

**MANAGEMENT INFORMATION SYSTEM FOR
DORMITORIES OF CAVITE STATE
UNIVERSITY-MAIN CAMPUS**

THESIS

**RAY CHARLES V. CERVANTES
MIKAEL FLORENZ P. NUESTRO**

College of Engineering and Information Technology

CAVITE STATE UNIVERSITY

Indang, Cavite

April 2014

**MANAGEMENT INFORMATION SYSTEM FOR DORMITORIES OF CAVITE
STATE UNIVERSITY- MAIN CAMPUS**

**Undergraduate Thesis
Submitted to the Faculty of the
College of Engineering and Information Technology
Cavite State University
Indang, Cavite**

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



*Management information system for
dormitories of Cavite State University --
658.4038 C33 2014
T-5334*

**RAY CHARLES V. CERVANTES
MIKAEL FLORENZ P. NUESTRO**

April 2014

ABSTRACT

CERVANTES, RAY CHARLES V. and NUESTRO, MIKAEL FLORENZ P., Management Information System for Dormitories of Cavite State University- Main Campus. Undergraduate Thesis. Bachelor of Science in Information Technology. Cavite State University Indang, Cavite. April 2014. Adviser: Mr. Simeon E. Daez.

The study entitled “Management Information System for Dormitories of Cavite State University- Main Campus” was developed to help the dormitory administration in achieving its goals for continues improvement and organizational performance. The objectives of the study were to provide an ease of access in carrying out and managing the Dormitories’ function and improve their current system. The development of an online Management Information System (MIS) for the dormitory will help eliminate the difficulty in data handling , redundancy of information inputting and redundancy of activities and as well as provide a reliable, efficient and secured system for the dormitory of Cavite State University.

The proponents used Software Development Methodology as paradigm for the development of the software. It is a software engineering process, aimed at guiding software development organizations in their endeavors. The methodology falls into seven process workflows consists of analyze/planning, breakdown priority project, pesign module, code – test / debug, integration of sub procedures, integration with existing system, test / implementation.

The online Management Information System for the dormitories of Cavite State University – Main Campus grants the organization an ease of usage. The difficulties coming from the organization were given a solution by the function of the system.

TABLE OF CONTENTS

	Page
BIOGRAPHICAL DATA	iii
ACKNOWLEDGMENT	v
ABSTRACT	vii
LIST OF TABLES	viii
LIST OF FIGURES	ix
LIST OF APPENDICES	x
LIST OF APPENDIX TABLES	xi
LIST OF APPENDIX FIGURES	xii
INTRODUCTION	1
Statement of the Problem	3
Theoretical Framework	5
Significance of the Study	8
Objectives of the Study	9
Time and Place of the Study	10
Scope and Limitation of Study	10
Definition of Terms	14
REVIEW OF RELATED LITERATURE	17
METHODOLOGY	27
Materials	27
Methods	28

Analyzed/Planned	28
Breakdown priority project	29
Design module	30
Code – Test / Debug	31
Integration of sub procedures	31
Integration of Existing System.	31
Test / Implementation	31

RESULTS AND DISCUSSION	35
-----------------------------------------	-----------

SUMMARY, CONCLUSION, AND RECOMMENDATIONS.. . . .	56
---------------------------------------------------------	-----------

Summary	56
-------------------	----

Conclusion	57
----------------------	----

Recommendations	57
---------------------------	----

REFERENCES	59
----------------------	----

APPENDICES	60
----------------------	----

LIST OF TABLES

Table	Page
1	Comparison of the related system with the proposed system.26
2	Respondents' assessment on the software for functionality49
3	Respondents' assessment on the software for reliability.50
4	Respondents' assessment on the software for suitability.51
5	Respondents' assessment on the software for efficiency.52
6	Respondents' assessment on the software for maintainability.53
7	Respondents' assessment on the software for portability 54

LIST OF FIGURES

Figure		Page
1	Theoretical framework of management information system for the dormitories of Cavite State University- main campus.	5
2	System development methodology	28
3	Screen layout of system's home page.....	41
4	Screen layout of sign in page.	42
5	Screen layout of reservation area.	43
6	Screen layout student's homepage.	43
7	Screen layout of view student equipment.	44
8	Screen layout of view student payment.....	44
9	Screen layout of university dormitory page.....	45
10	Screen layout for changing account password.....	48

LIST OF APPENDICES

Appendix		Page
1	Approval letter	65
2	Interview report.	70
3	Certificates.....	75
4	Unit testing	113
5	Integration testing	121
6	System testing	123
7	Sample questionnaire of the software evaluation	129
8	Software evaluation form	132
9	Sample programming code.	135
10	Frequency distribution.....	156

LIST OF APPENDIX TABLES

Appendix Table		Page
1	Programming logs of the system.	101
2	Frequency of respondents' assessment based on functionality.. . . .	157
3	Frequency of respondents' assessment based on reliability.	158
4	Frequency of respondents' assessment based on suitability.	159
5	Frequency of respondents' assessment based on efficiency.	160
6	Frequency of respondents' assessment based on maintainability.. . . .	161
7	Frequency of respondents' assessment based on portability.	162

LIST OF APPENDIX FIGURES

Appendix Figure		Page
1	Fishbone diagram of the problem “Information and Data Redundancy”	62
2	Fishbone diagram of the problem “Excessive Activity”.....	63
3	Fishbone diagram of the problem “Information Handling Difficulty”.....	64
4	Organizational Structure for the University Dormitory of Cavite State University.....	78
5	Class Diagram of Management Information System for Dormitory of Cavite State University- Main Campus.....	79
6	Database Schema of Management Information System for Dormitory of Cavite State University- Main Campus.....	80
7	Database Schema of Management Information System for Dormitory of Cavite State University- Main Campus.....	81
8	Gantt Chart	82
9	Component Diagram of Management Information System for Dormitory of Cavite State University- Main Campus.....	83
10	Use Case Diagram for Management Information System for Dormitory of Cavite State University- Main Campus.....	84
11	Sample Interface Design for Management Information System for Dormitory of Cavite State University- Main Campus.....	85
12	.Screen layout of validation area.....	86

13	Screen layout of view student payment.	86
14	Screen layout of payment area.	86
15	Screen layout of receipt.	87
16	Screen layout of the list of student transaction	87
17	Screen layout of payment summary.	88
18	Screen layout of adding a room.	88
19	Screen layout of deleting a room.	89
20	Screen layout of updating a room.	89
21	Screen layout of adding a new building.	89
22	Screen layout of deleting building	89
23	Screen layout of updating a building..	90
24	Screen layout of adding new equipment..	90
25	Screen layout of deleting an equipment.	90
26	Screen layout of adding a course.	90
27	Screen layout of deleting a course..	91
28	Screen layout of updating the period.	91
29	Screen layout of adding student asset	91
30	Screen layout of giving a student violation..	92

31	Screen layout of updating a student	92
32	Screen layout of clearing a student.	92
33	Screen layout for female reports.	93
34	Screen layout for male reports	93
35	Screen layout for master list reports.	94
36	Screen layout for building occupant reports.	94
37	Screen layout for transaction reports.	95
38	Screen layout for violation reports.	95
39	Screen layout of student report	96
40	Screen layout of building report	96
41	Screen layout of room report	97
42	Screen layout of dormitories income reports.. . . .	97
43	Screen layout of searching a student.	98
44	Screen layout of searching a building.	98
45	Screen layout of searching a room.. . . .	99
46	Screen layout of searching the occupants a room.	99
47	Screen layout of searching violations.	99
48	Screen layout of searching transaction.. . . .	100

49	Activity diagram for account module.	103
50	Activity diagram for student module.	104
51	Activity diagram for building/room module.	105
52	Activity diagram for reservation module.	106
53	Activity diagram for financial module.	107
54	Activity diagram for search module.	108
55	Activity diagram for report module.	109
56	Communication diagram of management information system for dormitories of Cavite State University- main campus.	110
57	Sequence diagram of management information system for dormitories of Cavite State University- main campus.	111
58	Interaction overview diagram of management information system for dormitories of Cavite State University- main campus.	112
59	Package diagram of management information system for dormitories of Cavite State University- main campus.	128

MANAGEMENT INFORMATION SYSTEM FOR DORMITORIES OF CAVITE STATE UNIVERSITY - MAIN CAMPUS

**Ray Charles V. Cervantes
Mikael Florenz P. Nuestro**

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 fulfillment of the requirements for the degree of Bachelor of Science in Information Technology. Contribution No. CEIT-2013-14-064
Prepared under the supervision of Mr. Simeon E. Daez.

INTRODUCTION

An important part of developing a Management Information System (MIS) does not rely on which technology to use, rather to decide which people to include, how can the flow of information be connected with each entity, improve the quality and expansion of access (Addison et al., 2012).

According to Bhargava (2009), Management Information Systems (MIS), also known as Information Management and Systems, is a discipline through the application of people, technologies, and procedures combined called information systems, to solve a particular problem. MIS is a planned system of collecting, storing and disseminating data in the form of information needed to carry out the functions of management”.