A PROPOSED OFFERING OF WEB-BASED SCHOOL CLINIC VISIT RECORDS SYSTEM

FOR DATAMEX COLLEGE OF SAINT ADELINE CALOOCAN BRANCH

A Thesis Project Presented to the

Faculty of Datamex College of Saint Adeline, Inc.

In Partial Fulfillment of the Requirements for the

Degree of Bachelor of Science in Information Technology

By:

Abingona, John Derek

Almira, Eugene

Arcilla, Nicole

Banaag, Raxel

Bidayan, Ivan Lorenz

Cabildo, Kathlyn Joyce

Remoto, Rachel

APPROVAL SHEET

This research paper entitled **"Web-based School Clinic Visit Records System"** prepared and submitted by John Derek Abingona, Eugene Almira, Nicole Arcilla, Raxel Banaag, Ivan Lorenz Bidayan, Kathlyn Joyce Cabildo, Rachel Remoto, in partial fulfillment of the requirements for the subject Quantitative Methods in Bachelor of Science in Information Technology, has been examined and is hereby recommended for acceptance and approval for final oral defense.

Mr. Gabriel Thomas Torneros
Thesis Adviser

PANEL MEMBERS

Accepted and approved in partial fulfillment of the requirements for the subject Quantitative Methods

Panel 1
Member

Panel 2
Member

Panel 3
Member

ADVISER'S CERTIFICATE

This is to certify that the thesis entitled **"Web-based School Clinic Visit Records System"** prepared and submitted by John Derek Abingona, Eugene Almira, Nicole Arcilla, Raxel Banaag, Ivan Lorenz Bidayan, Kathlyn Joyce Cabildo, Rachel Remoto, in partial fulfillment of the requirements for the degree of Bachelor of Science in Information Technology, has been examined and is hereby recommended for approval and acceptance.

Prepared under my supervision.

Mr. Gabriel Thomas Torneros
Thesis Adviser

ABSTRACT

This study presents the development and evaluation of a Web-based School Clinic Visit Records System (SCVRS) for Datamex College of Saint Adeline Caloocan Branch. The project addresses the inefficiencies of manual record-keeping in school clinics, such as delayed access to medical records and increased administrative workload. The SCVRS is designed to digitally record and manage clinic visits for students and school staff, aiming to improve efficiency, security, and access to student medical history.

The system, developed using web technologies including HTML, CSS, and JavaScript with local storage for data handling, focuses on managing patient records for mild cases. Key features include a secure login system for clinic staff, the ability to add, view, search, and update visit records, maintenance of basic patient information, and the generation of summary reports. The system is designed to run on a local computer and does not require an internet connection.

A structured survey questionnaire was used to gather feedback from fifty (50) student and school staff respondents. The results indicate strong support for the implementation of a digital system for managing clinic visit records, with respondents believing it would significantly improve efficiency, reliability, security, and overall management of clinic operations. The study concludes that the proposed SCVRS is necessary for modernizing the recording process and enhancing the institution's ability to monitor the health needs of students and staff. Recommendations include proceeding with system development, providing comprehensive clinic training to the clinic staff and exploring future enhancements.

ACKNOWLEDGMENTS

Above all, we want to express our sincere gratitude to the Almighty God for providing us with the direction, insight, fortitude, and blessings we needed to finish this thesis. This project would not have been easy without faith.

We would like to express our sincere appreciation to our Thesis Adviser, Mr. Gabriel Thomas Torneros, for the invaluable support, patient guidance, insightful feedback, and unwavering encouragement from the initial stages to the finalization of this study. Your expertise and dedication were instrumental in shaping this research.

We are also thankful to the Faculty of Datamex College of Saint Adeline, Inc. for their support and for providing the academic environment that fostered this research.

To our friends, peers, and colleagues for their friendship, knowledge sharing, and moral support, which helped to make the difficulties of this thesis easier to handle and the process more enjoyable.

Finally, we are profoundly thankful to our families for their unconditional love, endless support, understanding, patience, and encouragement. Your belief in us was a constant source of motivation.

TABLE OF CONTENTS

TITLE PAGE ..... **i**
APPROVAL SHEET ..... **ii**
ADVISER'S CERTIFICATE ..... **iii**
ABSTRACT ..... **iv**
ACKNOWLEDGMENT ..... **v**
TABLE OF CONTENTS ..... **vi**
LIST OF FIGURES ..... **viii**
LIST OF TABLES ..... **ix**
INTRODUCTION **1**

CHAPTERS
Chapter 1 – The Problem and Its Background **1**
Background of the Study 2
Statement of the Problem 3
Research Hypotheses 3
Conceptual Framework 4
Significance of the Study 6
Scope and Delimitation 7
Definition of Terms 8
Chapter 2 – Review of Related Literature **10**
School Clinics and Electronic Medical Records 11
Medical Records and Monitoring System 11
Web-Based Clinic Records Management 12
Synthesis 12
Chapter 3 – Design and Procedures **13**
Research Design 14
SDLC Waterfall Model 15
Data Generation Method 16
Respondents and Sampling Procedure 16
Research Instrument 16

Statistical Formula Used 17
Chapter 4 – Presentation, Analysis, and Interpretation of Data 19
Survey Results 20
Data Analysis 20
Tables and Figures 35
Chapter 5 – Summary of Findings, Conclusion, and Recommendation 36
Summary of Findings 37
Conclusion 38
Recommendation 39

APPENDICES 41
Appendix A — References 42
Appendix B — Gantt Chart .....
Appendix C — System Diagram .....
Appendix D — Screenshots of the System .....
Appendix E — Sample Code Snippet .....
Appendix F — Survey Questionnaire .....
Appendix G — Curriculum Vitae .....

LIST OF FIGURES

Figure 1: Conceptual Framework 4
Figure 2: Waterfall Model 15
Figure 3: Question 1 20
Figure 4: Question 2 21
Figure 5: Question 3 22
Figure 6: Question 4 23
Figure 7: Question 5 24
Figure 8: Question 6 25
Figure 9: Question 7 26
Figure 10: Question 8 27
Figure 11: Question 9 28
Figure 12: Question 10 29
Figure 13: Question 11 30
Figure 14: Question 12 31
Figure 15: Question 13 32
Figure 16: Question 14 33
Figure 17: Question 15 34

LIST OF TABLE

Table 1: Responses to Feedback 35

CHAPTER 1
THE PROBLEM AND ITS BACKGROUND

THE PROBLEM AND ITS BACKGROUND

This chapter discusses the background and problem of inefficient manual record-keeping in school clinics, proposing a web-based School Clinic Visit Records System (SCVRS) for Datamex College of Saint Adeline to improve efficiency, security, and access to student medical history. The study aims to assess the SCVRS's effectiveness and outlines its conceptual framework (Input-Process-Output) and significance for various stakeholders. While focusing on managing patient records for mild cases with features like secure login and report generation, the system has limitations, including handling only mild cases and lacking mobile compatibility.

BACKGROUND OF STUDY

In educational institutions, school clinic plays a vital role in ensuring students' health and well-being by providing minor medical assistance, and maintaining health records. However, many school clinics still rely on manual processes for recording patient, leading to inefficiencies such as delayed access to medical records, and increased administrative workload. These challenges can affect the clinic’s ability to provide timely and accurate healthcare services.

A Clinic Records and is a digital solution designed to improve the efficiency of school clinic operations. The patient records module ensures accurate documentation of student medical history, allowing clinic staff to access information easily and provide better healthcare services. According to Muhammad and Garba (2019), the traditional method of recording medical history is a lengthy, paper-based process that relies on physical documents. With technological advancements, there is a growing demand for digital systems to enhance accessibility and record keeping.

At Datamex College of St. Adeline Caloocan Branch, where the school clinic is still in the process of being established, implementing a Clinic Records can significantly improve clinic operations. With approximately 1,000 students, the system will help organize patient records, provide faster access to medical history.

This study aims to develop and implement a Clinic Records that improves data retrieval efficiency, and reduced administrative workload. The system's effectiveness will be assessed in terms of its ability to optimize clinic operations and offer easy access to student/school staff records.

By modernizing school clinic operations, this research provides a practical solution to common challenges, ensuring a more organized, accessible, and efficient healthcare service for students. The findings of this study can also serve as a foundation for future improvements in school clinic systems, benefiting other institutions facing similar issues.

STATEMENT OF THE PROBLEM

The main problem of this study is to assess the effectiveness of a School Clinic Visit Records System (SCVRS) in improving clinic efficiency through some factors such as usage, sustainability and patients' record's security. Specifically, this study seeks to answer the following research questions:

1. What are the system's benefits to the students, school staff, and its clinic staff?
2. Is the SCVRS secure enough to protect patient records?
3. Does a school need a clinic for its students and school staff?