

ONLINE FURNITURE SHOP SYSTEM

(CASE STUDY: BUGEMBE FURNITURE SHOP)

BY

GUMA ALIHAJ SALIM

BU/UG/2017/1856

0786046953/0757644065

alihajsalim79@gmail.com

A Project Report Submitted To the Faculty of Science and Education
For The Study Leading To Partial Fulfillment Of The
Requirements for the Award of the Degree Of
Bachelor of Science and Education Of
Busitema University

Supervisor

Dr. Angole Richard Okello

Department Of Computer Studies
Faculty of Science and Education

December, 2020.

DECLARATION

I **GUMA ALIHAJ SALIM** Reg. No. **BU/UG/2017/1856** hereby declare 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 was been under my supervision and has been successfully completed

Signed :Date :

Dr Angole Richard Okello

Head Of Department (H.O.D)

Department of Computer studies

Faculty of Science and Education

DEDICATION

This project work is dedicated to the ALMIGHTY GOD (ALLAH) for making me being able to start up and successfully finish in sound health. Also to my parents as well for being supportive in the cause of this project work both financially and spiritually, to all believers for the moral support and the spiritual support with the sincere prayers they made for me to attain this success and to my brother, sisters, close friends and to my dear lecturers for being supportive and kind to me during the cause of this project work.

ACKNOWLEDGEMENT

My sincere gratitude goes to THE ALMIGHTY GOD for his abundant mercies, guidance and protection over me throughout the course of my project work.

All thanks to my adorable parents Mr. SALIM SULAIMAN, Mrs. SAUDA SALIM and Mr. TOKO MANSUR for their profound help and support during the course of this project work.

I really would say words are not enough to express my profound gratitude to my Supervisor Dr ANGOLE RICHARD OKELLO who is also the Head of Department of Computer Studies, all the Lecturers in the Department of Computer Studies as well as the Non-teaching Staffs of the Department of Computer Studies especially the Lab Technician for their support and inspiration in one way or the other. May God bless you abundantly (Amen).

Thanks to my brothers, sisters, family as a whole and all my friends for their unconditional. All thanks to my sincere colleagues in the computer class 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 Devine favor bless you all (Amen).

TABLE OF CONTENTS

DECLARATION	i
APPROVAL	ii
DEDICATION	iii
ACKNOWLEDGEMENT.....	iv
LIST OF TABLES	x
LIST OF FIGURES	xi
LIST OF APPENDICES	xii
LIST OF ABBREVIATIONS	xiii
ABSTRACT.....	xiv
CHAPTER 1.....	1
INTRODUCTION	1
1.1 Background of the Study	1
1.2 Problem Statement	3
1.3 Purpose of the study	3
1.4 Specific Objectives of the study	3
1.5 Significance of the study	4
1.6 Scope	4
1.6.1 Content	4
1.6.2 Time.....	5
1.6.3 Area	5
CHAPTER 2.....	6
LITERATURE REVIEW	6
2.1 Introduction	6
2.2 Information System	6
2.2.1 Management information system (MIS).....	6
2.2.2 Sales and Marketing Systems	7
2.2.3 Online Shopping System	7

2.2.4 Online Furniture shop system	9
2.3 Methodology review	9
2.3.1 Information system methodology	10
2.3.1 Online shopping system methodology.....	10
2.3.3 Online Furniture Shop methodology.....	11
2.3.4 Choice of Methodology.....	11
2.4. System Design and Implementation review.....	11
2.5 System Testing and validation review.....	13
2.6 Summary of the literature review	13
CHAPTER 3	15
METHODOLOGY	15
3.1.1 Introduction.....	15
3.1.2 Research Design.....	15
3.2 Study area	16
3.3 Study Population and Sampling	16
3.3.1 Study population.....	16
3.3.2 Units of Analysis	16
3.4.1 Data Collection.....	17
3.4.2 Types and Sources of Data	17
3.4.3 Data Collection Methods	17
3.5.1 Validity and Reliability Issues.....	17
3.5.2 Data Analysis Methods.....	18
3.6 System Design.....	18
3.6.1 Architecture Design	18
3.6.2 Program Design	18
3.6.3 Data Storage Design.....	19
3.7 System development methodology by RAD with prototyping	19
3.7.1 Research process.....	20

3.8 System Implementation and testing	20
3.8.1 Tools and Techniques.....	21
3.8.2 System.....	21
3.8.3 System Testing	21
3.8.4 Potential outcomes	21
3.9 Ethical considerations.....	22
3.10 Conclusion.....	22
CHAPTER 4	23
FIELD STUDY	23
4.1 Introduction.....	23
4.2 Background study (current system).....	23
4.2.1 The strengths of the furniture shop	24
4.2.2 The weaknesses of the furniture shop.....	24
4.3 Requirements of the proposed system.....	25
4.3.1 Functional requirements	25
4.3.2 Non-Functional Requirements	28
4.3.3 Hardware, Software and programming Languages requirements.....	28
4.4 system design.....	29
4.4.1 System Architecture	29
4.4.2 Context flow diagram.....	30
4.4.4 System Data flow chart diagram	32
4.4.5 System modeling using User-case	33
4.4.6 Activity Tables	34
4.5 Database Design	37
CHAPTER 5	39
IMPLEMENTATION	39
5.1 Introduction.....	39
5.2 Main Page (Home page)	39

5.3 Admin Login Page	39
5.4 Admin Main page (Admin area).....	40
5.4.1 Insert New Product page	41
5.4.2 All Products report	42
5.4.3 Insert New Category	42
5.4.4 All Categories Report.....	43
5.4.5 Insert New Brand.....	44
5.4.6 All Brands Report.....	44
5.4.7 Customers Report.....	45
5.4.8 Orders Report.....	46
5.4.9 Payments Report.....	46
5.4.9 Admin Logout	47
5.5 Customer Main page	47
5.5.1 Cart Checkout Form.....	50
5.5.2 Customer Login Form.....	50
5.5.3 Customer Signup Form.....	51
5.5.5 Payment and order confirmation and Transaction id generation page.....	53
5.5.6 Customer Order Details Page.....	53
5.5.7 Change Password Form	54
5.5.8 Reset Password Form.....	55
5.6 Contact Us Page	56
5.7 Database Main Design	58
5.7.1 Admins Table.....	58
5.7.2 Brands Table.....	58
5.7.3 Cart Table.....	59
5.7.4 Categories Table	59
5.7.5 Orders Table.....	59
5.7.6 Payments Table.....	60

5.7.7 Products Table.....	60
5.7.8 Customer user info Table.....	61
CHAPTER 6.....	62
DISCUSSIONS, CONCLUSION, AND RECOMMENDATIONS	62
 6.1 Introduction	62
 6.2 Discussions	62
6.2.1 Requirements determination.....	62
6.2.2 Design of the system	63
6.2.3 Implementation of the system.....	63
6.2.4 Testing and Validation of the functionalities of the system.....	63
 6.3 Conclusion.....	63
 6.4 Recommendations	64
6.5 Limitations and The future work of the system.....	64
6.5.1 Limitations.....	64
6.5.2 Future work	65
References.....	I
Appendices.....	III

LIST OF TABLES

Table 3.1	Showing the sample size of the population meant to be used
Table 4.1	Main Page
Table 4.2	Login for Admin
Table 4.3	Admin Main Page
Table 4.4	Customer Main Page
Table 4.5	Login for Customers
Table 4.6	Registration for Customers

LIST OF FIGURES

- Figure 2.1 RAD Methodology
- Figure 4.1 System Architecture
- Figure 4.2 Context Diagram
- Figure 4.3 O-Level Data Flow Diagram
- Figure 4.4 Admin and Customer Side DFD
- Figure 4.5 Data flow chart diagram
- Figure 4.6 User-case Diagram
- Figure 4.7 Entity Relationship Diagram

LIST OF APPENDICES

Appendix A: Open ended Interview questions and Answers

Appendix B: Short Questionnaire

LIST OF ABBREVIATIONS

PHP	Hypertext Preprocessor
RAD	Rapid Application Development
HTML	Hypertext Markup Language
CSS	Cascading Style Sheets
TV	Television
U.S	United States
U.S.A	United States of America
GUI	Graphical User Interface
MS-DOS	Microsoft Disk Operating System
ICT	Information Communication Technology
GB	Gigabytes
RAM	Random Access Memory
JSP	Java Server Pages.
SQL/sql	structured query language
C#	C sharp
GHz	Gigahertz
UML	Unified Modeling Language
DFD	Data Flow Diagram
FSMS	Furniture Shop Management System

ABSTRACT

It is well known that online shop system is seen as a form of electronic commerce which allows customers to directly buy goods or services from the seller Via Internet using a web browser. This Report in title "Online Furniture Shop System" discusses on an online shop that allows the customers to access and purchase the furniture available in Bugembe furniture shop online and also allows Shop management add new varieties of furniture on cart instantly. There are 2 main modules in this system, which are Admin/manager and Customer modules. The problem of the study is that shop mainly uses manual system for carrying out their activities such as Bugembe furniture sales, record keeping and also expensive and unreliable means of advertising the business such as Radio, TV and paper adverts. As a result customers face a lot of challenges in accessing the available furniture on store and also spends a lot of money and time coming to check and purchase the goods and as well the shop manager spends a lot of money on adverts. The purpose of the study was to develop an online furniture shop system which allows the customers to access and purchase the furniture available in Bugembe furniture shop online and also allows Shop management add new varieties of furniture on cart instantly. The methodology considered qualitative approaches/method for data collection where Interview and Direct observation were used therefore Sampling considered was purposive and the data was analyzed by conscientious method (going with the majority) and presented descriptively using written communication. The design and implementation methodology used was RAD having 5 phases which are capture requirements, Quick Analysis and design, build prototype, customer evaluation of the prototype and develop the final product. Some design and implementation tools such Sublime Text editor for coding, PHP as the main programming language and Wampserver and Webserver for the database were used. The results of the study were obtained through developing an online furniture shop system that was tested both during and after the implementation and both the functional and nonfunctional requirements were in place. Finally the system was successfully completed with all the functionalities abled and deployed since 85% of the users agreed that the system performs its function. Therefore my recommendation goes to the student to do further research on the system, the government to license the system, to the users that the system can be elsewhere to do any other business apart from furniture shop.