ONLINE HOTEL RESERVATION SYSTEM

(CASE STUDY: MBALE TRAVELERS-IN HOTEL)

BY

TAKUNYA KENETH

BU/UP/2017/1803

Department of Computer Studies

Faculty of Science and Education

A Project report Submitted to the Faculty of Science Education for the Study Leading to a Project in Partial Fulfillment of the Requirements for the Award of the Degree of Bachelor of Science and education of Busitema University.

Supervisor

MR OBOTH ANDREW

Department of Computer Studies

Faculty of Science and Education.

2020

Declaration

I **TAKUNYA KENETH** Registration Number **BU/UP/2017/1803** hereby declares that this Project Report is original and has not been published and/or submitted for any other degree award to any other University before.

Sign…….. Date: ……

Approval

This Project Report has been submitted for Examination with the approval of my loving supervisor.

Signed……Date……

Mr. OBOTH ANDREW

Department of Computer studies

Faculty of Science and Education

Busitema University

Dedication

This project work is dedicated to the **ALMIGHTY GOD** for making me to be able to start up and successfully finish in sound health. Also to my guardians as well for being supportive in the course of this project work both financially and spiritually, to all my church members for the moral support and the spiritual support with the sincere prayers they made for me to attain this success and to my close friends for being supportive and kind to me during the course of this project work. Finally, to my dear brothers and sisters for the kind of support they rendered to me during this work. May the almighty God bless you all abundantly.

Acknowledgement

My sincere gratitude goes to **THE ALMIGHTY** for his abundant mercies, guidance and protection over me throughout the course of my project work. All thanks to my beloved **MUM Ms. KADONDI SARAH** and my ground father **Mr. TAKUNYA WILISON** for the profound help and support to me during the course of this project work.

I would really say words are not enough to express my profound gratitude to my beloved Supervisor **Mr. OBOTH ANDREW**, the Head of Department of Computer Studies **Dr. RICHARD ANGOLE,** and all the Lecturers in the Department of Computer Studies as w ell as the Non-Teaching Staffs of the Department of Computer Studies especially the Lab Technicians for their support and inspiration in one way or the other. May God bless you abundantly (Amen).

Thanks goes to my beloved brothers (**NINDU DAVID, TAKUNYA GEOFREY**), sisters (**NAIGAGA DINAH, WENENE SUZAN and KATAIKE BRENDA**), family as a whole and all my friends for their unconditional support and their patient to me in the due course of this research project. All thanks to my sincere colleagues in the computer class 2019/2020 most especially **Mr. BADAZA GEORGE Mr.OKETCH DENIS ,Mr CHEBET ISAAC ,Mr.OLOBO JULIUS** and **Mr.BYARUHANGA MOSES** for your maximum support and the whole fraternity of Nagongera Campus for their immense contribution and unconditional support throughout the course of my project work. May **God** in his Divine favor bless you all **(Amen)**

Table of Contents

Declaration…….....i

Approval……..……..……ii

Dedication……..iiii

Acknowledgement……..……iv

List of Tables…...……..……viii

List of Figures……...……..ix

List of Appendices……..….x

List of Abbreviations…….……..……xi

Abstract……..……xii

CHAPTER ONE……....1

1.0 INTRODUCTION……...……...……1

1.2 problem Statement ……..……..2

1.3 Main objective 3

1.4 Specific Objectives 3

1.5. Significance of the study.…….……..3

1.6 Scope of the Study.…….……...….4

CHAPTER TWO…….……..5

LITERATURE REVIEW.....5

2.0 Introduction……...…….…….....5

2.1 Definition of the key terms……..……..5

2.2 Perception of other researchers towards a computerized system……..….6

2.3 The role of information systems in an organization…….....7

2.4 Related research papers……..……7

2.5 Research gap……..…11

CHAPTER THREE……..……..…12

3.0 RESEARCH METHODOLOGY……..……..12

3.0 Introduction…….……..……12

3.1 Area of the Study……..…… 12

3.2 Population and Sampling…….……....12

3.3 Data Collection…….…….…… 12

3.3.1 Interview 13

3.3.2 Observation 13

3.3.3 Review of the existing documents…….……..13

3.3.4 Seconday data 13

3.4 Data Analysis and presentation...…….…. 14

3.5 Rad Application Development ...……..……..…… 14

3.6 System Implementation 15

3.7 System testing 15

3.8 System validation..... 16

3.9 Ethical Considerations 16

CHAPTER FOUR…….…….……... 17

STSTEMS ANALYSIS, DESIGN AND IMPLEMANTATION…..…….…….. 17

4.1 Introduction…….……..……..……. 17

4.2 Current system 17

4.2.1 Problems with the current system 17

4.2.2 Justification for the proposed system..... 17

4.3 Requirements of the system…….……..……....1 8

4.3.1 Functional requirements..... 18

4.3.2 Non-functional requirements 18

4.3.3 Hardware requirements 19

4.3.4 Software requirements 19

4.4 System design 19

4.4.1 Architecture……..……..…19

4.4.2 Context Flow diagram..... 21

4.4.3 Data Flow Diagram 22

4.4.4 System modelliing using use-case 23

4.5 Entity Relationship Diagram ……..……..……. 25

CHAPTER FIVE……...…….…… 27

PRESENTATION OF THE RSULTS…….……..27

5.1 Data analysis……..…….……..…….. 27

5.2 Implementation of results……...…… 28

5.2.1 The Home page 28

5.2.2 The Administrator Page 29

5.2.3 The Client booking page 30

5.3 The Discussion of the Results……..…30

CHAPTER SIX……..……..…….32

conclusion,limitations of the study, summary and recommendations……...32

6.1 Introduction…….……...…..…...32

6.2 Concluion…….…….……...……...32

6.3 Limitations of the study……..……..……..…… 33

6.4 Summary…….…..……..……..... 33

6.5 Recommendations……..……. 33

References:……35

List of Tables

Table 1:Hardware Requirements. 19
Table 2:Software requirements. 19
Table 3:Respondents' views about the current system. 27
Table 4:Showing results from the performance score of the developed system. 31

List of Figures

Figure 1:System architecture. 20
Figure 2:Context flow diagram. 21
Figure 3:Data flow diagram. 22
Figure 4:Use- case diagram. 24
Figure 5:Entity Relationship Diagram (ERD). 26
Figure 6: Bar chart showing Respondents views about the current system 28
Figure 7:Home page. 29
Figure 8:Administrator page. 29
Figure 9:The client booking area 30
Figure 10: Bar chart showing results from performance score of the developed system. 31

List of Appendices

Appendices……36

Appendix A: Interview Questions used to solicit data ……..…36

Appendix B: Estimated budget…….….38

Appendix C: Time schedule…….....39

List of Abbreviations

Abbreviation	**Explanation**
HTML	Hypertext Markup Language
PHP	Hypertext Preprocessor
MYSQL	My Structured Query Language
SQL	Structured Querry Language
OHRS	Online hotel reservation System
DFD	Data Flow Diagram
MS Project	Microsoft Project
SDLC	System Development Life Cycle
API	Application Programming Interface
CPU	Central Processing Unit
SAD	Systems Analysis and Design
RAD	Rapid application Development
GHz	Giga Hertz
Gigabyte	Gb
STP	Software Test Plan
VG	Very Good
G	Good
F	Fair
NG	Not Good
UD	Un decided

Abstract

This research was based at improving bookings and minimizing the cost at hotel. One of the problems cited at the hotel is that the hotel used to advertise their services on posters and on streets. For this case,the main purpose of the study was to develop an online hotel reservation system for the hotel to minimize these problems.

The main method used was the RAD from SSADM where the functional modules are developed in parallel as prototypes and are integrated to make the complete product for faster product delivery. Since there is no detailed preplanning, it makes it easier to incorporate the changes within the development process.

The major tools that were used in the implementation an Online hotel reservation system are ;

(i) MySQL database server.
(ii) Hypertext Pre- processor (PHP)
(iii)Hypertext markup language (HTML)
(iv) Cascading style sheets (CSS) and JavaScript.

Therefore an online hotel reservation system was developed to solve the problems that the hotel is facing due to use of manual system in the way that the system enables the hotel to handle booking activities online and meet the satisfaction of their customers .

CHAPTER ONE

1.0 Introduction

According to Afriyie (2012), hotel reservation means booking hotel services in advance or before reaching to the destination. Through this, a client is able to access hotelier services such as rooms to pass the night, food among others depending on his/her own wish in time to avoid getting frustrated when what is needed is over or fully occupied.

Now Bidgoli (2011) defined online hotel reservation system as the software application /tool to store, publish and update the dynamic data about the availability and prices of the hotel accommodation, and provides users with a regular reservation.

Previously Customers were mostly being constrained with the usual practice where they had to look for a hotel more so when arrived in the particular place, walk in physically and find out whether there is a service one may wish to book. In case that there is nothing, a customer still continues to move to next closest hotel to enquire once more and this could make customers really stranded Chen (2013)

Therefore, the study carried out aimed at developing an online hotel reservation system to enable customers book for whatever they need from wherever location they are before lodging into the hotel. The system is to allow for easy access and retrieval of information and reporting. With such a system in place, Mbale Travelers-In Hotel would be more competitive in Mbale.

1.1 Background of the study

Mbale travelers-in is a hotel well known for providing its customers with clean and comfortable place to stay for a short period of time say one, two days or a week, place for refreshment, entertainment and protection of the visitor. It's a private hotel running in Mbale town, Eastern Uganda near Mt Elgon and located along Naboa road opposite DFCU bank. The hotel is employing more staff to cope up with the increasing amount of paper work and hotel payments by the clients in booking all over the country. The hotel currently uses the manual system to hold all external and internal correspondence relating to clients and staff. A lot of documents concerning different payments and information are labeled and stored in cabinets at the hotel. For security purposes,

References

- Chopra Rashi,(2006),International Journal of Advanced Research in computer and communication engineering
- Corbett,Eludire,(2009),The Design and Implementation of hotel Management System Research Journal of Applied Sciences, Engineering and Technology pg3707-712
- Devin,(1981),database structures and design 2nd Edition
- El-Altar,M.S.T,(2010),Design and implementation of information systems,London wiliams.K
- Gommans et al,(2014),international journal of scientific and research publication,IV
- Isakowitz et al,(1998),web information system
- Ismail Quarchli,(2015),Research Journal of Applied Sciences, Engineering and Technology Research Journal of Applied Sciences, Engineering and Technology page 3707-712
- Krammer,et al,(2007),The role of information and communications technology sector in expanding economic opportunity corporate social responsibility initiative report
- Kroenke, David,(2015),Mis Essentials Boston Pearson
- Kryder L.G,(2003),Introduction to information systems london John.P
- Laudon,(2007),Fundamentals to business information systems
- Merriam-Webster,(1999),System analysis and designBoston
- O'Brien,Marakas,(2011),Introduction to information systems
- Rajapakse,(2012),A fresh graduate guide to software development Tool and technologies
- Scholes,Mingers,(1990),Introduction to Structured Analysis and Design
- Stonier,Thomas,(1997),Introduction to information systems London
- Taylor,S.S,(2007),Comments on hotel booking by Mechanical Engineering Teaching Assistants Journal of Business and Technical Communication 402-424