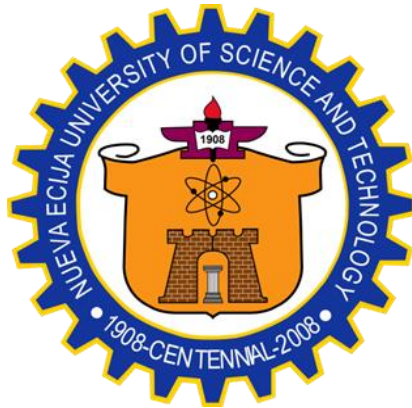


AGRILEARN: AN E-LEARNING APPROACH TO AGRICULTURAL EDUCATION



A CAPSTONE AND RESEARCH PROJECT

by:

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LESTER JOHN LLOYD MONTE

December 2024

***AGRILEARN: AN E-LEARNING APPROACH TO
AGRICULTURAL EDUCATION***

A Capstone and Research Project
Presented to the Faculty of the
College of Information and Communications
Technology
Cabanatuan City, Nueva Ecija

In Partial
Fulfillment of the
Requirements for the degree
Bachelor of Science in Information Technology
With Specialization in
Web Systems Technology

by:

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December 2024



Republic of the Philippines
Nueva Ecija University of Science and Technology
College of Information and Communications Technology



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This capstone and research project entitled **AgriLearn: An E-Learning Approach to Agricultural Education**, prepared and submitted by **Eugene Van R. Linsangan, Jhon Eric A. Jocson, Lester John Lloyd O. Monte, Gabriel P. Manialong** in partial fulfillment of the requirements for the degree, Bachelor of Science in Information Technology with Specialization in Web Systems Technology is hereby recommended for approval and acceptance.

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JOINT UNDERTAKING

We, **Eugene Van R. Linsangan, Gabriel P. Manialong, Jhon Eric A. Jocson, Lester John Lloyd O. Monte** of all members, all of legal age, Filipino, and students of Nueva Ecija University of Science and Technology (NEUST), after having been duly sworn in accordance with law, do hereby state and depose:

1. That the undersigned are the authors/researchers of an academic project entitled *AgriLearn: An E-Learning Approach to Agricultural Education*, in partial fulfillment of the requirements for the degree of Bachelor of Science in Information Technology at Nueva Ecija University of Science and Technology (NEUST). This project was completed with the guidance and contribution of our adviser, **Angelito I. Cunanan Jr., MSIT**, and our course teacher, **Rachel T. Alegado, DIT** who are hereby recognized as co-authors of this work in acknowledgment of their valuable intellectual and professional support throughout the development of the project.
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IN WITNESS WHEREOF, we have hereunto set on our hands this ____ day of _____, 2024 in the City of Cabanatuan, Philippines.

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CERTIFICATION OF ENGLISH CRITIC

This is to certify that the capstone and research project entitled **AGRILEARN: AN E-LEARNING APPROACH TO AGRICULTURAL EDUCATION**, prepared and submitted by **Eugene Van R. Linsangan, Gabriel P. Manialong, Jhon Eric A. Jocson, Lester John Lloyd O. Monte**, in partial fulfilment of the requirements for the degree, Bachelor of Science in Information Technology with Specialization in Web Systems Technology has been grammatically and technically edited by the undersigned. The said manuscript has been found to be acceptable to the rules of grammar and composition.

This certification has been issued to the abovementioned students-researchers for reference purposes only.

RUTH G. LUCIANO, PhD
Research Editor/English Critic

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The Researchers

DEDICATION

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Eugene, Jhon Eric, Lester John, & Gabriel

Table of Contents

Title.....	ii
Certification of English Critic.....	v
Acknowledgement.....	vi
Dedication.....	viii
List of Tables.....	xii
List of Figure.....	xv
Abstract.....	xvi
CHAPTER I.....	1
Introduction.....	1
Review of Related Literature.....	3
Conceptual Framework.....	7
Statement of the Problem.....	10
Scope and Limitation of the study.....	13
Significance of the Study.....	13
Definition of Terms	15
CHAPTER II.....	17
RESEARCH METHODOLOGY.....	17
Research Design.....	17
Research Locale.....	19
Research Respondents.....	20
Type of Respondent Frequency Percentage	20

Sample and Sampling Technique	21
Data Gathering Instruments	23
Candidate End User Respondents.....	23
Elected IT Expert Respondents	23
Ethical Consideration	37
Chapter III.....	39
RESULTS AND DISCUSSION.....	39
1.Assessment of the Current Situation Navigating the Farmers from Aliaga, Nueva Ecija.....	39
2. Design and development of AGRI-LEARN (based on the phases of Agile Software Development Cycle).....	45
Use Case Diagram	47
Data Flow Diagram.....	49
Level 0 DFD	50
Level 1 DFD`	51
Entity Relationship Diagram.....	52
Data Dictionary.....	53
Database Normalization.....	63
3. Development Phase.....	64
4. Continuation of Design Phase	64

5. Construction Phase	65
6. Requirement Gathering Phase 4.....	65
7. Test Phase	65
8. Deployment of Our System.....	66
Summary of Assessment: Elected IT experts...	67
Summary of Assessment: Candidate End Users..	81
Chapter IV.....	89
Summary.....	89
Conclusion.....	90
Recommendations.....	91
REFERENCES.....	92
APPENDIX A.....	94
APPENDIX B.....	95
APPENDIX C.....	97
APPENDIX D.....	104
User Manual	104
Instructor Manual.....	107
CURRICULUM VITAE.....	130

List of Tables

Table 1 Type of Respondents Frequency Percentage	20
Table 2 Candidate End User Respondents	25
Table 3 Elected IT Expert Respondents	27
Table 4 <i>Scoring Scale for Compatibility</i>	28
Table 5 <i>Scoring Scale for Usability</i>	30
Table 6 <i>Scoring Scale for Reliability</i>	32
Table 7 <i>Scoring Scale for Security</i>	34
Table 8 <i>Scoring Scale for Maintainability</i>	36
Table 9 <i>Scoring Scale for Portability</i>	38
Table 10 <i>Results of the Assessment by End-Users</i>	42
Table 11 <i>Results of the Assessment on the Problems Encountered Using the System Feature in terms of Management of Data</i>	43
Table 12 <i>Results of the Survey on Likelihood of the user will the web application Using the Manual System in terms of Reliability of Output</i>	45
Table 13 <i>Summary of the Acceptance Questionnaire</i>	46
Table 14 <i>Data Dictionary for admin account</i>	54
Table 15 <i>Data Dictionary for the end-user account</i>	55
Table 16 <i>Data Dictionary for test_learners</i>	55
Table 17 <i>Data Dictionary for announcement</i>	56
Table 18 <i>Data Dictionary for the archive</i>	56
Table 19 <i>Data Dictionary for the archivevids</i>	56
Table 20 <i>Data Dictionary for courses</i>	57
Table 21 <i>Data Dictionary for course_reviews</i>	57
Table 22 <i>Data Dictionary for the</i>	

Enrolled Course	58
Table 23 Data Dictionary for <code>global_chat</code>	58
Table 24 Data Dictionary for <code>lesson_</code> <code>progress</code>	58
Table 25 Data Dictionary for <code>list_of_applicants</code>	59
Table 26 Data Dictionary for <code>notes</code>	59
Table 27 Data Dictionary for <code>questions</code>	60
Table 28 Data Dictionary for <code>enrolled_</code> <code>course</code>	60
Table 29 Data Dictionary for <code>quizzes</code>	60
Table 30 Data Dictionary for <code>review_</code> <code>reply</code>	61
Table 31 Data Dictionary for <code>user_</code> <code>activity</code>	61
Table 32 Data Dictionary for <code>video</code> <code>lessons</code>	61
Table 33 Data Dictionary for <code>video_</code> <code>reports</code>	62
Table 34 Data Dictionary for <code>watch_video_lesson</code>	62
Table 35 Functional Suitability Assessment by IT Experts	67
Table 36 Performance Efficiency of the AgriLearn as evaluated by the IT Experts	69
Table 37 Compatibility of AgriLearn as evaluated by the IT Experts	70
Table 38 Usability of AgriLearn as Assessed by the IT Experts	72
Table 39 Reliability of AgriLearn as	

Assessed by the IT Experts	74
Table 40 Security of AgriLearn as	
Assessed by the IT Experts	75
Table 41 Maintainability of AgriLearn	
as Assessed by the IT Experts	76
Table 42 Portability of AgriLearn as	
Assessed by the IT Experts	78
Table 43 Summary of IT Experts' Rating	79
Table 44 Functional Suitability of	
AgriLearn as Assessed by the End-Users	81
Table 45 Performance Efficiency of	
AgriLearn as Assessed by the End-Users	83
Table 46 Usability of AgriLearn as	
Assessed by the End-Users	84
Table 47 Portability of AgriLearn as	
Assessed by the End-Users	85
Table 48 Summary of the Rating given	
by the End-Users	86

List of Figures

Figure 1	Conceptual Framework	10
Figure 2	Research Locale Map	20
Figure 3	Use Case Diagram	49
Figure 4	Context Diagram	52
Figure 5	Level 0 Data Flow Diagram	52
Figure 6	Level 1 Data Flow Diagram	53
Figure 7	Entity Relationship Diagram	54
Figure 8	Data Normalization	63
Figure 9	Gantt Chart	66

Abstract

In an era where digital transformation is reshaping industries, agriculture remains a critical yet underrepresented sector in leveraging modern technology for knowledge dissemination and education. AgriLearn emerges as an innovative solution addressing this gap by offering a comprehensive e-learning platform focused on modern agricultural techniques, machinery, and sustainable practices. The system empowers farmers and students alike with essential insights to enhance productivity, reduce costs, and make informed decisions in their agricultural pursuits.

Developed using the Agile Development Life Cycle, AgriLearn ensures adaptability and user-centricity in its design. The front-end is built with HTML, CSS, and JavaScript, delivering a seamless and responsive interface across various devices, while the backend, powered by PHP, provides robust functionality. The platform's curriculum includes topics such as farming methods, crop production, agricultural economics, and sustainability, ensuring a holistic learning experience.

The study revealed that agriculture enthusiasts often face challenges in adapting to the rapid advancements in technology and the tools used by the present generation. AgriLearn was successfully developed using the Agile Development Life Cycle, with plans to monitor, maintain, and improve the platform in the future. Assessments conducted using Software Quality Characteristics Standards showed that both IT experts and end-users were generally satisfied with the system. The IT experts gave the platform an average rating of 3.64, while end-users provided a score of 3.24. These results highlight the system's efficiency and effectiveness as a tool for agricultural learning courses.