

SMART SCHOOL SYSTEM (S³)

(CASE STUDY: FOUR SECONDARY SCHOOLS IN TORORO DISTRICT)

 \mathbf{BY}

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DECLARATION

I **Byaruhanga Moses** declare that this report is the fruit of my work and affirm that the information inside the report has never been submitted to this department by any student or any sources of information

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DEDICATION

Fatly I will thank the Almighty God who has successfully enabled me to complete this research and as well the research report. I then dedicate this report to my dear sister **SANYU ROSE**, my brothers and other sisters. Special thanks to my dear supervisors **Mr. LUKYAMUZI ANDREW** who passed through thorns and rain to see me through this great recess term. For if it was not him, maybe I would not shoot the tip of this mountain. Lastly, let me thank everyone that has put his effort in seeing me go through my education up to this level including **CHILD AID UGANDA** my dear colleagues, May the Almighty God bless you with his right hand.

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ABSTRACT

Students' continuous academic assessment over time and development of a general customizable computerized system framework for students' assessment are two interesting research areas that are given little attention in Uganda's secondary school institutions. Accurate and appropriate decision making by the school management and academic performance quality enhancement are both driven by accurate students' continuous assessment over time. A qualitative research done using observation, interviews and studying existing systems revealed that though a number of schools have embraced the use of automated report card systems, the concentration has been only on termly assessment and report production and development of specialized systems for individual schools. This project aims at the analysis, design and development of a web based computerized decision support system that assists its users to track the performance of students over time, view students' performance statistics in form of graphs and numerical information for accurate decision-making process. Apart from that, this project looks at also developing a general customizable computerized system that can be used by a wider number of institutions. This report booklet also looks at related researches, the extensions that would result into more powerful systems, advantages, challenges and limitations of the web-based system developed.

TABLE OF CONTENTS

DECLA	ARATIONii
DEDIC	ATIONiii
ACKN	OWLEDGEMENTiv
ABSTR	RACTv
TABLE	E OF CONTENTSvi
LIST O	F ACRONYMSviii
LIST O	F FIGURESix
CHAP	TER ONE: INTRODUCTION
1.2	Problem/challenge statement
1.3	Main objective
1.4	Other objectives
1.5	Significance of the study
1.5	Scope
CHAP	TER TWO: LITERATURE REVIEW4
2.1	Introduction
2.2	Development of smart school system. 6
2.3	Definition of major key terms
CHAP	TER THREE: METHODOLOGY16
3.1	Introduction
3.2	Area of study
3.3	Population and sample
3.4	Data collection
3.5	Analysis and presentation
3.6	Method of design
3.7	Implementation tools
3.8	Testing
3.9	Ethics and Research Limitations
CHAP	TER FOUR: PRESENTATION AND DESIGN
4.0 Introduction	
4.1 A	analysis and design
4.2 C	furrent System21

4.3 Challenges of the current system	21
4.4 Advantages of the current system	22
4.5 Description of the smart school system	22
4.6 Design and implementation methodology of Smart School System	27
CHAPTER FIVE: SMART SCHOOL SYSTEM IMPLEMENTATION	33
5.0 Introduction	33
5.1 Smart School System Interfaces	33
5.2 Testing and Coding	38
5.3 Operation	39
5.4 Maintenance	39
CHAPTER SIX: DISCUSSION, CONCLUSION AND RECOMMENDATIONS	40
6.1 Discussion	40
6.2 Conclusion	41
6.3 Recommendations	42
REFERENCES	43
APENDIX A: SAMPLE INTERVIEW GUIDE	44
APENDIX B: ESTIMATED BUDGET	45
APENDIX C: TIME SCHEDULE	46
APENDIX D. SAMPLE O-LEVEL MANUAL REPORT SHEET	47

LIST OF ACRONYMS

CD Compact Disk

CSS Cascading Style Sheets

DSS Decision Support Systems

ERD Entity Relationship Diagram

HTML Hypertext Markup Language

PHP Hypertext pre-processor

SDLC Systems Development Life Cycle

SIMS School Information Management System

SQL Structured Query Language

WWW World Wide Web

LIST OF FIGURES

Figure 1 Conceptual Model Of DSS	9
Figure 2 Problem structuring grades and using decision support systems	10
Figure 3 SSS Design	19
Figure 4 Smart School System Flow Chart	23
Figure 5 Smart School System Context Diagram	28
Figure 6 Smart School System Data Flow Diagram	29
Figure 7 Smart School System Use Case Diagram	29
Figure 8 Smart School System ERD	31
Figure 9 Login Page Design	31
Figure 10 Home page design	32
Figure 11 Register Students Page Design	32
Figure 12 Login Page	33
Figure 13 Smart School System Home Page	34
Figure 14 Student Register Page	35
Figure 15 Enter students' marks page	35
Figure 16 Student Results Page	36
Figure 17 Numerical Statistical Page	37
Figure 18 Graph Page	37
Figure 19 Class Assessment Graph in years	38