

ONLINE ATTENDANCE MONITORING SYSTEM FOR
GOVERNOR LUIS ANTONIO FERRER JR. EAST
NATIONAL HIGH SCHOOL

THESIS

PETER JONH P. MACAWILE
ANGELA JOYCE V. PAGUIA

College of Engineering and Information Technology
CAVITE STATE UNIVERSITY
Indang, Cavite

June 2018

**ONLINE ATTENDANCE MONITORING SYSTEM FOR GOVERNOR LUIS
ANTONIO FERRER JR. EAST NATIONAL HIGH SCHOOL**

Undergraduate Thesis
Submitted to the Faculty of the
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



*Online attendance monitoring system for
Governor Luis Antonio Ferrer Jr. East
025 04 M11 2018
T-7455*

**PETER JONH P. MACAWILE
ANGELA JOYCE V. PAGUIA
June 2018**

ABSTRACT

MACAWILE, PETER JONH P. and PAGUIA, ANGELA JOYCE V., ONLINE ATTENDANCE MONITORING SYSTEM FOR GOVERNOR LUIS ANTONIO FERRER JR. EAST NATIONAL HIGH SCHOOL. Undergraduate Thesis. Bachelor of Science in Information Technology. Cavite State University, Indang, Cavite. May 2018. Adviser: Ms. Aiza E. Bihis

The study aimed to design and develop an Online Attendance Monitoring System for Governor Luis Antonio Ferrer Jr. East National High School to help the teachers in recording the attendance of their students online. Specifically, it aimed to design and develop different modules that provide the needs of the clients.

The researchers used Evolutionary Prototyping Methodology as the methodology for the study. It is a lifecycle model in which the system is developed to be readily modified in response to end-user and customer feedback. The methodology used has four phases namely: defining basic requirements, creating a working prototype, verification of working prototype, evaluating and deliberating the requirements.

The system was first tested by the researchers and was evaluated by the teachers and parents of the students of Governor Luis Antonio Ferrer Jr. East National High School. The evaluation was also done at Cavite State University – Main Campus.

The evaluation results indicate that the system was able to prove its functionality, reliability, usability, efficiency, maintainability, portability and user-friendliness. The results proved that the system completed the needed requirements and achieved the aspiration of the study.

TABLE OF CONTENTS

	Page
TITLE PAGE	i
APPROVAL SHEET	ii
ABSTRACT	iii
BIOGRAPHICAL DATA	iv
ACKNOWLEDGEMENT	v
LIST OF TABLES	vi
LIST OF FIGURES	vii
LIST OF APPENDICES	viii
LIST OF APPENDIX FIGURES	ix
LIST OF APPENDIX TABLES	x
INTRODUCTION	
Statement of the Problem	2
Objective of the Study	4
Significance of the Study	4
Time and Place of the Study	6
Scope and Limitation of the Study	6
Theoretical Framework	9
Definition of Terms	12

	Page
REVIEW OF RELATED LITERATURE	
Related Literature	13
Related Studies	32
METHODOLOGY	
Materials	35
Methods	36
RESULTS AND DISCUSSION	40
SUMMARY, CONCLUSION AND RECOMMENDATIONS	
Summary	60
Conclusion	61
Recommendations	62
REFERENCES	63
APPENDICES	67

LIST OF TABLES

Table	Page
1 Comparison table of the related studies and proposed system	34
2 Numerical interpretation used for rating the application	50
3 Non-technical evaluation for the functionality of the application	52
4 Non-technical evaluation for the reliability of the application	52
5 Non-technical evaluation for the usability of the application	53
6 Non-technical evaluation for the user-friendliness of the application	53
7 Non-technical mean score for the over-all rating of the system	54
8 Technical evaluation for the functionality of the application	55
9 Technical evaluation for the reliability of the application	55
10 Technical evaluation for the usability of the application	56
11 Technical evaluation for the efficiency of the application	56
12 Technical evaluation for the maintainability of the application	57

	Page
13 Technical evaluation for the portability of the application	58
14 Technical evaluation for the usability of the application	58
15 Technical mean score of the over-all rating of the system	59

LIST OF FIGURES

Figure		Page
1	Theoretical framework of the study	9
2	Evolutionary prototyping methodology	36
3	Enhancing the logo of the school	41
4	Designing the application on android studio	41
5	MySQL	42
6	Sublime text editor and xampp	42
7	Screen layout of searching of student	43
8	Screen layout of student information	44
9	Screen layout of login of account	44
10	Screen layout of adding of teacher's account	45
11	Screen layout of adding of students	45
12	Screen layout of batch uploading using ms excel	46
13	Screen layout of adding of subjects	46
14	Screen layout of adding of sections	47
15	Screen layout of adding of schedules	47
16	Screen layout of teacher's account	48
17	Screen layout of student's list and checking of attendance ...	48
18	Screen layout of teacher reports	49

LIST OF APPENDICES

Appendix		Page
1	Questionnaire	68
2	Fishbone diagram	71
3	Gantt chart	74
4	Non-technical evaluation form	76
5	Technical evaluation form	78
6	Use-case diagram	80
7	Frequency distribution	83
8	Unit testing	86
9	Integration testing	95

LIST OF APPENDIX FIGURES

Appendix Figure		Page
1	Fishbone diagram for recording of attendance manually	72
2	Fishbone diagram for slow retrieving of records	72
3	Fishbone diagram for manual dissemination of information	73
4	Use case diagram for account management module	81
5	Use case diagram for attendance module	81
6	Use case diagram for registration module	82
7	Use case diagram for report module	82

LIST OF APPENDIX TABLES

Appendix Table		Page
1	Gantt chart	75
2	Frequency distribution of non-technical	84
3	Frequency distribution of technical	85

ONLINE ATTENDANCE MONITORING SYSTEM FOR GOVERNOR LUIS ANTONIO FERRER JR. EAST NATIONAL HIGH SCHOOL

Peter Jonh P. Macawile
Angela Joyce V. Paguia

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 with Contribution No. **CEIT 2017-18-1-170**. Prepared under the supervision of Ms. Aiza E. Bihis.

INTRODUCTION

Nowadays, most of the daily habits that is being done in our lives is automated and run by different machines to accomplish all tasks in specific time to avoid errors on doing so through manually doing a load of works. Computers back then is use to perform numerical calculations. The most common computer is an abacus. Shelly, Freund and Vermaat (2010) explained that computers is an electronic device which operates under control of instructions stored within its memory that accepts inputs, process these inputs and produce specified outputs. People nowadays spend their time on a computer either working on something or spending more of their time to entertain themselves.

The Governor Luis Antonio Ferrer Jr. East National High School (GLAFJENHS) encountered different problems such as manual recording of attendance, slow retrieving of records and properly disseminating accurate reports such as number of absent per class in a semester to the parents and students.