# A REQUIREMENT MODELING FOR CUSTOMER RELATIONSHIP MANAGEMENT (CRM) SYSTEM FOR UNIVERSITY ALUMNI

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# A REQUIREMENT MODELING FOR CUSTOMER RELATIONSHIP MANAGEMENT (CRM) SYSTEM FOR UNIVERSITY ALUMNI

A project submitted to Dean of Research and Postgraduate Studies Office in partial Fulfillment of the requirement for the degree Master of Science (Information Technology)
Universiti Utara Malaysia

By Muhammad Bin Mahmud

# DEAN OF AWANG HAD SALLEH GRADUATE SCHOOL UNIVERSITI UTARA MALAYSIA

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### ABSTRAK (BAHASA MALAYSIA)

Di dalam kajian ini, masalah utama yang dikenal pasti ialah sukar untuk memilih perisian open source Customer Relationship Management (CRM) bagi kegunaan alumni universiti kerana kekurangan requirement modeling. Oleh itu, objektif yang dikenal pasti untuk kajian ini adalah untuk mereka bentuk requirement modleing untuk alumni universiti. Metodologi bagi kajian ini adalah berdasarkan Design Science Research Process (DSRP) metodologi. Selepas mengenal pasti masalah dan objektif dalam Fasa 1 dan 2, maklumat dikumpul untuk dimodelkan di dalam Fasa 3. Maklumat untuk projek ini telah dikumpul daripada Persatuan Alumni Universiti Utara Malaysia (PAUUM). Berdasarkan maklumat yang dikumpul, penilaian ke atas dua perisian CRM iaitu SugarCRM dan vTiger dilakukan dalam Fasa 4. Hasil daripada kajian ini menunjukkan bahawa SugarCRM sesuai untuk kegunaan alumni universiti. Salah satu sebabnya ialah kerana SugarCRM dapat menyediakan pengambilan pelajar dengan berjaya, penyimpanan, dan strategi pengumpulan dana. Di samping itu, SugarCRM menawarkan komunikasi yang efisen, mampu untuk menguruskan kos operasi dengan kos yang terhad, mempunyai kestabilan dan skala yang lebih baik, dan menawarkan lebih banyak ciri-ciri dan sokongan.

# **ABSTRACT (ENGLISH)**

In this study, the main problem identified as it is difficult to adopt suitable open source Customer Relationship Management (CRM) system for university alumni due to lack of requirement modeling. Therefore, the objective come out for this study is to design a requirement modeling for university alumni. Research methodology for this study is based on Design Science Research Process (DSRP) methodology. After identifying the problem and objective in Phase 1 and 2, gathering requirements and modeling it is continued in Phase 3. The information for this project is gathered from Persatuan Alumni Universiti Utara Malaysia (PAUUM). Based on the requirements, evaluation on two open source CRM software which is SugarCRM and vTiger is completed in Phase 4. Results from this study shows that SugarCRM is suitable for university alumni management. One of the reason is because SugarCRM able provide successful recruitment, retention, fundraising strategies. In addition, SugarCRM offer efficient communication, capable to manage costs of operations with limited budgets, has better stability and scalability, and offer more features and support.

### **ACKNOWLEDGEMENT**

By the name of ALLAH SWT, The Most Gracious and The Most Merciful

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# TABLE OF CONTENTS

	Page
ABST ABST ACKN LIST	IISSION TO USE
CHAI	PTER ONE: INTRODUCTION
1.0 1.1 1.2 1.3 1.4 1.5 1.6	Introduction1Motivation2Problem Statement3Research Questions4Research Objective4Research Scope4Research Contribution5Report organization6
СНА	PTER TWO: LITERATURE REVIEW
2.0 2.1 2.2 2.3 2.4 2.5 2.6 2.7 2.8	Introduction 8 CRM
3.0 3.1 3.2 3.3 3.4 3.5 3.6 3.7	Introduction

3.8	Summary	41
СНА	PTER FOUR: SYSTEM ANALYSIS AND DESIGN	
4.0	Introduction	
4.1	Requirement Modeling	
4.2	Functional and Non-functional Requirements	
4.3	Use Case Diagram	
4.4	Use Case Description. Sequence, and Class Diagrams	
4.5	Summary	132
СНА	PTER FIVE: RESULTS AND DISCUSSION	
5.0	Introduction	
5.1	Evaluation Template 1	
5.2	Evaluation Template 2	139
5.3	Interface Captions	
5.4	Marketing Campaign Management Screen Design	<b></b> 161
5.5	Discussion	164
5.6	Conclusion	165
СНА	PTER SIX: FUTURE RECOMMENDATIONS AND CO	ONCLUSION
6.0	Introduction	
6.1	Future Recommendations	167
REF	ERENCES	169

# LIST OF TABLES

Table	Page
Table 2.1: Comparison between open source and commercial software.	15
Table 2.2: Top open source CRM software based on different researcher.	16
Table 2.3: CRM software evaluation form Yilmaz (2011).	19
Table 2.4: CRM software evaluation form Shahin (2008).	23
Table 4.1: Functional requirement for alumni management system (Front-end).	43
Table 4.2: Functional requirement for alumni management system (Back-end).	45
Table 4.3: Non-functional requirement for alumni management system.	46
Table 4.4: Register use case description.	48
Table 4.5: Login use case description.	52
Table 4.6: View donation report use case description.	55
Table 4.7: View fees payment report use case description.	58
Table 4.8: Post donation drives use case description.	60
Table 4.9: Post news use case description.	63
Table 4.10: View mailing list use case description.	65
Table 4.11: Post volunteer work use case description.	68
Table 4.12: Select volunteer work use case description.	71
Table 4.13: Add buddy list use case description.	74
Table 4.14: Approve buddy list request use case description.	77
Table 4.15: Pay fees use case description.	79
Table 4.16: Give donation use case description.	82
Table 4.17: Post ideas use case description.	84

Table 4.18: Rank ideas use case description.	86
Table 4.19: View social media use case description.	88
Table 4.20: Upload videos use case description.	91
Table 4.21: Post advertisement use case description.	93
Table 4.22: Approve advertisement use case description.	96
Table 4.23: Manage donation drive.	100
Table 4.24: Manage advertisement use case description.	104
Table 4.25: Manage news use case description.	108
Table 4.26: Manage volunteer work use case description.	110
Table 4.27: Manage videos use case description.	114
Table 4.28: View call center report use case description.	117
Table 4.29: Profiling use case description.	120
Table 4.30: View report use case description.	123
Table 4.31: View fundraising prospect use case description.	126
Table 4.32: Manage member use case description.	129
Table 5.1: SugarCRM evaluation based on Template 1.	133
Table 5.2: vTiger evaluation based on Template 1.	136
Table 5.3: Comparison between vTiger and SugarCRM.	139
Table 5.4: SugarCRM and vTiger evaluation based on Template 2.	139

# LIST OF FIGURES

Figure	Page
Figure 2.1: Example from a brokerage CRM system.	9
Figure 2.2: System framework design.	10
Figure 2.3: Types of CRM system.	11
Figure 2.4: CRM applications in CRM life cycle.	13
Figure 2.5: CRM architecture in HP Company.	14
Figure 2.6: Colloquy learning system integrated with SugarCRM.	27
Figure 2.7: Caption of the Ruhr University Bochum alumni CRM system profile page.	29
Figure 2.8: Caption of the Berlin Institute of Technology alumni CRM system profile page.	29
Figure 2.9: Caption of the University of Hohenheim alumni CRM system profile page.	30
Figure 2.10: Caption of the University of Osnabrück alumni CRM system profile page.	30
Figure 2.11: Caption of the job resume page.	31
Figure 2.12: Caption of the buddy list page.	32
Figure 2.13: Caption of the guestbook page.	32
Figure 2.14: Caption of the career service search engine page.	33
Figure 2.15: Caption of the alumni CRM back-end homepage.	33
Figure 2.16: Caption of the alumni CRM back-end filters page.	34
Figure 2.17: Caption of the alumni CRM back-end accounts datasheet page.	34
Figure 2.18: Caption of the alumni CRM back-end persons datasheet page.	35
Figure 2.19: Caption of the alumni CRM back-end reports page.	35

Figure 3.1: Design science research process (DSRP) model.	38
Figure 3.2: DSRP methodology modified for this project.	39
Figure 4.1: Use case diagram.	47
Figure 4.2: Register sequence diagram.	50
Figure 4.3: Register class diagram.	51
Figure 4.4: Login sequence diagram.	53
Figure 4.5: Login class diagram.	54
Figure 4.6: View donation report sequence diagram.	57
Figure 4.7: View donation report class diagram.	57
Figure 4.8: View fees payment report sequence diagram.	59
Figure 4.9: View fees payment report class diagram.	60
Figure 4.10: Post donation drives sequence diagram.	62
Figure 4.11: Post donation drive class diagram.	63
Figure 4.12: Post news sequence diagram.	65
Figure 4.13: Post news class diagram.	65
Figure 4.14: View mailing list sequence diagram.	67
Figure 4.15: View mailing list class diagram.	68
Figure 4.16: Post volunteer work sequence diagram.	70
Figure 4.17: Post volunteer work class diagram.	71
Figure 4.18: Select volunteer work sequence diagram.	73
Figure 4.19: Select volunteer work class diagram.	74
Figure 4.20: Add buddy list sequence diagram.	76
Figure 4.21: Add buddy list class diagram.	76

Figure 4.22: Approve buddy list request sequence diagram.	78
Figure 4.23: Approve buddy list request class diagram.	79
Figure 4.24: Pay fees sequence diagram.	81
Figure 4.25: Pay fees class diagram.	81
Figure 4.26: Give donation sequence diagram.	83
Figure 4.27: Give donation class diagram.	83
Figure 4.28: Post ideas sequence diagram.	85
Figure 4.29: Post ideas class diagram.	85
Figure 4.30: Rank ideas sequence diagram.	87
Figure 4.31: Rank ideas class diagram.	88
Figure 4.32: View social media sequence diagram.	90
Figure 4.33: View social media class diagram.	90
Figure 4.34: Upload videos class diagram.	92
Figure 4.35: Upload videos sequence diagram.	92
Figure 4.36: Post advertisement sequence diagram.	95
Figure 4.37: Post advertisement class diagram.	96
Figure 4.38: Approve advertisement class diagram.	98
Figure 4.39: Approve advertisement sequence diagram.	99
Figure 4.40: Manage donation drive sequence diagram.	102
Figure 4.41: Manage donation drive class diagram.	103
Figure 4.42: Manage advertisement sequence diagram.	106
Figure 4.43: Manage advertisement class diagram.	107
Figure 4.44: Manage news sequence diagram	109

Figure 4.46: Manage volunteer work sequence diagram.  Figure 4.47: Manage volunteer work class diagram.  Figure 4.48: Manage videos sequence diagram.  Figure 4.49: Manage videos class diagram.  Figure 4.50: View call center report sequence diagram.  Figure 4.51: View call center report class diagram.  Figure 4.52: Profiling sequence diagram.  Figure 4.53: Profiling class diagram.  Figure 4.54: View report sequence diagram.  Figure 4.55: View report sequence diagram.  Figure 4.56: View fundraising prospect sequence diagram.  Figure 4.57: View fundraising report class diagram.  Figure 4.58: Manage member sequence diagram.  Figure 4.59: Manage member class diagram.  Figure 5.1: Caption of SugarCRM sales homepage.  Figure 5.2: Caption of SugarCRM opportunities page.  Figure 5.3: Caption of SugarCRM contacts page.
Figure 4.48: Manage videos sequence diagram.  Figure 4.49: Manage videos class diagram.  Figure 4.50: View call center report sequence diagram.  Figure 4.51: View call center report class diagram.  Figure 4.52: Profiling sequence diagram.  Figure 4.53: Profiling class diagram.  Figure 4.54: View report sequence diagram.  Figure 4.55: View report sequence diagram.  Figure 4.55: View report class diagram.  Figure 4.56: View fundraising prospect sequence diagram.  Figure 4.57: View fundraising report class diagram.  Figure 4.58: Manage member sequence diagram.  Figure 4.59: Manage member class diagram.  Figure 5.1: Caption of SugarCRM sales homepage.  Figure 5.2: Caption of SugarCRM opportunities page.
Figure 4.49: Manage videos class diagram.  Figure 4.50: View call center report sequence diagram.  Figure 4.51: View call center report class diagram.  Figure 4.52: Profiling sequence diagram.  Figure 4.53: Profiling class diagram.  Figure 4.54: View report sequence diagram.  Figure 4.55: View report class diagram.  Figure 4.56: View fundraising prospect sequence diagram.  Figure 4.57: View fundraising report class diagram.  Figure 4.58: Manage member sequence diagram.  Figure 4.59: Manage member class diagram.  Figure 5.1: Caption of SugarCRM sales homepage.  Figure 5.2: Caption of SugarCRM opportunities page.
Figure 4.50: View call center report sequence diagram.  Figure 4.51: View call center report class diagram.  Figure 4.52: Profiling sequence diagram.  Figure 4.53: Profiling class diagram.  Figure 4.54: View report sequence diagram.  Figure 4.55: View report class diagram.  Figure 4.56: View fundraising prospect sequence diagram.  Figure 4.57: View fundraising report class diagram.  Figure 4.58: Manage member sequence diagram.  Figure 4.59: Manage member class diagram.  Figure 5.1: Caption of SugarCRM sales homepage.  143  Figure 5.2: Caption of SugarCRM opportunities page.
Figure 4.51: View call center report class diagram.  120 Figure 4.52: Profiling sequence diagram.  121 Figure 4.53: Profiling class diagram.  122 Figure 4.54: View report sequence diagram.  125 Figure 4.55: View report class diagram.  126 Figure 4.56: View fundraising prospect sequence diagram.  127 Figure 4.57: View fundraising report class diagram.  128 Figure 4.57: View fundraising report class diagram.  129 Figure 4.58: Manage member sequence diagram.  130 Figure 4.59: Manage member class diagram.  131 Figure 5.1: Caption of SugarCRM sales homepage.  142 Figure 5.2: Caption of SugarCRM opportunities page.
Figure 4.52: Profiling sequence diagram.  123 Figure 4.53: Profiling class diagram.  124 Figure 4.54: View report sequence diagram.  125 Figure 4.55: View report class diagram.  126 Figure 4.56: View fundraising prospect sequence diagram.  127 Figure 4.57: View fundraising report class diagram.  128 Figure 4.58: Manage member sequence diagram.  129 Figure 4.59: Manage member class diagram.  130 Figure 5.1: Caption of SugarCRM sales homepage.  141 Figure 5.2: Caption of SugarCRM opportunities page.
Figure 4.53: Profiling class diagram.  Figure 4.54: View report sequence diagram.  Figure 4.55: View report class diagram.  Figure 4.56: View fundraising prospect sequence diagram.  Figure 4.57: View fundraising report class diagram.  Figure 4.58: Manage member sequence diagram.  Figure 4.59: Manage member class diagram.  Figure 5.1: Caption of SugarCRM sales homepage.  Figure 5.2: Caption of SugarCRM opportunities page.
Figure 4.54: View report sequence diagram.  Figure 4.55: View report class diagram.  Figure 4.56: View fundraising prospect sequence diagram.  Figure 4.57: View fundraising report class diagram.  Figure 4.58: Manage member sequence diagram.  Figure 4.59: Manage member class diagram.  Figure 5.1: Caption of SugarCRM sales homepage.  Figure 5.2: Caption of SugarCRM opportunities page.
Figure 4.55: View report class diagram.  Figure 4.56: View fundraising prospect sequence diagram.  Figure 4.57: View fundraising report class diagram.  Figure 4.58: Manage member sequence diagram.  Figure 4.59: Manage member class diagram.  Figure 5.1: Caption of SugarCRM sales homepage.  Figure 5.2: Caption of SugarCRM opportunities page.
Figure 4.56: View fundraising prospect sequence diagram.  Figure 4.57: View fundraising report class diagram.  Figure 4.58: Manage member sequence diagram.  Figure 4.59: Manage member class diagram.  Figure 5.1: Caption of SugarCRM sales homepage.  Figure 5.2: Caption of SugarCRM opportunities page.
Figure 4.57: View fundraising report class diagram.  Figure 4.58: Manage member sequence diagram.  Figure 4.59: Manage member class diagram.  132  Figure 5.1: Caption of SugarCRM sales homepage.  Figure 5.2: Caption of SugarCRM opportunities page.  143
Figure 4.58: Manage member sequence diagram.  Figure 4.59: Manage member class diagram.  132  Figure 5.1: Caption of SugarCRM sales homepage.  143  Figure 5.2: Caption of SugarCRM opportunities page.
Figure 4.59: Manage member class diagram.  132 Figure 5.1: Caption of SugarCRM sales homepage.  142 Figure 5.2: Caption of SugarCRM opportunities page.
Figure 5.1: Caption of SugarCRM sales homepage.  Figure 5.2: Caption of SugarCRM opportunities page.  143
Figure 5.2: Caption of SugarCRM opportunities page.
Figure 5.3: Caption of SugarCRM contacts page.
Figure 5.4: Caption of SugarCRM accounts page.
Figure 5.5: Caption of SugarCRM forecasts page.
Figure 5.6: Caption of SugarCRM quotes page.
Figure 5.7: Caption of SugarCRM dashboards page. 148
Figure 5.8: Caption of SugarCRM marketing homenage

Figure 5.9: Caption of SugarCRM campaigns page.	150
Figure 5.10: Caption of SugarCRM emails page.	151
Figure 5.11: Caption of SugarCRM leads function.	152
Figure 5.12: Caption of SugarCRM marketing analytics function.	153
Figure 5.13: Caption of SugarCRM support homepage.	154
Figure 5.14: Caption of SugarCRM cases page.	155
Figure 5.15: Caption of SugarCRM inbound emails function.	156
Figure 5.16: Caption of SugarCRM knowledgebase page.	157
Figure 5.17: Caption of SugarCRM bug tracker page.	158
Figure 5.18: Caption of vTiger leads page.	159
Figure 5.19: Caption of vTiger knowledgebase page.	159
Figure 5.20: Caption of vTiger campaign page.	160
Figure 5.21: Caption of vTiger tickets page.	161
Figure 5.22: Screen design of post donation drive.	162
Figure 5.23: Screen design of post volunteer work.	162
Figure 5.24: Screen design of select volunteer work.	163
Figure 5.25: Screen design after selecting volunteer work.	163
Figure 5.26: Screen design of manage donation drive.	164
Figure 5.27: Screen design of manage volunteer work.	164

# **CHAPTER ONE**

### INTRODUCTION

### 1.0 Introduction

Customer and Relationship Management (CRM) system primarily is a business strategy widely adopted in companies or enterprises. It is an application tool of enterprise used to improve the market competitiveness. The main goal of the system is to build the right relationship between businesses and customers, making sure right products reach to right customers at the right time, with the right medium, and cost accumulation in providing the products or services (Pan and Wang, 2010).

Seems there is a lot of benefit gained from the business industries by implementing CRM systems, many universities has shown their interest in adopting it. University of Oxford is reported to have selected Blackbaud Enterprise CRM in supporting their global fundraising operations. The system's user-friendly reporting and analysis tools will allow the staff to access timely and accurate information in order to make better informed decisions. Furthermore it will facilitate personalizing interactions, provide superior service, and build stronger relationships with the university's 180,000 alumni and friends (Wright and Mathos, 2008).

One of the important entities in a university is the alumni society. The society responsible to manage alumni is responsible in gathering and sending out information about their activities and development to the fellow members. This society usually consists of a university's former students or graduates. They are vital to a university improvement because they have experiences, contacts, and insights that faculty cannot always deliver in the classroom. Opinion and experience shared from former students who have been working and having a career is always welcomed by the students especially for those who will begin transited from being a student and

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