DEVELOPMENT OF MANAGEMENT INFORMATION SYSTEM FOR COLLEGE OF SPORTS, PHYSICAL EDUCATION AND RECREATION (CSPEAR) OF CAVITE STATE UNIVERSITY - MAIN CAMPUS



RAQUEL P. ANACAY ARLENE T. ECUBIN

College of Engineering and Information Technology

CAVITE STATE UNIVERSITY

Indens, Cevite

January 2019

DEVELOPMENT OF MANAGEMENT INFORMATION SYSTEM FOR COLLEGE OF SPORTS, PHYSICAL EDUCATION AND RECREATION (CSPEAR) OF CAVITE STATE UNIVERSITY – MAIN CAMPUS

Undergraduate Thesis
Submitted to the Faculty of
Department of Information Technology
Cavite State University
Indang, Cavite

In partial fulfillment of the requirements for the degree Bachelor of Science in Information Technology

RAQUEL P. ANACAY ARLENE T. ECUBIN January 2019

ABSTRACT

ANACAY, RAQUEL P. and ECUBUN, ARLENE T. Development of Management Information System for College of Sports, Physical Education and Recreation (CSPEAR) of Cavite State University- Main Campus. Undergraduate Thesis. Bachelor of Science in Information Technology. Cavite State University Indang, Cavite. January 2019. Adviser: Ms. Gladys G. Perey.

The study was conducted from January 2016 to December 2018 at Cavite State University – Main Campus, Indang, Cavite to develop a management information system for the College of Sports, Physical Education and Recreation. Specifically, it aimed to: 1. develop a system that will address the problem on the time-consuming listing of records; 2. design and develop a system that will automatically update records and information; and 3. develop a system that will automatically generate reports.

The Prototyping Technique was used as pattern in the development of the system which includes: requirement gathering phase, quick design phase, building prototype phase, assessment/user evaluation phase, prototype refinement phase and engineer product phase.

The system was developed using XAMPP, where Apache was used as the server, PHP as the scripting language and MySQL, for the database. Google Chrome as the default browser and Microsoft Office Word 2016 for documentation and designing of the diagrams.

The developed system consists of four (4) modules, namely: account management module, faculty and staff information module, student information module and report generation module. It has three (3) levels of access such as: the administrator or MIS officers, college registrar and department chairperson.

The software was evaluated in terms of its functionality, reliability, usability, efficiency, maintainability, portability and user-friendliness by twenty (20) instructors, for the technical evaluation, and 90 students, for the non-technical evaluation. Based on the evaluation, the system satisfied all the objectives of the study.

TABLE OF CONTENTS

	Page
BIOGRAPHICAL DATA	iii
ACKNOWLEDGEMENT	v
ABSTRACT	ix
LIST OF TABLES	xiii
LIST OF FIGURES	xiv
LIST OF APPENDIX TABLES	xv
LIST OF APPENDIX FIGURES	xvii
LIST OF APPENDICES	xviii
INTRODUCTION	1
Statement of the Problem	2
Objectives of the Study	3
Significance of the Study	4
Time and Place of the Study	4
Scope and Limitation of the Study	4
Definition of Terms	5
Theoretical Framework	6
REVIEW OF RELATED LITERATURE	9
Related Literature	9
Related Studies	12
MATERIALS AND METHODS	16
Materials	16

Methodology	16
RESULTS AND DISCUSSION	20
SUMMARY, CONCLUSION AND RECOMMENDATIONS	40
Summary	40
Conclusion	41
Recommendations	43
REFERENCES	44
APPENDICES	46

LIST OF TABLES

Table		Page
1	Comparison of related studies to the study conducted	15
2	Likert scale with the interpretation used in the evaluation	30
3	Breakdown of respondents	31
4	Technical evaluation of the software's functionality	33
5	Technical evaluation of the software's reliability	34
6	Technical evaluation of the software's usability	34
7	Technical evaluation of the software's efficiency	35
8	Technical evaluation of the software's maintainability	35
9	Technical evaluation of the software's portability	36
10	Technical evaluation of the software's user-friendliness	36
11	Summary of the software's technical evaluation	37
12	Non-technical evaluation of the software's functionality	37
13	Non-technical evaluation of the software's reliability	38
14	Non-technical evaluation of the software's usability	38
15	Non-technical evaluation of the software's user-friendliness	39
16	Summary of the software's non-technical evaluation	39

LIST OF FIGURES

Figure		Page
1	Theoretical framework of the system	8
2	Prototyping model	17
3	Screenshot for homepage	21
4	Screenshot for log-in page	22
5	Screenshot for administrator	22
6	Screenshot for adding staff	23
7	Screenshot for list of staff	23
8	Screenshot for adding new rank	24
9	Screenshot for adding new status	24
10	Screenshot for adding faculty	25
11	Screenshot for list of faculty	25
12	Screenshot for adding schedule	26
13	Screenshot for adding student	26
14	Screenshot for list of students	27
15	Screenshot for subjects	27
16	Screenshot for course	28
17	Screenshot for activities	28
18	Screenshot for seminar	29
19	Screenshot for reports	29
20	Screenshot for user management	30

LIST OF APPENDIX TABLES

K.	Page
Frequency distribution of respondents' perception on software's functionality	63
Frequency distribution of respondents' perception on software's reliability	64
Frequency distribution of respondents' perception on software's usability	64
Frequency distribution of respondents' perception on software's efficiency	65
Frequency distribution of respondents' perception on software's maintainability	66
Frequency distribution of respondents' perception on software's portability	66
Frequency distribution of respondents' perception on software's user-friendliness	67
	Frequency distribution of respondents' perception on software's functionality Frequency distribution of respondents' perception on software's reliability Frequency distribution of respondents' perception on software's usability Frequency distribution of respondents' perception on software's efficiency Frequency distribution of respondents' perception on software's maintainability Frequency distribution of respondents' perception on software's portability

LIST OF APPENDIX FIGURES

Appendix Figure		Page
1	Fishbone diagram of unavailability of previous records	48
2	Fishbone diagram of unorganized management of records	49
3	Fishbone diagram of difficulty in producing reports	50
4	Use case diagram for account module	52
5	Use case diagram for faculty and staff information module	53
6	Use case diagram for student information module	54
7	Use case diagram for report module	55
8	Gantt chart	62

LIST OF APPENDICES

Appendix		Page
A	Fishbone Diagram	47
В	Use Case Diagram	51
C	Interview Report	56
D	Gantt Chart	60
Е	Frequency Distribution Table	62
F	Evaluation Form	68
G	Sample Evaluation	71
Н	Unit Testing	7 6
I	Integration Testing	81
J	Source Code	83

DEVELOPMENT OF MANAGEMENT INFORMATION SYSTEM FOR COLLEGE OF SPORTS, PHYSICAL EDUCATION AND RECREATION (CSPEAR) OF CAVITE STATE UNIVERSITY – MAIN CAMPUS

Raquel P. Anacay Arlene T. Ecubin

An undergraduate thesis manuscript submitted to the faculty of the Department of Information Technology, College of Engineering and Information Technology, Cavite State University, Indang Cavite in partial fulfilment of the requirements for the degree of Bachelor of Science in Information Technology with Contribution No. 2018-19-1-048

Prepared under the supervision of Gladys G. Perey.

INTRODUCTION

The College of Sports, Physical Education and Recreation (CSPEAR) has its vision to provide leadership, formulate policies and set priorities and directions in the promotion and development of all amateur sports in Southern Tagalog Region. This will involve all provincial training institutes, other state universities and colleges and interested public and private institutions in the region.

The mission of CSPEAR is to provide undergraduate an advanced instruction in physical education and recreation sciences. It strives to develop persons committed to the pursuit of excellence in physical education and recreational studies who are able to translate into action concepts and values necessary to improve the quality of life of the Filipino. It also aims to promote physical education, sports and recreation among the studentry and other constituents of the university.