

**Development of E.A.S.C.A.:**  
**An Electronic Archives and Special Collection Application**

**A Research Project**  
**Presented to the Faculty of the**  
**College of Industrial Technology - Graduate Program**  
**Technological University of the Philippines**  
**Manila**



**In Partial Fulfillment of the**  
**Requirements for the Degree**  
**Master of Information Technology**

**By**

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**September 2006**

## ABSTRACT

The main objective of the study is geared towards the development of an Electronic Archives and Special Collection Application (EASCA) for the Aklatang Emilio Aguinaldo of DLSU-Dasmariñas.

The developed system (EASCA) has the ability to handle with ease and flexibility the five diverse types of information that the Archives and Special Collection maintains, namely; Memorabilia, Photo Collection, Thesis/Rare Books, University Publication, and University Records. It has a web-search-similar interface which is very user-friendly in delivering a virtual reference upon query request. It can store and maintain all archived records in one place while still keeping instant and simultaneous access.

Its text retrieval capability searches more than one field at a time and a Boolean searching feature, resulting in rapid word search and full-text searching due to its variable and unlimited field length thereby delivering incredible speed and dead-on search accuracy. Users get the power of “relational-like” databases, but without the slow search speeds. The system also has the ability to link multiple textbases and share all information on a many-to-one basis. A “Browse Choices” option (by pressing the F3 key on query boxes) enables the user to browse and paste choices directly on the database index instead of guessing what keywords or terms might yield quality results.

The system is also unique and robust because the integrity of the textbase and the speed of the searches are maintained and not compromised as the textbase grows. Because of its unlimited field length, fields take the shape of text entries. It can place as much information into a field as necessary – from a one-word entry to a 500-page

document. Fields are also multiple-entry capable (by pressing the F7 key on field boxes during record adding/editing), simplifying form design/maintenance and maximizing searching and reporting precision.

Data security is also a definite consideration because it restricts unauthorized users from accessing vital information and features like adding or modifying through the primary textbase password feature, straightforward “eyes-only” interface and automatic read-only access (silent password) for regular users. Only the Archives and Special Collection personnel could gain authorized access to sensitive configurations and settings. Security for certain PDF links source file is also strictly applied through PDF encryption and password protection, especially for converted thesis/dissertations and scanned confidential documents, disabling the copy/paste and printing option and even a password to open if necessary.

Based on the summary of software evaluation, all software quality characteristics garnered excellent marks. With efficiency scoring the highest due to the developed system’s profound performance speed followed by usability for its very user-friendly interface. The features and contents can be easily grasped even by the most novice user.

Overall, the developed system can be considered as highly accepted and appreciated by the respondents/evaluators for it has met all the requirements and intended functionalities.

## TABLE OF CONTENTS

		Page
Title page		i
Approval Sheet		ii
Dedication		iii
Acknowledgment		iv
Abstract		v
Table of Contents		vii
List of Figures.		ix
List of Tables		xii
Chapter 1	Introduction	1
	Background of the study	2
	Objectives of the Study	4
	Scope and Limitations of the Study	5
Chapter 2	Conceptual Framework	7
	Review of Related Literature and Studies	7
	Conceptual Model of the Study	76
	Operational Definition of Terms	79
Chapter 3	Research Methodology	87
	Project Design.	87
	Project Development	90
	Operation Testing and Procedure	99
	Evaluation Procedure	101
Chapter 4	Results and Discussions	105
	Project Description	105

	Project Structure . . . . .	106
	Project Capabilities and Limitations . . . . .	112
	Project Evaluation . . . . .	114
Chapter 5	Summary of Findings, Conclusions, and Recommendations . . . . .	123
	Summary of Findings . . . . .	123
	Conclusions . . . . .	124
	Recommendations . . . . .	125
References	. . . . .	126
Appendices	. . . . .	134



## LIST OF FIGURES

	Page
Figure 1. The OAIS-Type Archive . . . . .	16
Figure 2. The OAIS Information Model . . . . .	17
Figure 3. The Five Functional Units of OAIS . . . . .	20
Figure 4. The OAIS Model of Players and Roles . . . . .	31
Figure 5. Information packages in the OAIS model . . . . .	41
Figure 6. Overall Mechanism for Data Archival . . . . .	61
Figure 7. The Process of Content Development . . . . .	62
Figure 8. AGI's General Scheme of System Operation . . . . .	64
Figure 9. Organizational Model of Holdings in the AGI . . . . .	65
Figure 10. AGI's Means of Access to Information . . . . .	67
Figure 11. AGI's Example of Archives System Configuration . . . . .	68
Figure 12. The InMagic DB/TextWorks screen capture . . . . .	73
Figure 13. The Conceptual Model of the Study . . . . .	76
Figure 14. The Context Diagram . . . . .	87
Figure 15. Data Flow Diagram . . . . .	89
Figure 16. The Waterfall Model . . . . .	90
Figure 17. The EASCA Main Menu . . . . .	93
Figure 18. Sub-Process 1 (SP1) Input function of the Archives and Special Collection personnel . . . . .	94
Figure 19. The Query Process For client inquiry (Patrons/Researchers) . . . . .	95

Figure 20. The System Administration Process For the Archives and Special Collection personnel	96
Figure 21. The Block Diagram of the System.	98
Figure 22. The ISO/IEC 9126 six quality characteristics of software	101
Figure 23. The Electronic Archives and Special Collection Application (EASCA) Main Terminal and Network Server.	107
Figure 24. The Electronic Archives and Special Collection Application (EASCA) two Client/Query Terminals.	107
Figure 25. The E.A.S.C.A. Menu Screen	108
Figure 26. The Query Screen	109
Figure 27. The Search Result Window	110
Figure 28. The Display Record Form Screen	111

## LIST OF TABLES

	Page
Table 1. The characteristics and subcharacteristics adopted by ISO/IEC 9126 – 1996 which provides internal metrics for measuring software quality	102
Table 2. The System Evaluation Likert Scale.	104
Table 3. Result of conducted Self-Evaluation	114
Table 4. Evaluation of Software Quality Characteristic: Functionality	115
Table 5. Evaluation of Software Quality Characteristic: Reliability	117
Table 6. Evaluation of Software Quality Characteristic: Usability	117
Table 7. Evaluation of Software Quality Characteristic: Efficiency	118
Table 8. Evaluation of Software Quality Characteristic: Maintainability	119
Table 9. Evaluation of Software Quality Characteristic: Portability	119
Table 10. Overall Results of the Project Evaluation	120