop Cloud-based System for Meat Traceability 20
2.2.2 Blockchain-based smart tracking and tracing platform for drug supply chain 21
2.2.3 Blockchain-based application for the traceability of complex assembly structures 22
2.2.4 The Proposed of a Smart Traceability System for Teak Supply Chain Based on Blockchain Technology 22
2.2.5 Design and Development of an Efficient Traceability System for Greek Kiwifruit 23
CHAPTER 3 – RESEARCH METHODS 26
3.1 Research Framework 26
3.2 Data Gathering 26
3.3 Front-end and Back-end Design 27
3.4 Front-end and Back-end Development 29
3.5 Testing 30
3.6 UEQ 30
CHAPTER 4 – RESULTS AND DISCUSSIONS 31
4.1 Unit Test Results 31
4.2 Front End Development Results 33
4.2.1 The Homepage Features 33
4.2.2 The Tracking Features 36
4.3 User Experience Questionnaire Results 39
4.3.1 Mean Value Analysis 39
4.3.2 Confidence Intervals 41
4.3.3 Scale Consistency 42
4.3.4 Data Benchmarking 42
4.3.5 Data Inconsistencies 43

CHAPTER 5 – CONCLUSIONS AND RECOMMENDATIONS 44
5.1 Conclusions 44
5.2 Recommendations 44
GLOSSARY 45
REFERENCES 48
CURRICULUM VITAE 51

LIST OF FIGURES

Figures Page

Figure 1. *Mobula alfredi* 12

Figure 2. *Mobula birostris* 12

Figure 3. *Rhynchobatus djiddensis* 13

Figure 4. *Glaucostegus typus* 13

Figure 5. *Rhina anclyostoma* 13

Figure 6. The Project Framework 25

Figure 7. Use Case Diagram 26

Figure 8. Activity Diagram 27

Figure 9. Architecture Diagram (The Front End is circled in red) 28

Figure 10. Web Application Homepage 32

Figure 11. Login Page 32

Figure 12. Sign-Up Page 33

Figure 13. Menu Page 33

Figure 14. Stingray Fish Data Form 34

Figure 15. Product Data Form 34

Figure 16. Tracking Page 35

Figure 17. Product History page 35

Figure 18. Add New User form 36

Figure 19. New User added 36

Figure 20. Adding another new user 37

Figure 21. New user replaces old user 37

Figure 22. Mean value per item of Oristingray 38

Figure 23. Graph of Mean Value per Scale of Oristingray 39

Figure 24. Oristingray's UEQ Data Compared to Others 41

LIST OF TABLES

Table Page

Table 1. List of Comparisons from each literature 23

Table 2. Oristingray Unit Test Results …..... 30

Table 3. Mean Value and Variance per Scale of Oristingray 39

Table 4. Confidence Intervals per Scale of Oristingray.....39

Table 5. Alpha Coefficient of Oristingray's Scale.....40