

STUDENT FEE MANAGEMENT SYSTEM

CASE STUDY: DABANI GIRLS' SCHOOL

BY

AUMA DOREEN WASSWA

BU/UG/2017/112

aumadoreen56@gmail.com

0770677397

**A PROJECT REPORT SUBMITTED TO THE DEPARTMENT OF COMPUTER STUDIES IN
PARTIAL FULFILLMENT FOR THE AWARD OF BACHELORS DEGREE OF SCIENCE IN
COMPUTER SCIENCE AT BUSITEMA UNIVERSITY**

SUPERVISOR:

MADAM NATURINDA ENID

DEPARTMENT OF COMPUTER STUDIES

FACULTY OF SCIENCE AND EDUCATION

NOVEMBER, 2020

DECLARATION

I, Auma Doreen Wasswa, Registration Number BU/UG/2017/112, declare that the work presented in this project report is my original work and has not been submitted to any university or institution of higher learning for any academic award. All work from other authors has been fully, properly acknowledged and cited.

Signature:..... Date of submission:.....

Auma Doreen Wasswa

APPROVAL

This project report has been submitted to the department of computer studies Busitema University Nagongera campus indicating that I successfully completed my research with approval of:

Supervisor

.....

Signature

.....

Date

.....

DEDICATION

This project report is dedicated to my father Mr. Waswa Fabiano, my mother Mrs. Norah Waswa, Brothers and Sisters, friends, relatives and all those who prayed for me to the Almighty during the whole process of my education, God bless you all!!.

ACKNOWLEDGEMENT

I first thank the ALMIGHTY GOD for the protection, love, care, provision and the far he has brought me. It has been God throughout not by my power.

Sincere gratitude and heartfelt thanks go to my supervisor Madam Naturinda Enid for her valuable time, encouragement, guidance and supervision during the course of study. Without her, this book would not have been what it is.

Special acknowledgement goes to my lovely parents, relatives and friends for their continuous support and help. My class members, fellow comrades, Busitema community, Dabani Girls' School thank you so much for your cooperation and the contribution you gave towards this research. Am very grateful.

May the Almighty God richly bless you.

LIST OF ACRONYMS

DFD	Data Flow Diagram
ERD	Entity Relationship Diagram
GHz	Giga Hertz
HTML	Hypertext Markup Language
ICT	Information and Communications Technology
MYSQL	My Structured Query Language
MIS	Management Information System
OS	Operating System
RAM	Random Access Memory
SAD	Systems Analysis and Design
VS	Visual Studio

LIST OF FIGURES

Figure 1.1 Waterfall Model adopted from (Morgan, 2018).....	8
Figure 2: shows the context diagram of the developed system.....	18
Figure 3: Entity Relationship Diagram	22
Figure 4: Use Case Diagram	23
Figure 5: Login screen	24
Figure 6: New User.....	25
Figure 7: Account setting	25
Figure 8 Registration	25
Figure 9: Registration access.....	26
Figure 10: home page.....	28
Figure 11: Fees window.....	29
Figure 12: data entry form.....	30
Figure 13 senior one students with balance form.....	32
Figure 14: list form	32

LIST OF TABLES

Table 1: showing the different strata and number in the strata.	8
Table 2: shows categories of respondents at the Dabani Girls' School.....	12
Table 3: showing comparative analysis of the strengths and weaknesses	14
Table 4: entities and their attributes.....	20
Table 5: Student details.....	20
Table 6: Bursar details	21

Table of Contents

DECLARATION	i
APPROVAL.....	ii
DEDICATION	iii
ACKNOWLEDGEMENT	iv
LIST OF ACRONYMS	v
CHAPTER ONE	1
1.0 Introduction	1
1.1 Background of the study	1
1.2 Problem statement.....	2
1.3 Objectives of the study	2
1.3.1 General objective.....	2
1.3.2 Specific objectives.....	2
1.4 Scope of the study	2
1.5 Significance of the study	2
CHAPTER TWO: LITERATURE REVIEW	3
2.0 INTRODUCTION	3
2.1 Existing systems.....	3
2.2 Computerized Systems	5
2.3 Spreadsheet Application (file based approach).....	6
CHAPTER THREE: RESEARCH METHODOLOGY	7
3.0 Introduction	7
3.1 Research Design	7
3.2 Target population of study	7
3.2.1 Sampling techniques.....	7
3.3 Development Methodology.....	8
3.4 Requirements identification.....	9
3.5 System study and investigation	9
3.5.1 Data Collection Methods.....	9
3.6 System Design.....	10
3.7 System Implementation	11
3.8 System testing and validation	11
CHAPTER FOUR: SYSTEMS ANALYSIS AND REQUIREMENTS	12
ELICITATION	12
4.0 Introduction	12

4.1	Response rate	12
4.1.1	Parameters that interpret the findings	12
4.1.2	Parameters that interpret the challenges faced in the use of the current system.....	13
4.2	Description of the current system	13
4.2.1	Strengths of the current system	13
4.2.2	Weaknesses of the current manual system.....	14
4.2.3	Comparative analysis of the strengths and weaknesses.....	14
4.3	Requirements of the new system.....	14
4.3.1	User requirements.....	14
4.3.2	Functional requirements.....	15
4.3.3	Non-Functional requirements	15
4.3.4	System requirements	16
4.3.4.1	Hardware requirements	16
4.3.4.2	Software requirements	16
CHAPTER FIVE: SYSTEM DESIGN, IMPLEMENTATION, TESTING AND VALIDATION.....		17
5.0	Introduction	17
5.1.	Identification of technologies that were used.	17
5.1.1	Visual basic.net.....	17
5.1.2	Microsoft Access	17
5.2	Coding of the System.....	18
5.3	Context diagram	18
5.4	Database design.....	19
5.4.1	Conceptual design.....	19
5.4.2	Logical design.....	19
5.4.3	Physical design	19
5.5	Identification of entities and their attributes.....	20
5.3.1	Description of the database attributes	20
5.3.2	Relationships between Entities	21
5.3.3	Entity Relationship Diagram	21
5.4	System Implementation.....	23
5.4.1	Developed System	23
5.4.1.1	Home page.....	24
5.5	TESTING	33
CHAPTER SIX: DISCUSSION, RECOMMENDATIONS, LIMITATIONS, FUTURE		34
WORK AND CONCLUSIONS		34

6.0 Introduction	34
6.1 Discussion.....	34
6.2 Recommendations	35
6.3 Limitations of the study	35
6.4 Area for Further Research	36
6.5 Conclusion	36
References	37
APPENDICES	38

ABSTRACT

This research investigated the problem of managing fee records at the Dabani Girls' School. One of the problems cited at the school is that the students could always refer to the school bursar in case of any challenges concerning their fee transactions. The study enabled the researcher to develop student fee management system to overcome these problems.

A System Engineering methodology using the System Development Life Cycle (SDLC) approach was used to analyze, design, and implement the developed system. Methods of systems analysis and design (SAD) were used to collect and elicit the different requirements and to specify them; as well as collecting the relevant data through interviews, observations, and document reading.

The study recommends that Dabani Girls' School should use the developed system for proper management of the students' fee records. This is because it can effectively and efficiently avail the fee transactions made by students.