

**ENHANCEMENT OF ONLINE STUDENT ACADEMIC
ADVISING FOR THE COLLEGE OF ENGINEERING
AND INFORMATION TECHNOLOGY**

THESIS

**SHAIRA LOUIENNE B. LAGASCA
JASPER CLYDE B. RAVINA**

College of Engineering and Information Technology

CAVITE STATE UNIVERSITY

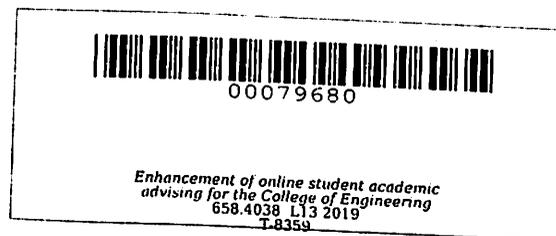
Indang, Cavite

June 2019

**ENHANCEMENT OF ONLINE STUDENT ACADEMIC ADVISING FOR THE
COLLEGE OF ENGINEERING AND INFORMATION TECHNOLOGY**

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

In partial fulfilment
of the requirements of the degree of
Bachelor of Science in Information Technology



**SHAIRA LOUIENNE B. LAGASCA
JASPER CLYDE B. RAVINA**
May 2019

ABSTRACT

LAGASCA, SHAIRA LOUIENNE B. and RAVINA, JASPER CLYDE B. Enhancement of Online Student Academic Advising for the College of Engineering and Information Technology. Undergraduate Thesis. Bachelor of Science in Information Technology. Cavite State University, Indang, Cavite. May 2019. Adviser: Mr. Jake R. Ersando.

This study was conducted for the improvement of the previous study, Design and Development of Online Student Academic Advising for the College of Engineering and Information Technology. It was developed to solve the problems of traditional advising of both registration advisers and students of the College of Engineering and Information Technology.

The data and requirements were gathered by the researchers through interview questionnaires with six (6) questions answered by the registration advisers of the college and through the recommendation of Allysa P. Cabanting and Yveth V. Matilla's study: 1.) The system should connect to the Cavite State University site so that the students can access the system easily. 2.) The system should detect that the student's grade is aiming for graduating with honors. 3.) The system should have a collaborative module which allows the student to communicate to adviser without going to their office.

The researchers designed five (5) modules for the development of the system: Profile Management Module, Checklist Module, Pre-Reg Module, Report Module and Collaborative Module. In applying the recommendation, 1.) The system cannot connect to the Cavite State University site because of the strict security measures. 2.) The user is redirected to a sub-module of checklist module in which the system computes the grades of a graduating or graduated student. When the system has finished computing the grades

of the student it shows the final Grade Point Average (GPA) and if the student acquired a Latin Honor or not with the following rules instructed in the system through the University's Student's Handbook. 3.) the advisee and adviser can communicate through the use of collaborative module.

The researchers used the Iterative Development Model. The methodology consists of seven (7) process workflows namely initial planning, requirements, analysis and design, testing, evaluation and deployment. In iterative development, feature code is designed, developed and tested in repeated cycles; with each iteration, additional features can be designed, developed and tested until there is a fully functional software application ready to be deployed to customers.

The system was evaluated by a total of one-hundred ten (110) participants, consisting of one-hundred (100) students and ten (10) registration adviser from the College of Engineering and Information Technology at Cavite State University—Main Campus—Indang, Cavite. The system was evaluated through two (2) kinds of evaluation forms—non-technical and technical. Non-technical evaluation has a criteria of functionality, reliability, usability and user friendliness and technical evaluation has a criteria of functionality, reliability, usability, efficiency, maintainability, portability and user-friendliness. Each evaluation form has a numerical rating ranging from 5 — Excellent, 4 — Very Good, 3 — Good, 2 — Fair and 1 — Poor. The participants assessed the system with an overall remark of 'Excellence' in the criteria of both non-technical and technical evaluation forms. The adviser and students of College of Engineering and Information Technology may now be able to use the Enhanced Online Student Academic Advising.

TABLE OF CONTENTS

	Page
BIOGRAPHICAL DATA	iii
ACKNOWLEDGMENT	v
ABSTRACT	vii
LIST OF TABLES	xi
LIST OF FIGURES	xii
INTRODUCTION	1
Statement of the Problem	2
Objectives of the Study	3
Significance of the Study	4
Time and Place of the Study	5
Scope and Limitation	6
Definition of Terms	13
Theoretical Framework	15
REVIEW OF RELATED LITERATURE AND STUDIES	18
Review of Related Literature	18
Review of Related Studies	28
METHODOLOGY	34
Materials	34
Methods	34
RESULT AND DISCUSSION	43
System Overview	44

Software Evaluation	67
SUMMARY, CONCLUSION AND RECOMMENDATION	76
Summary	76
Conclusion	77
Recommendation	77
REFERENCES	79
APPENDICES	81

LIST OF TABLES

Table		Page
1	Comparison and Contrast of Related Studies with the Study	31
2	Mean score for the Functionality of the Non-Technical Evaluation	68
3	Mean score for the Reliability part of the Non-Technical Evaluation	69
4	Mean score for the Usability part of the Non-Technical Evaluation	69
5	Mean score for the User-Friendliness part of the Non-Technical Evaluation	70
6	Mean score for the Functionality part of the Technical Evaluation	71
7	Mean score for Reliability of the software from the Technical Evaluation	72
8	Mean score for Usability of the software from the Technical Evaluation	72
9	Mean score for Efficiency of the software from the Technical Evaluation	73
10	Mean score for Maintainability of the software from the Technical Evaluation	74
11	Mean score for Portability of the software from the Technical Evaluation	74
12	Mean score for User-Friendliness from the Technical Evaluation	75

LIST OF FIGURES

Figure		Page
1	Theoretical Framework of the Enhancement of Online Student Academic Advising for the College of Engineering and Information Technology	17
2	Iterative Development Model	35
3	Screen layout of Online Student Academic Advising Home Page in Web	44
4	Screen layout of registering new advisers in administrator's account	45
5	Screen layout of registering new student in adviser's account	46
6	Screen layout of index page in administrator's account	47
7	Screen layout of index page in adviser's account	47
8	Screen layout of index page of student's account	48
9	Screen layout of adding new curriculum in administrator's account	49
10	Screen layout of updating the curriculum in administrator's account	49
11	Screen layout of grades repository's status report	50
12	Screen layout of completion repository's status report	51
13	Screen layout of all adviser users in administrator's account	52
14	Screen layout of all student users in administrator's account	52
15	Screen layout of report module in 'All' category in administrator's account	53
16	Screen layout of report module in 'Adviser' category in administrator's account	54

17	Screen layout of report module in ‘Student’ category in administrator’s account	54
18	Screen layout of the profile of the administrator	55
19	Screen layout of the profile of the adviser in administrator’s account	56
20	Screen layout of the profile of the student in administrator’s account	56
21	Screen layout of the grades-accepting module	57
22	Screen layout of the actual checklist module	58
23	Screen layout of grades sent through grades repository in adviser’s account	58
24	Screen layout of grades sent through completion repository in adviser’s account	59
25	Screen layout of pre-reg module in adviser’s account	60
26	Screen layout of complete list of advised subjects of the student in adviser’s account	60
27	Screen layout of the report module of the adviser	61
28	Screen layout of profile of the adviser	62
29	Screen layout of the profile of the student in adviser’s profile	62
30	Screen layout of collaborative module of the adviser	63
31	Screen layout of student’s profile	64
32	Screen layout of student’s grades repository	64
33	Screen layout of student completion` repository	65
34	Screen layout of student’s checklist module	65
35	Screen layout of student’s collaborative module	66

ENHANCEMENT OF ONLINE STUDENT ACADEMIC ADVISING FOR THE COLLEGE OF ENGINEERING AND INFORMATION TECHNOLOGY

**Shaira Louienne B. Lagasca
Jasper Clyde B. Ravina**

A final 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 fulfillment of the requirements for the degree of Bachelor of Science in Information Technology with contribution No. CEIT 2018-19-2-253 Prepared under the supervision of Mr. Jake R. Ersando.

INTRODUCTION

According to a catalog archive in 2011, advising involves multiple functions. It helps the students discover appropriate individual goals and intentions. It also provides the students with information about alternative programs and modes of study and through special counseling with appropriate help and guidance.

The Advising System of College of Engineering and Information Technology is still using the manual way. The advising process of the advisers includes working with the grades of their advisees' subjects, determines the semester's subjects and counseling process. It also adds the work of the adviser if the student is labeled as irregular, transferee, shiftee or has a status—warning, probationary or ineligible. It takes a lot of time to finish one advisee to complete the whole process through manual procedure due to the absence of electronic materials or assistant to minimize the work and for securing the information of the students.