De La Salle University – Dasmariñas

Patient's File Record Information System for Indang Drug and Diagnostic Laboratory (PFR-IS)

An Undergraduate Special Problem
Presented to
The Faculty of Computer Studies Department
De La Salle University – Dasmariñas
Dasmariñas, Cavite

In Partial Fulfillment
of the Requirements for the Degree
Bachelor of Science in Computer Science

by

Fidel, Glenn O.
Malonzo, Jaime Rafael Jr. G.,
Nuestro, Richard Numer C.
Parra, Marc Anthony C.

March 2001

TABLE OF CONTENTS

1.0 INTRODUCTION

- 1.1 Background of the study 1 - 1
- 1.2 Statement of the Research Problem 1 - 1
- 1.3 Statement of Objectives 1 - 2
  - 1.3.1 General Objectives 1 - 2
  - 1.3.2 Specific Objectives 1 - 2
- 1.4 Significance of the Study 1 - 2
- 1.5 Scope and Limitations of the Study 1 - 3
- 1.6 Methodology of the Study 1 - 3

2.0 REVIEW OF RELATED LITERATURE 2 - 1

3.0 THEORETICAL FRAMEWORK

- 3.1 Statement of Assumptions 3 - 1
- 3.2 Operational Definitions 3 - 1
  - 3.2.1 Definition of Terms 3 - 1
  - 3.2.1 Definition of Process 3 - 2
- 3.3 Theories used in the Study 3 - 3

4.0 THE EXISTING SYSTEM

- 4.1 Description of the System 4 – 1
- 4.2 Definition of Data Capture 4 - 1
- 4.3 Inputs 4 - 2
- 4.4 Processes 4 - 2
- 4.5 Files 4 - 5
- 4.6 Outputs 4 - 6
- 4.7 Data Flow Diagram 4 – 6

5.0 THE PROPOSED SYSTEM

- 5.1 System Overview 5 - 1
- 5.2 System Objectives 5 - 2
- 5.3 Scope 5 - 2

5.4 System Justification 5 - 3

6.0 DESIGN
6.1 Inputs 6 - 1
6.2 Processes 6 - 2
6.3 Files 6 - 3
6.4 Outputs 6 - 3

7.0 IMPLEMENTATION
7.1 Resource Requirements 7 - 1
7.1.1 Software Requirements 7 - 1
7.1.2 Hardware Requirements 7 - 1
7.1.3 Human Resources Requirements 7 - 2
7.2 Installation Plans 7 - 2
7.2.1 System Installation 7 - 2
7.2.2 Training Plans 7 - 3
7.2.3 Conversion Plans 7 - 3
7.2.4 Testing 7 - 4

8.0 COST BENEFIT ANALYSIS
8.1 Intangible Benefits 8 - 1
8.2 Tangible Benefits 8 - 1

9.0 CONCLUSIONS AND RECOMMENDATION 9 - 1

LIST OF APPENDICES

APPENDIX A	Normalization
APPENDIX B	Data Dictionary
APPENDIX C	Data Flow Diagram (proposed)
APPENDIX D	Entity Relationship Diagram
APPENDIX E	Entity List
APPENDIX F	Screen Designs
APPENDIX G-K	Certifications

Abstract

In health care, the use of automation in the form of computer systems has increased dramatically to improve services and relieve the burden on medical staffs. Regarding this, the proponents were able to come up with an idea of creating a system for a laboratory clinic. By searching the different places here in Cavite, the group found a diagnostic laboratory in Indang Cavite to be the subject of this study. The group researched and interviewed the personnel in the said laboratory regarding the different activities done in the laboratory including file handlings and transactions. In relation with these, the proponents were able to come up with an idea of creating a system for a laboratory clinic named Patients' File Record Information System (PFR-IS).

The main objective of the proposed system is to provide an easy access on patient's record and to reduce time spent in processing patient's record. The reason why it is created is to be able to guarantee the availability of all files anytime and easy retrieval of all the files. This information provides more liability in handling record-handling information, thus, it also handles the computation of services it offered like cholesterol count, urinalysis, stool exam, etc. The patients' record is kept and handled by a database for easy manipulation. It includes the information of the patients' regarding the laboratory examination. The price of each service is also included in the database and the number of patients for that particular date.

In developing the proposed system, the proponents were able to use system analysis and design tools to create an organized and effective system. The systems development methodology was used in the development of the system. In the development of this study, the proponents used prototyping; it typically involves the creation of some preliminary models or version of a major subsystem, or a small or "scaled-down" version of the entire system. The proponents use Visual Basic 5 in developing the system and refer to different thesis related to this study for reference.