

**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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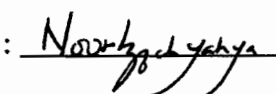
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ABSTRAK

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.

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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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