BUSITEMA UNIVERSITY

FACULTY OF ENGINEERING

DEPARTMENT OF COMPUTER ENGINEERING

ONLINE EVENT TICKETING SYSTEM ACCOMPLISJED WITH MOBILE MONEY PAYMENT

SUBMITTED

BY

WANYANA ROSE

SUPERVISOR: Mr. LUSIBA BADIRU

A project Report submitted to the Department of Computer Engineering in Partial fulfillment of the requirements for the award of Bachelor's degree in Computer Engineering at Busitema

University

May 2017

ACKNOWLEDGEMENTS

Great appreciation goes to the Almighty God, for giving me a gift of Life and a chance of education. I greatly appreciate my mother and siblings for the financial support, encouragement and motivation.

I also thank MR. LUSIBA BADRU and the entire Department of Computer Engineering for the technical guidance throughout the execution of this project and my entire four years that I have spent in Busitema University.

Lastly but not the least I appreciate my friends, group mates, classmates and all the entire Busitema body for being there for me in both good and tough times may God bless all of you.

DECLARATION

I, WANYANA ROSE BU/UG/2013/1591, do hereby	declare that this Project report is original
and has not been submitted for any other degree award	l to any other University before.
Signature	Date
WANYANA ROSE	
Bachelor of Computer Engineering	
Department of Computer Engineering	
Busitema University	

APPROVAL

This dissertation report has been submitted with the approval of the following supervisor.		
Signature	Date	
Mr. LUSIBA BADIRU		
Department of computer Engineering		
Faculty of engineering		
Busitema University.		

DEDICATION

I dedicate this report to my Lord Jesus Christ, my beloved mother MS. NALUGO JOSEPHINE, my siblings, my excellent supervisor MR. LUSIBA BADRU, all my friends, and classmates.

Thank you all

LIST OF ACRONYMS

APIs Application Programming Interfaces

CSS Cascading Style Sheets

ERD Entity-Relationship Diagrams

FUFA Federation of Uganda football association

HTML Hyper Text Markup Language

ICT information and communications technology

JSP Java Server Page

MNOs mobile network operators

MTN mobile telephone network

PHP Hypertext preprocessor

SQL Structured Query Language

SMS short message service

UCC Uganda Communications Commission

LIST OF FIGURES AND TABLES

Table 1comparison of existing systems	11
Figure 2 E-R diagram	
Figure 3 Data Flow Diagram	20
Figure 4 Physical Design	21
Figure 5 Home page with current events	23
Figure 6 Payment procedure	24
Figure 7Successful purchase of ticket	24
Figure 8 Selecting ticket category	28
Figure 9 Confirming tickets	28

ABSTRACT

The entertainment industry is one of the most profitable sectors in the business world. People always spent money for being entertained, and so will they in the future.

Entertainment is important as it brings people together and is a good way for the entire family to bond. It diverts people's attention from their demanding lives and amuses them in their leisure time. Usually, entertainment is fun, enjoyable and pleasurable. Entertainment can take various forms including music, drama, storytelling, movie, sports, dance and traditional performances.

However, People getting to know about these events is a challenge, and then, in case they get to know, how they can attend these events, i.e. how they can get tickets (even for events that are far away from the customer's place) is also a challenge. This problem is currently being solved by ticket stores where event managers avail tickets to these stores and then customers have to go to these places and buy tickets. Unfortunately in most cases these are restricted by time, location, and most important by availability of tickets (available tickets are mostly limited to events taking place in a certain local area where a ticket store is located).

This project was therefore aimed at developing an online event ticketing system that is accomplished with mobile money payments to help eradicate the problem.

This work is arranged mainly in six chapters, chapter one includes the introduction of the project. Chapter two discusses the literature related to the system, chapter three illustrates the methodologies used in coming up with the working prototype of the system, chapter four includes system design and analysis, chapter five contains the implementation and testing of the system and chapter six contains the summary of the work, discussion and recommendations.

.

Table of Contents

ACKNOWLEDGEMENTS	-
DECLARATION	
APPROVAL	
DEDICATION	
LIST OF ACRONYMS	
LIST OF FIGURES AND TABLES	
ABSTRACT	
CHAPTER ONE INTRODUCTION	
1.1 Background	
1.2 Problem Statement	
1.3 Objectives	
1.3.2 Specific Objectives	
1.4 Justification/Significance	
•	
1.5.1 Technical Scope	
1.5.2 Time Scope CHAPTER TWO LITERATURE REVIEW	
2.0 Introduction	
2.1 Concept Description and Definition	
2.2 Applications of Online Ticketing	
2.2.1 Booking Travel Tours Online	
2.2.2 Booking Hotels Online	
2.2.3 Purchasing Airline Tickets Online	
2.3 Existing Systems in Uganda	
2.3.1 Ticket Stores	
2.3.2. Etikiti	
2.3.3 Payway Uganda	
2.3.4 Eventbrite	
2.3.5 Easy ticket Uganda	
2.4 Drawbacks of Existing Systems	
2.5 Existing systems comparison table	11

2.6 Mobile Money in Uganda	12
2.6.1 Merits of Using Mobile Money	12
2.6.2 Using Mobile Money to Process Payments	13
2.7 The implemented system	13
CHAPTER THREE METHODOLOGY	14
3.0 Introduction	14
3.1 Requirements Elicitation	14
3.2 Data Collection	14
3.2.1 Literature Review	14
3.2.2 Interviews	14
3.2.3 Observations	14
3.2.4 Prototyping	15
3. 3 Data Analysis	15
3.4 System Design	15
3.4.1 Software Technologies	15
3.4.2 Software Equipment and Design Tools	16
CHAPTER FOUR: SYSTEM ANALYSIS AND DESIGN	17
4.0 Introduction	17
4.1 System Analysis	17
4.1.1 Functional Analysis	17
4.1.2 Requirements Analysis	17
4.1.2.1 Functional Requirements	17
4.1.2.2 Non Functional Requirements	18
4.2 System Design	19
4.2.1 Entity-Relationship Diagram	19
4.2.2 Data Flow Diagram	20
4.2.3 Physical Design	21
CHAPTER FIVE: IMPLEMENTATION AND TESTING	22
5.0 Introduction	22
5.1 Development Tools	22
5.2 System Operation	22
5.3 System Testing	23
5.4 Verification	23

5.5 Validation	23
CHAPTER SIX: DISCUSSIONS AND RECOMMENDATIONS	25
6.0 Introduction	25
6.1 Summary of the work	25
6.2 Critical analysis / appraisal of the app	25
6.3 Proposals / Recommendations for future work	26
6.4 Conclusion	26
References	27
Appendix 1 snap shots of the system	28
Appendix 2 sample code	29

CHAPTER ONE INTRODUCTION

1.1 Background

Entertainment is important as it brings people together and is a good way for the entire family to bond. It diverts people's attention from their demanding lives and amuses them in their leisure time. Usually, entertainment is fun, enjoyable and pleasurable. Entertainment can take various forms including music, drama, storytelling, movie, sports, dance and traditional performances

The entertainment industry is one of the most profitable sectors in the business world. People always spent money for being entertained, and so will they in the future.

People are mainly attracted by live events like concerts, operas, sport, games, or revue shows. It gives people a great and unique entertainment experience. People getting to know about these events is a challenge, and then, in case they get to know, how they can attend these events, i.e. how they can get tickets (even for events that are far away from the customer's place) is also a challenge. This problem is currently being solved by ticket stores.

In Uganda currently the issue of selling tickets in the entertainment industry is being handled mostly by ticket stores (agents) where event managers avail tickets to these stores and then customers have to go to these places and buy tickets. Unfortunately in most cases these are restricted by time, location, and most important by availability of tickets (available tickets are mostly limited to events taking place in a certain local area where a ticket store is located).

This therefore calls for an Online Ticketing system accomplished with mobile money payments. It works as a web-based multi-agent application that allows the user to buy tickets online for events that are either stored in the system's own database or available using web services offered directly by the event provider but accessed by the online ticketing system. The users pays using mobile money because it is widely used in Uganda and it a simple way of processing payments and it serves the clients at lower cost per transaction and with reduced investment in the physical infrastructure[1]. Buying of tickets is made independent of time and location.

References

- [1] J. Sujata, S. Perumal, M. Zaman, and A. Jha, "Mobile Money: Concept, Ecosystem, Benefits and Challenges associated with Mobile Money."
- [2] S. Zailani, L. C. Kheng, and Y. Fernando, "Service quality analysis on the consumer perceptions toward online ticketing: Evidence in Malaysia," *International business management*, vol. 2, pp. 11-21, 2008.
- [3] M. Mezghani, "Study on electronic ticketing in public transport," *European Metropolitan Transport Authorities (EMTA)*, vol. 56, p. 38, 2008.
- [4] J. McGill, A. Salyzyn, S. Bouclin, and K. Galldin, "Emerging Technological Solutions to Access to Justice Problems: Opportunities and Risks of Mobile and Web-based Apps," 2016.
- [5] V. S. Molchanova, "The Use of Online Service Booking in Tourist Activity," *European Journal of Social and Human Sciences*, vol. 2, pp. 75-80, 2014.
- [6] (2016, 09/10). *uganda crane vs comoros*. Available: www.fufa.co.ug/uganda-vs-comoros-ticket-selling-centres
- [7] (08/03). 5 ticketing companies in uganda. Available: http://www.dignited.com/10131/companies-offering-online-electronic-ticket-payments-in-uganda/.
- [8] (11/10). Easy ticket terms and conditions," Easy ticket-Uganda". Available: http://www.EasyTicketUganda-OnlineTickets_TermsandConditions.html.
- [9] G. K. Munyegera and T. Matsumoto, "Mobile Money, Remittances and Rural Household Welfare: Panel Evidence from Uganda," *Tokyo: GRIPS*, 2014.
- [10] World Wide Web Consortium, "HTML5," 2015. Available: www.w3.org/TR/html5/
- [11] CSS3.com. (03/08/2016). "CSS3.com A Comprehensive Reference Giude," Available: http://www.css3.com.
- [12] The JQuery Foundation. (Accessed: 03/08 /2016). "JQuery Write Less, Do More,". Available: Online: https://jquery.com
- [13] (08/03). "Android," Android, . Available: https://www.android.com.
- [14] (08/03). The PHP Group, "PHP: Downloads," 2015: Available: http://php.net/downloads.php.
- [15] (08/03). Oracle Corporation and /or its affiliates, "MYSQL," 2015. . Available: https://www.mysql.com.
- [16] (08/03). The Apache Software Foundation, "The Apache HTTP Server Project," The Apache Software Foundation, 1997 2015. . Available: https://httpd.apache.org.
- [17] (08/03). Sublime HQ Pty Ltd, "Sublime Text Download," Sublime HQ Pty Ltd, 2006-2015. .

 Available: http://www.sublimetext.com.
- [18] (08/03). Google Inc, "Download Android Studio and SDK Tools," Google Inc, 2015. Available: Available: https://developer.android.com/sdk/index.html.