

BAKERY CUSTOMER ORDER AND DELIVERY SYSTEM

CASE STUDY: BAKE FOR LIFE COMPANY LIMITED TORORO BRANCH

NAME: NABWIRE BRENDA

REG NO: BU/UG/2019/2314

TELL: 0701421771/0770618821

EMAIL: nabwirebrenda2314@gmail.com

A FINAL RESEARCH REPORT SUBMITTED TO THE FACULTY OF SCIENCE AND EDUCATIONUNDER COMPUTER DEPARTMENT LEADING TO PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF BACHELORS DEGREE IOF SCIENCE IN COMPUTER SCIENCE AT BUSITEMA UNIVERSITY.

SUPERVISOR

DR. LUKYAMUZI ANDREW

DEPARTMENT OF COMPUTER STUDIES

FACULTY OF SCIENCE AND EDUCATION

23RD, JAN, 2023

DECLARATION

I, NABWIRE BREND declare that this project report is the original copy of the research that I conducted during my final year study at Busitema University and this copy has not been submitted anywhere for any course or for any degree award to any other university.

date 30th- 01-2023

Nabwire Brenda

APPROVAL

This report has been submitted to my dearly supervisor for examination and approval.

Sign:

Supervisor: DR. LUKYAMUZI ANDREW

Date: 30th- 01-2023

DEDICATION

I would like to dedicate this report to entire fraternity of Busitema university for the skills imparted in me so as to come up with this great idea, my parents for the tireless efforts in looking for whatever was needed mammy and daddy(Isanin Edinanci, Wangota Charles)there is no one like you. Great thanks goes to all people who extended their valuable guidance and help whenever required for the project which I worked on, may god bless you. And above all I can never fail to thank my caring supervisor DR. Lukyamuzi Andrew you have just been a parent to me thank you for you wisdom, guidance and all the trainings done during this project, may god put his eye of protection allover you

ACKNOWLEDGEMENT

This system development project wouldn't be completed without the kindly advices, support and cooperation of the following people. I wish to express my heartfelt gratitude to my project supervisor, DR. Lukyamuzi Andrew who spent much of his time from the start of this project till the end for this report would not be possible without his professional expertise, Mr Byalunanga Moses for his sport to the points where I had failed, Mr Kisangala Gerald for his guidance to mention but a few am really very grateful may you continue with that heart even to others and this is extended to all lecturers who stood with me in points that i would not see may God count it for you always. My thanks also continue going to my fellow students for the cooperation of seeing that everyone succeeds may God prosper you wherever you go.

Last, but not least, I wish to acknowledge the unwavering support shown by my family members who were always there to give me endless support whenever I needed it.

TABLE OF CONTENT

Contents

DECLARATION	i
APPROVAL	ii
DEDICATION	iii
ACKNOWLEDGEMENT	iv
TABLE OF CONTENT	v
LIST OF FOGURES	viii
ACRONOMS	ix
ABSTRACT	X
CHAPTER I: INTRODUCTION, BACKGROUND	1
1.0 INTRODUCTION: BAKERY CUSTOMER AND ORDER AND DELIVERY S'	YSTEM 1
1.1 BACKGROUND	1
1.2 PROBLEM STATEMENT	3
1.3 OBJECTIVES	4
1.3.1 Main objective	4
1.3.2 Specific objectives	4
1.4 SIGNIFICANCE OF THE STUDAY	4
1.5 SCOPE OF THE STUDAY	5
CHAPTER II: LITRITURE REVIEW	6
2.0 INTRODUCTION	6
2.1 KEY TERMS (Bakery customer order and delivery system)	6
2.1.1 Bakery	6
2.1.2 Customer Order	6
2.1.3 There are two types of orders:	7
2.1.4 Bakery Online Ordering System	7
2.1.5 Delivery system	7
2.1.6 Advantages of order and delivery systems	7
2.2 PREVIOUS RESEARCH	10

2.3 REVIEW OF THE CHALLENGES OF THE EXISTING SYSTEM	11
CHAPTER III: METHODOLOGY	12
3.0 INTRODUCTION	12
3.0.1 Research problem:	12
3.0.2 Research design	12
3.1 AREA OF THE STUDY	13
3.2 STUDY POPULATION	13
3.3 SUMPLING METHOD USED	14
3.4 BATA COLLECTION	14
3.4.1 Interviews	14
3.4.2 Focus Groups	15
3.4.3 Observation method	15
3.5 DATA ANALYSIS	16
3.6 SYSTEM ANALYSIS AND DESIGN	16
3.6.1 Context Diagram	16
3.6.2 Data Flow Diagram	16
3.6.3 Use-Case Diagram	17
3.7 SYSTEM DEVELOPMENT	17
3.8 SYSTEM DEVELOPMENT TOOLS	18
3.9 TESTING	18
3.10 ANALYSIS OF THE SYSTEM DEVELOPMENT	18
CHAPTER IV: SYSTEM ANALYSIS AND DESIGN	20
4.0 INTRODUCTION	20
4.1 SYSTEM STUDY AND ANALYSIS	20
4.2 DATA PRESENTATION AND ANALYSIS	20
4.3 CURRENT SYSTEM	24
4.4 ADVANTAGES OF CUSTOMER ORDER AND DELIVERY SYSTEM	24
4.5 SYSTEM ANALYSIS	25
4.5.1 User requirements	25
4.5.2 Functional requirement	25
4 5 3 Non-functional requirement	26

4.6 HARDWARE/ SOFTWARE REQUIREMENTS	26
4.6.1 Hardware requirements	26
4.6.2 Software Requirements	27
4.7 SYSTEM DEVELOPMENT APPROACH	27
4.8 REQUIREMENT ANALYSIS AND DEFINITION	27
4.9 SYSTEM DESIGN	27
4.9.1 Context flow diagram	28
4.9.2 Data Flow Diagram (DFD)	28
4.9.3 Use case diagrams	29
4.9.4 Bakery customer order E-R Diagram	30
4.9.5 Programming Tools for Bakery customer order and delivery system.	30
4.9.6 Implementation and Testing	30
4.9.7 Coding and testing	30
4.9.8 System Documentation and Training	31
4.10 USER INTERFACE DESIGN	31
CHAPTER V: IMPLIMENTATION AND TESTING	33
5.0 INTRODUCTION	33
5.1 INTERFACE DESIGN	33
5.1.1 Customer login and register interface.	33
5.1.2 Customer menu/category interface	34
5.1.3 Customer order interface	35
5.1.4 Customer order details	36
5.1.5 Add product interface	36
5.16 Admin interface for adding category	37
5.1.7 Full sales details	37
5.2 DATA STORAGE	38
5.2.1 Users table	38
5.2.2 Category table	39
5.2.3 Products table	40
5.2.4 Order/ purchase details	40
5 3 SYSTEM TESTING	41

5.3.1 Unit testing	41
5.3.2 Integrating testing	42
CHAPTER VI: DISCUSSION, CONCLUSION, RECOMMENDATION, AND FUTURE	
WORKS	43
6.0 INTRODUCTION	43
6.1 DISCUSSION	43
6.2 CONCLUSION	44
6.3 RECOMMENDATIONS	45
6.4 FUTURE WORKS	45
REFERENCES	46
APPENDIX	47
LIST OF FOGURES	
Figure 1: Context Diagram	28
Figure 2: Data flow diagram	29
Figure 3: Use case diagram	29
Figure 4: ERD Diagram	30
Figure 5: Customer login and register interface	34
Figure 6: Customer menu/category interface	35
Figure 7: Customer order interface	36
Figure 8: Customer order details	36
Figure 9: Add product interface	37
Figure 10: Admin interface for adding category	37
Figure 11: Full sales details	38
Figure 12: Users table	39
Figure 13: Category table	39
Figure 14: Products table	40
Figure 15: Order/ purchase details	41

ACRONOMS

BCODS: bakery customer order and delivery system

BFLC: Bake for Life Company

Ltd: limited

SSADM: structured system analysis and design

RAD: rapid application development

DTD: dataflow diagram

ERD: Entity relationship diagram

HTML: hypertext markup language

CSS: cascading style sheet

PHP: hypertext preprocessor

RAM: Random Access Memory

UPS: uninterruptible power supply

Uid: user id

I.e.: that is to say

E.g.: for example

ABSTRACT

Every business' vision is to maximize profits from customers' satisfaction and devotion towards

the store by providing more made to order services for the customers. However, it is also easy to

lose its possible customers if they do not have sufficient stocks in the store. Thus, this paper

presents

A careful study and analysis of an existing manual order and delivery system bake for Life

Company limited and aimed at designing a web-based customer order and delivery system in

order to increase the efficiency and accuracy of the business operations of the company. A

customer order and delivery system is a web-based system aimed at receiving orders from the

customers to the supply team of bake for Life Company limited so that products to be produced

are to be consumed by the market.

The study was carried out to reduce the problems of over production and less production and loss

of order records due to the existing manual system used at the company. An analysis of the

existing manual system was done to get a better understanding of the system. Hence, Rapid

Application Development (RAD) methodology was used in this research to implement an

iterative methodology which is suitable for stand-alone applications that can be updated from

time to time as may be required by the web-based system. Testing was done in every phase of

the development life cycle to ensure that the new system worked properly.

The system was designed and implemented using PHP programming language and MYSQL for

the database. This system designed provides the report of all the orders made and other activities

such as product sales, customer's registration among others.

Key words: RAD, PHP, MYSQL, a web-based sales and BCOD system.

Х

CHAPTER I: INTRODUCTION, BACKGROUND

1.0 INTRODUCTION: BAKERY CUSTOMER AND ORDER AND DELIVERY SYSTEM

This chapter presents an overview and the rationale upon which the research outcomes are evaluated. It consists of the following sections: introduction background of the study, problem statement, objectives of the study, significance of the study, scope of the study, etc.

Bakery industry is distributed all over the world and is one of the lucrative businesses (producing wealth or profit) that deals in the production of a number of products namely bread, cakes, buns, mandaz, doughnuts to mention but a few which are common on people's dining tables mainly during breakfast and dinner in both urban and semi-urban communities with ready market. They are enjoyable irrespective of the age, place, and good of it all, caters for both the rich and the poor through the different sizes with the varying prices that are affordable to the poor e.g. mandaz of 200#, 500#etc. they are quite nutritive and easily preserved and the shelf life can be prolonged.

Market for bakery products are all becoming household items which are needed every day, at social events for instance birthdays, weddings, bridal and baby showers, religious events, corporate parties and schools. This market is available throughout the year and countrywide.

Experts say, it is better to diversify into different products such as various types of bread, cakes and pastries. "This means if anyone does not like bread, you will be able to provide them with a pastry or cake," said Ms. Harriet Kibuuka, the proprietor of Harryz Confectionary in Kyaliwajjala.(monitor Monday, August 21, 2017 — updated on January 03, 2021)

1.1 BACKGROUND

Many bakery industries experience bigger losses due to poor estimation of the products to be produced to the market every day simply because the vendors are not sure of the demand for the products that customers may need in the market. And this has coasted them so much by

REFERENCES

Alias, A. A. (2021). Web-based online bakery ordering system with QR code [PhD Thesis]. Universiti Teknologi Mara Perlis.

Bakery. (n.d.). Entrepreneur. Retrieved November 16, 2022, from https://www.entrepreneur.com/businessideas/bakery

Bakery Online Ordering System Source Code Using PHP/MySQL 2022. (n.d.). Retrieved November 14, 2022, from https://itsourcecode.com/free-projects/php-project/bakery-online-ordering-system/

Bakeshop Online Ordering System in PHP/MySQLi with Full Source Code | Free Source Code | Projects and Tutorials. (n.d.). Retrieved November 14, 2022, from https://www.sourcecodester.com/php/14609/bakeshop-online-ordering-system-phpmysqli-full-source-code.html

Is, N. (2016). *Cake ordering system for Saujana Makmur Enterprise (e-CakeS)* [PhD Thesis]. Universiti Teknologi MARA.