

UNIVERSITI TEKNOLOGI MARA

**CO-CURRICULUM MERIT CALCULATION
SYSTEM FOR SCHOOL (e-CoMCS)**

NURUL ARDIYANNA ZAINODIN

**Thesis submitted in fulfillment of the requirements for
Bachelor of Science (Hons) Business Computing
Faculty of Computer and Mathematical Sciences**

JANUARY 2014

DECLARATION

I certify that this report and the research to which it refers are the product of my own work and that any ideas or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.



.....
NURUL ARDIYANNA BINTI ZAINODIN

2011907369

JANUARY 16, 2014

ABSTRACT

e-CoMCS is a system that systematically integrates the merit calculation and evaluation of reputation for students. There are two problems that occurred in current situation. First, most of the secondary school is using manual calculation and second, no evaluation for co-curriculum students' reputation. The objectives of e-CoMCS are to identify requirement of merit calculation co-curriculum for school, to develop a system to help teacher evaluate the merits of students and evaluate the usability of the system. This system will be access by students, advisor and coordinator of co-curriculum clubs. To make it functioning effectively, e-CoMCS uses one technique which is Simple Additive Weighting (SAW) method. It is used to calculate the ranking of the student's performance. Waterfall model is used to design the system from the beginning to the end. In evaluating the system, the quantitative data analysis was conducted to evaluate the system in such of user interface, usability, ease of use and accuracy. The data findings were assembled through the questionnaire survey with 30 respondents. Construct with the highest result is regarding the content with 70% respondents are agree with it and mode for this indicators 4. The highest mean based on user feedback for this construct is item D2 (Mean = 4.1, SD = 0.5477). This indicates that, the respondents are agreeing with the content in this system because the information provided in this system is helpful for them and user knows where to find the information needed.

TABLE OF CONTENTS

CONTENTS	PAGE
SUPERVISOR'S APPROVAL	ii
DECLARATION	iii
ACKNOWLEDGEMENT	iv
ABSTRACT	v
TABLE OF CONTENTS	vi
LIST OF FIGURES	ix
LIST OF TABLES	xi
LIST OF ABBREVIATIONS	xii

CHAPTER ONE: INTRODUCTION

1.1	Introduction	1
1.2	Problems Statement	3
1.3	Objective	3
1.4	Scope	4
1.5	Significance	5
1.6	Research Framework	6
1.7	Expected Outcome	7
1.8	Conclusion	8

CHAPTER TWO: LITERATURE REVIEW

2.1	Introduction	9
-----	--------------	---

2.2	Malaysian Education System	9
2.2.1	Curriculum and Co-curriculum	10
2.2.2	Curriculum	11
2.2.3	Co-curriculum	13
2.3	Merit Calculation	14
2.3.1	Interpretation of categories in School	14
2.3.2	Categories of activities in school	16
2.3.3	Method to calculate merit for co-curriculum	17
2.4	Problem in current system	18
2.5	Web-based Application Language	19
2.5.1	PHP Language	19
2.5.2	MySQL	20
2.5.3	JavaScript Language	20
2.5.4	Multiple Attribute Decision Making (MADM) Method	20
2.5.5	Simple Additive Weighting (SAW) Method	22
2.7	System Development Model (SDM)	26
2.7.1	System Development Lifecycle (SDLC)	26
2.7.2	Waterfall Model	26
2.7.3	Rapid Application Development (RAD)	28
2.8	Implication of Literature Study	29
2.9	Conclusion	29

CHAPTER THREE: RESEARCH METHODOLOGY

3.1	Introduction	30
3.2	Research methodology	30
3.3	Waterfall Model	30
3.3.1	Feasibility Study	32
3.3.2	Requirement analysis	33
3.3.3	Design	33
3.3.4	Merit Calculation	45
3.3.5	SAW Method	47