

**CANCER CARE SYSTEM (CCS): WEB-BASED
SOCIAL INTERACTION SYSTEM FOR CANCER
COMMUNITY AND THEIR CAREGIVERS**

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**UNIVERSITI UTARA MALAYSIA
2010**

**CANCER CARE SYSTEM (CCS): WEB-BASED
SOCIAL INTERACTION SYSTEM FOR CANCER
COMMUNITY AND THEIR CAREGIVERS**

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

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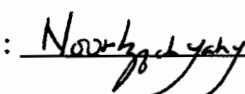
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ABSTRAK

Kajian ini bertujuan untuk memastikan komunikasi di kalangan komuniti kanser disokong dengan baik. Maka, satu model bagi sistem interaksi social telah direka bentuk dan dibangunkan untuk komuniti kanser iaitu *Cancer Care System* (CCS). Kajian ini dimulakan dengan mengenalpastikan keperluan-keperluan untuk menentukan komponen-komponen dalam CCS. Tiga teknik pencarian fakta telah digunakan untuk tujuan tersebut iaitu temubual, kajian dokumen dan analisis komparatif. Komponen-komponen yang telah dikenalpasti akan digunakan untuk membina satu prototaip. Kajian ini diteruskan dengan reka bentuk and pembangunan CCS di mana pendekatan prototaip telah digunakan. Terdapat empat langkah dalam pendekatan prototaip tersebut iaitu kenalpasti keperluan-keperluan asas, membangun prototaip, mengguna prototaip serta menilai sebagai prototaip operasi. Pengujian pengguna telah dijalankan setelah selesai pembangunan CCS dan penilaian kebolegunaan mengenai sistem tersebut telah dijalankan melalui proses soal selidik. *Computer System Usability Questionnaire* (CSUQ) telah digunakan untuk tujuan penilaian kepuasan pengguna dalam kajian ini. Pengguna-pengguna yang terlibat dalam kajian ini adalah pesakit-pesakit kanser, ibu bapa dan pakar perubatan. Secara keseluruhan, dapatan kajian ini telah menunjukkan bahawa kebanyakan pengguna berpuas hati setelah menggunakan CCS. Selain itu, beberapa cadangan daripada pengguna perlu diambil kira untuk penambahbaikan pada masa hadapan. Kajian ini diakhiri dengan peringkasan keseluruhan pencapaian serta cadangan-cadangan untuk kajian pada masa hadapan .

ABSTRACT

The purpose of this study is to ensure communication among cancer community is well-supported. Thus, a model for a social interaction system was designed and developed for cancer community namely Cancer Care System (CCS). This study starts off with defining requirements to determine the components of the CCS. Three fact finding techniques were used in this phase namely interview, document study, and comparative analysis. The discovered components were then used to develop a prototype. This study followed by the design and development of CCS where prototyping approach was used. There are four steps involved in prototyping; identify basic requirements, develop initial prototype, use the prototype, and evaluate as operation prototype. User testing was carried out after the development of CCS was completed and the usability evaluation was then conducted through questionnaire. Computer System Usability Questionnaire (CSUQ) was adopted and utilized to measure users' satisfaction in this study. The subjects of this study are cancer patients, parents, and medical practitioners. The findings have shown that most of the users are satisfied with using the CCS in term of system usefulness, information quality, and interface quality. However, a few of suggestions from users should be taken into consideration for future improvement. Finally, this study was concluded by summarizing the overall results and achievement. The recommendations for future study also included.

ACKNOWLEDGEMENTS

First of all, I would like to take this opportunity to convey deepest appreciation to everyone who helps me to complete my studies. I would like to express my utmost gratitude to my supervisor, Dr. Ariffin Abdul Mutalib for his suggestion, advice, willingness and kindness in helping me throughout the process of this study. I wish to express my gratitude to Mrs. Noor Izzah Yahya, my evaluator, for her valuable and constructive comments.

In addition, I would like to express my deepest appreciation to all the lecturers who have taught me before throughout the Master Degree Course. Their willingness to educate me with a lot of knowledge has allowed me to be more knowledgeable thus able efficiently complete this study. I would like to thank my friends for their cooperation and emotional support throughout my study.

Lastly, special thanks for my beloved family members, especially to my parents who have given me their full support during my difficult moments. Their full support remains the mainstay for me in overcoming all the difficulties and limitations in completing this study.

TABLE OF CONTENTS

	Page
PERMISSION TO USE	I
ABSTRACT (BAHASA MALAYSIA)	III
ABSTRACT (ENGLISH)	IV
ACKNOWLEDGEMENTS	V
LIST OF TABLES	VIII
LIST OF FIGURES	IX
LIST OF ABBREVIATIONS	XI
CHAPTER ONE: INTRODUCTION	
1.1 Background of Study	1
1.2 Problem Statement	2
1.3 Research Question	3
1.4 Research Objective	3
1.5 Scope of Study	4
1.6 Significance of Study	4
1.6.1 To the Body of Knowledge	4
1.6.2 To the Cancer Community	5
1.7 Report Structure	5
CHAPTER TWO: LITERATURE REVIEW	
2.1 Introduction	7
2.2 Online Social Interaction	7
2.3 Online Social Support for Cancer Community	9
2.4 Usability Evaluation	13
2.5 Summary	16
CHAPTER THREE: RESEARCH METHODOLOGY	
3.1 Introduction	17
3.2 Requirement Definition	18
3.3 Design and Development	20
3.3.1 Identify Basic Requirements	21
3.3.2 Develop Initial Prototype	21
3.3.3 Use the Prototype	22
3.3.4 Evaluate as Operation prototype	22
3.4 Data Collection	22
3.4.1 Data sampling	23
3.5 Data Analysis	23
3.6 Summary	24

CHAPTER FOUR: DESIGN AND DEVELOPMENT		
4.1	Introduction	25
4.2	The Design of Prototype	25
4.2.1	Architecture Design	26
4.2.2	The Prototype Modules	26
4.2.2.1	Cancer Community Module	27
4.2.2.2	Administrator Module	27
4.2.3	Database design	28
4.2.4	UML Diagrams	29
4.2.4.1	Class Diagram	30
4.2.4.2	Use Case Diagram	31
4.2.4.3	Use Case Specification	32
4.2.4.4	Sequence Diagram	33
4.2.4.5	Collaboration Diagram	36
4.3	CCS Development	38
4.3.1	PHP Scripting Language	38
4.3.2	Apache Web Server	38
4.3.3	MySQL	39
4.3.4	Macromedia Dreamweaver MX	39
4.4	The CCS	39
4.4.1	Cancer Community Module	40
4.4.2	Administrator Module	46
4.5	Summary	49
CHAPTER FIVE: RESULTS AND FINDINGS		
5.1	Introduction	50
5.2	Descriptive Statistics	50
5.3	Users recommendation	57
5.4	Summary	58
CHAPTER SIX: CONCLUSION AND RECOMMENDATIONS		
6.1	Conclusion	59
6.2	Problems and Limitations	60
6.3	Recommendations for Future Study	61
6.4	Summary	61
REFERENCES		63
APPENDIX		
Appendix A: Questionnaire		67
Appendix B: Class Diagram		70
Appendix C: Use Case Specification		72
Appendix D: Sequence Diagram		82
Appendix E: Collaboration Diagram		86

LIST OF TABLES

	Page	
Table 2.1	Technique to Measure Usability	15
Table 3.1	Functional Requirements	21
Table 3.2	Likert Scale Classification	24
Table 4.1	List of Functionalities for Cancer Community Sub Module	27
Table 4.2	List of Functionalities for Administrator Sub Module	28
Table 4.3	Use Case Specification for Login	32
Table 5.1	Frequency Distribution of System Usefulness	51
Table 5.2	Frequency Distribution of Information Quality	53
Table 5.3	Frequency Distribution of Interface Design	54
Table 5.4	Frequency Distribution of Overall Satisfaction	56

LIST OF FIGURES

	Page	
Figure 2.1	The HutchWorld Home Page	12
Figure 2.2	Software Quality Attributes According ISO 9126	14
Figure 3.1	Summary of Research Processes	18
Figure 3.2	Prototyping Process	20
Figure 4.1	Architecture Design of CCS	26
Figure 4.2	Cancer Care System Main Modules	26
Figure 4.3	Cancer Community Module	27
Figure 4.4	Administrator Module	28
Figure 4.5	Database Design	29
Figure 4.6	Class Diagram for CCS in Cancer Community Module	30
Figure 4.7	Use Case Diagram for CCS in Cancer Community Module	31
Figure 4.8	Use Case Diagram for CCS in Administrator Module	32
Figure 4.9	Login Sequence Diagram for Cancer Community	33
Figure 4.10	Manage Message Sequence Diagram for Cancer Community	34
Figure 4.11	Chat Sequence Diagram for Cancer Community	34
Figure 4.12	Manage Bulletin Sequence Diagram for Cancer Community	35
Figure 4.13	Manage Forum Sequence Diagram for Cancer Community	35
Figure 4.14	Login Collaboration Diagram for Cancer Community	36
Figure 4.15	Manage Message Collaboration Diagram for Cancer Community	36
Figure 4.16	Chat Collaboration Diagram for Cancer Community	37
Figure 4.17	Manage Bulletin Collaboration Diagram for Cancer Community	37
Figure 4.18	Manage Forum Collaboration Diagram for Cancer Community	37
Figure 4.19	The Cancer Care System Login Main Page	40
Figure 4.20	User's Registration Form	40
Figure 4.21	Error Message if Login Process is Not Permitted	41
Figure 4.22	User Home Page	41
Figure 4.23	Chat Room Page	42
Figure 4.24	Compose Message	42
Figure 4.25	Reply Message	42
Figure 4.26	Bulletin Board Page	43
Figure 4.27	User Manage Bulletin	43
Figure 4.28	Community Forum Page	44
Figure 4.29	User Post Message in a Particular Forum Site	44
Figure 4.30	Member Directory Page	45
Figure 4.31	The Searching result	45
Figure 4.32	User's Detail	45
Figure 4.33	Community Links Page	45
Figure 4.34	Change Password Page	46
Figure 4.35	Admin Login Page	46
Figure 4.36	Manage Bulletin Board	47
Figure 4.37	Manage Chat List	47
Figure 4.38	Message Page	48

Figure 4.39	Manage Community Forum	48
Figure 5.1	Respondent's Perception on System Usefulness	51
Figure 5.2	Respondent's Perception on Information Quality	53
Figure 5.3	Respondent's Perception on Interface Design	55
Figure 5.4	Respondent's Perception on Overall satisfaction	56

LIST OF ABBREVIATIONS

CCS	Cancer Care System
CMC	Computer-Mediated Communication
CSUQ	Computer System Usability Questionnaire
GUI	Graphical User Interface
PHP	Hypertext Pre-processor
UML	Unified Modeling Language
ISO	International Standard Organization
SUMI	Software Usability Measurement Inventory

CHAPTER ONE

INTRODUCTION

1.1 Background of Study

Undeniably, the rise of social technology such as Web sites brings a lot of benefits to the users. It provides capabilities and opportunities for users to share their experiences, expose their tacit knowledge, discuss a wide range of topics, and to seek for support (Girgensohn & Lee, 2002). According to John et al. (2008), social interaction web sites such as Blogger, Facebook, Friendster, MySpace, and Twitter have radically changed user interactions on the World Wide Web (WWW) from a static, one way, and consumption model to a dynamic, multi-way, and participation model.

According to Walther and Boyd (2002), social support communication traditionally is considered to be the exchange of verbal and nonverbal message such as expression, information, or recommendation. Nevertheless, traditional social support recently has being transform into computer-mediated communication (CMC). It involved in the large social network among people who not know each other and it has eliminated the face-to-face communication. While traditional is referred to a particular person in seeking support, online interaction support enables a particular person goes to a virtual space where inside there no one knows anyone or has heard about any person.

The contents of
the thesis is for
internal user
only

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