Universiti Teknologi MARA

Online Auction System for Aidea.com Technology (OAS)

NONI AZMIRA BINTI ALI MOHD NAZIR

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

JANUARY 2018

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 goes to my supervisor, Prof. Madya Dr Mazidah Binti Puteh, who gave me the opportunity to do this wonderful project on the title Online Auction for Aidea.com Technology, which also helped me with her guidance and advice during this research.

Next, I would like to express my special thanks of gratitude to my CSP650 lecturer, Madam Norizan Binti Mohamad, who gave a complete guidance in the process of doing the research and development of the project. Her guidance is very meaningful and important to meet all of the requirements needed to complete this research.

Special appreciation also goes to my beloved parents for their love and encouragement in ensuring this research to be completed within the time specified. They are always being there to support and give inspiration during the completion of this research. Without them, I would never have enjoyed so many opportunities.

Last but not least, I would like to give my gratitude to my dearest friends who helped me a lot in finalizing this project within the limited time frame. All of their help and assistance given are very much appreciated. Without them all, this research could not be accomplished.

ABSTRACT

Online auction process has no longer limited here and now because of the arrival of the internet produced a sea change in selling. Aidea.com Technology is an organization that sells IT products through brick-and-mortar method. There are several problematic areas that have been identified within the organization business process which are excessive amount of stock available in the store, difficult to outreach more customers, and high running cost. An online auction system has been proposed to the organization as a solution in order to overcome the problems faced by the organization. The theories that have been applied in developing the proposed system are forward auction and electronic bidding. The system development model used for the system development is Waterfall model. Waterfall model is the most appropriate for this project because the requirements are very well documented, clear and fixed, and the project duration is short. All of the requirements have been collected to identify the stakeholders of the system. The proposed system has been developed according to the user and system requirements. Online Auction System for Aidea.com Technology (OAS) is a web-based system that facilitates a platform for the users to participate in auctioning process where bidders can place bid on active auctions with amount that is not lower than the reserve price. The system has conducted the usability evaluation by the users. Result from the analysis specify that OAS has satisfied the respondent term of satisfaction (SD = 0.50). The mean is 4.60. For future work, OAS can be improved by integrating e-commerce features such as 'Buy Now' option where customer can buy product straight away without having to wait for the auction to be closed.

ν

TABLE OF CONTENTS

CONTENT

PAGE

| SUPERVISOR APPROVAL | ii |
|---------------------|-----|
| STUDENT DECLARATION | iii |
| ACKNOWLEDGEMENT | iv |
| ABSTRACT | V |
| TABLE OF CONTENTS | vi |
| LIST OF FIGURES | X |
| LIST OF TABLES | xii |
| | |

CHAPTER ONE: INTRODUCTION

| 1.1 | Background of the Project | . 1 |
|-----|-----------------------------|-----|
| 1.2 | Current Business Process | 2 |
| 1.3 | Problem Statement | 4 |
| 1.4 | Project Objective | 6 |
| 1.5 | Project Scope | 6 |
| 1.6 | Significance of the Project | - 7 |
| 1.7 | Project Framework | 8 |
| 1.8 | Gantt Chart | 9 |
| 1.9 | Conclusion | 11 |

vi

CHAPTER TWO: LITERATURE REVIEW

| 2.1 | Introduction | 12 |
|-----|--|-----|
| 2.2 | Online Auction System | 12 |
| | 2.2.1 Forward Auction | 14 |
| | 2.2.2 Process | 15 |
| | 2.2.3 Characteristics | 17 |
| 2.3 | Electronic Bidding | 18 |
| | 2.3.1 Reserve Price | 18 |
| 2.4 | Similar Project | 19 |
| | 2.4.1 AuctionWorx Enterprise | 19 |
| | 2.4.2 Easy.Auction | 20 |
| | 2.4.3 Merkeleon | 21 |
| 2.5 | Software Development Life Cycle (SDLC) | 22 |
| | 2.5.1 Waterfall Model | 23 |
| | 2.5.2 Agile Model | 24 |
| | 2.5.3 Evolutionary Prototyping | .25 |
| 2.6 | Implication of Literature Review | 27 |
| 2.7 | Conclusion | 29 |

CHAPTER THREE: METHODOLOGY

| 3.1 | Introduction | 30 |
|-----|--|----|
| 3.2 | Methodology Overview | 31 |
| | 3.2.1 Waterfall Model | 31 |
| 3.3 | Phase One: Requirement Elicitation | 33 |
| | 3.3.1 Preliminary Investigation | 33 |
| | 3.3.2 Data Collection Method | 35 |
| | 3.3.3 Sampling | 36 |
| 3.4 | Phase Two: Functional and Non-Functional Requirement | 38 |

vii