ONLINE ADOPTION FORUM SCHEDULER ATTENDANCE AND MONITORING SYSTEM

A Capstone Project Presented to the Faculty of the Master in Information Technology
Aemilianum College Inc.
Rizal St., Piot, West District, Sorsogon City
Sorsogon, Philippines 4700

In Partial Fulfillment of the Requirements for the Degree MASTER IN INFORMATION TECHNOLOGY

JAMES ANDREW DE LA CRUZ ATOS

RECOMMENDATION FOR ORAL DEFENSE

In partial fulfillment of the requirements for the degree of MASTER'S IN INFORMATION TECHNOLOGY, this research project entitled, "ONLINE ADOPTION FORUM SCHEDULER ATTENDANCE AND MONITORING SYSTEM," by JAMES ANDREW D. ATOS, is hereby submitted to the thesis committee for oral examination.

MILAN E. BAUSA, MIT Adviser

THESIS COMMITTEE

In partial fulfillment of the requirements for the degree of MASTER'S IN INFORMATION TECHNOLOGY, this research project, entitled, "ONLINE ADOPTION FORUM SCHEDULER ATTENDANCE AND MONITORING SYSTEM," prepared and submitted by JAMES ANDREW D. ATOS, is hereby recommended for ORAL DEFENSE.

MARNEIL ALLEN G. SANCHEZ, MIT

Member

SHERRY MAE R. LLANDELAR, DIT Member

JOSEFINA R. SARMIENTO, MIT PhD
Member

LYDIA D. DOCTOR, Ph.D Member

REV. FR. MANDEE N. BATAC, CRSChairman

RESULT OF THE ORAL DEFENSE

Result of the Oral Examination for **JAMES ANDREW D. ATOS**, candidate for the degree, MASTER IN INFORMATION TECHNOLOGY.

Project Title : **ONLINE ADOPTION FORUM SCHEDULER**

ATTENDANCE AND MONITORING SYSTEM

Adviser : Milan E. Bausa, MIT

Place : Aemilianum College Inc.

Date : January 26, 2025

Day : Sunday

Time : 11:00 a.m.

APPROVED by the Committee on the Oral Examination with a grade of ______%.

MARNEIL ALLEN G. SANCHEZ, MIT
Member

SHERRY MAE R. LLANDELAR, DIT

Member

JOSEFINA R. SARMIENTO, MIT PhD

LYDIA D. DOCTOR, Ph.D Member

Member

REV. FR. MANDEE N. BATAC, CRSChairman

APPROVAL SHEET

ACCEPTED and APPROVED in partial fulfillment of the requirements for the degree of MASTER IN INFORMATION TECHNOLOGY.

Comprehensive Examinations - PASSED.

JOSEFINA R. SARMIENTO, PhD Dean, CECTLA

LYDIA D. DOCTOR, Ph.D
Assistant Director for Academics

REV. FR. REY GENARO M. MALABANAN, CRS School Director

Contact No.: 211-6012

ACKNOWLEDGEMENT

The researcher extends sincere gratitude and appreciation to the following individuals, whose guidance and inspiration played an invaluable role in the realization of this study:

First and foremost, he would like to thank the **Aemilianum College Inc.** School Director, **Rev. Fr. Rey Genaro M. Malabanan, CRS,** for his constant support and guidance. His leadership and commitment to academic excellence have been a great inspiration throughout this journey;

He also extends his heartfelt gratitude to his professor, **Josefina Rey Sarmiento**, **Ph.D.**, and his capstone project adviser, **Milan E. Bausa**, **MIT** for their invaluable guidance, expertise, and unwavering support. Their insightful feedback, constructive criticism, and dedication have been instrumental in shaping the direction and quality of this research;

To the panel members, Marneil Allen G. Sanchez, MIT, Sherry Mae R. Llandelar, DIT, and Lydia D. Doctor, Ph.D., Assistant Director for Academics of the College, whose expertise has greatly enriched and improved this capstone project, he expresses his sincere appreciation.

vi

Aemilianum College Inc.

Master in Information Technology

Piot, 4700 Sorsogon City, Sorsogon, Philippines

To his **friends**, **colleagues**, and **relatives** who have contributed their time, ideas, and encouragement in various ways, enabling him to manage his time effectively and make this project possible, he extends his deepest gratitude.

To his **cherished family**, including his beloved mother, **Mrs. Imelda A. Calvario**, as well as his unwavering support system - his wife, **Mrs. Lyza A. Atos**, and his precious son, **Zion James A. Atos** - their boundless love, encouragement, and tireless support have been instrumental throughout this journey.

Above all, he expresses his gratitude to **Almighty God**, the source and reason for his existence.

J. A. D. A.

PROJECT STUDY ABSTRACT

Title : **ONLINE ADOPTION FORUM SCHEDULER**

ATTENDANCE AND MONITORING SYSTEM

Number of Pages : 115

Author : James Andrew D. Atos

Type of Document : Project Study

Type of Publication: Published

School : Aemilianum College Inc.

Rizal St., Piot, West District, Sorsogon City

Sorsogon, Philippines

Degree Conferred : Master in Information Technology (MIT)

Keywords : Aemilianum College Inc., Adoption Forum Management,

Adoption Process Coordination, Automated Scheduling System, Digital Public Service Platforms, Forum Attendance Monitoring, Notification System Integration, Online Adoption

Forum Scheduler

The Online Adoption Forum Scheduler Attendance and Monitoring System aimed to streamline the adoption process for Child Care Office V through a system with integrated modules. These modules included a Management Module for administrators to manage user accounts, an Event Management Module for users to generate and select pre-adoption forums, and a Client Management Module for accessing forums and receiving digital certificates. Additionally, SMS and Email Notification Modules enhanced communication by sending reminders, schedules, and

meeting links. The system was evaluated using the ISO/IEC 25010 standard, focusing on functionality, reliability, usability, and other quality attributes. The study excluded advanced features like analytics and scalability to maintain a focused scope.

The Rapid Application Development (RAD) Methodology was used to develop the system. This iterative approach allowed for rapid prototyping, continuous feedback, and refinement, ensuring the system met user requirements effectively and efficiently. The methodology enabled swift development while accommodating necessary adjustments throughout the process.

During the development, as well as after testing and evaluation of the developed system, several key findings were established. The Online Adoption Forum Scheduler Attendance and Monitoring System successfully included a Management Module that enabled administrators to register, log in, update profiles, and manage user accounts effectively. The system also integrated an Event Management Module, allowing users to generate, navigate, and select their pre-adoption forums seamlessly. Additionally, a Client Management Module was successfully incorporated, enabling users to access the online pre-adoption forum and receive their digital Certification of Attendance. The study further added an SMS Notification Module that ensured clients were notified via SMS about their scheduled online adoption forum. Finally, the system included an Email Notification Module that sent clients an email

containing the Google Meet link and the scheduled time for the online pre-adoption forum.

Based on the findings of this study, the following conclusions were formulated. The implementation of the Management Module demonstrated the system's ability to streamline administrative tasks, enhancing efficiency and improving user account management for administrators. The integration of the Event Management Module highlighted the system's effectiveness in providing users with a seamless and user-friendly experience for managing pre-adoption forum schedules. The incorporation of the Client Management Module showed the system's capability to facilitate user access to online pre-adoption forums and streamline the issuance of digital Certificates of Attendance. The addition of the SMS Notification Module effectively enhanced communication by ensuring clients were promptly notified about their scheduled online adoption forums. Finally, the inclusion of the Email Notification Module improved client communication by sending timely emails containing the Google Meet link and the scheduled time for the online pre-adoption forum.

Based on the conclusions drawn from this study, the following recommendations were formulated. First, the Management Module should be further optimized by incorporating additional features such as role-based access control and advanced reporting, which would enhance administrative efficiency and security. Second, the Event Management Module should be expanded by adding features like



calendar synchronization and reminder notifications to improve the user experience and better manage forum schedules. Third, the Client Management Module should be enhanced by integrating a tracking system for user progress and enabling real-time updates on certificate issuance, which would improve user engagement and overall system functionality. Fourth, the SMS Notification Module should be improved by incorporating customizable message templates and delivery time settings to better accommodate client preferences and time zones. Fifth, the Email Notification Module should be enhanced by adding features such as automated follow-up reminders and the ability to resend the meeting link in case of delivery issues, ensuring better client communication and engagement. Lastly, it is recommended to implement a feedback mechanism within the system, allowing clients and administrators to provide suggestions or report issues, thereby contributing to continuous improvement in system functionality and user experience over time.

TABLE OF CONTENTS

						I	Page
Title Page							i
Recomme	endation for Oral Defense	e					ii
Result of	the Oral Defense .						iii
Approval	Sheet						iv
Acknowle	edgement						v
Project St	udy Abstract .						vii
Table of (Contents						xi
List of Ta	bles						xiii
List of Fig	gures						xiv
List of Ap	pendices						XV
Chapter							
I.	Project Background						1
	Introduction .						1
	General Objective.						4
	Specific Objectives.						4
	Scope and Delimitation					•	5
	Significance of the Stud	y.					6
	Project Dictionary						10
	Notes						17
II.	Review of Related Liter		19				
	Related Literature						19
	Related Systems						39
	Synthesis of the State-o	f-the	-Art				57



Aemilianum College Inc. Master in Information Technology Piot, 4700 Sorsogon City, Sorsogon, Philippines

	Gap Bridged by t	he Stud	ly						59
	Conceptual Fram	ework.							60
	Notes								65
III.	Technical Backgr	ound.							72
	Resources.								72
	Stakeholders.								74
	Constraints.								77
	Project Developn	nent Mo	ethodol	ogy.					84
	Notes								87
IV.	Online Adoption	Forum	Schedu	ıler Att	endanc	e			
	And Monitoring S								87
	Requirements Pla	anning.							87
	User Design.								91
	Rapid Constructi	on							97
	Cutover .								101
V.	Summary, Findin	gs, Con	clusion	ı, and R	ecomm	endati	on.		102
	Summary .								102
	Findings .								103
	Conclusions								105
	Recommendation	1S.							105
Bibliogra									107
				•	•	117			
Annondic	O.C.								117

LIST OF TABLES

Table No.	Title				Page
3.1.	Software Requirements				72
3.2.	Hardware Requirements				73
3.3.	Stakeholders .				75
3.4.	System Development Time F	rame			81
3.5.	Deployment System Require	ement			83

LIST OF FIGURES

Figure No.	Title			Page
2.1.	Conceptual Paradigm			64
3.1.	Rapid Application Development			86

LIST OF APPENDICES

Appendix.	Title					Page
A	Communications					119
В	Evaluation Tool					120
С	Source Codes					125
D	Documentation					126
Е	Curriculum Vitae		_	_		128