REQUIREMENT MODEL FOR

CONFERENCE MANAGEMENT SYSTEM (CMS)

A dissertation submitted to the Faculty of Information Technology

in partial fulfillment of the requirements for the degree

Master of Science (Information Technology)

Universiti Utara Malaysia

By

Nadia Abd. Samad

JABATAN HAL EHWAL AKADEMIK
(*Department of Academic Affairs*)
Universiti Utara Malaysia

PERAKUAN KERJA KERTAS PROJEK
(Certificate of Project Paper)

Saya, yang bertandatangan, memperakukan bahawa
(I, the undersigned, certify that)

NADIA BT. NODIN @ ABD. SAMAD

calon untuk Ijazah
(candidate for the degree of) **MSc. (IT)**

telah mengemukakan kertas projek yang bertajuk
(has presented his/ her project paper of the following title)

REQUIREMENT MODEL CONFERENCE MANAGEMENT SYSTEM (CMS)

seperti yang tercatat di muka surat tajuk dan kulit kertas projek
(as it appears on the title page and front cover of project paper)

bahawa kertas projek tersebut boleh diterima dari segi bentuk serta kandungan dan meliputi bidang ilmu dengan memuaskan.
(that the project paper acceptable in form and content, and that a satisfactory knowledge of the filed is covered by the project paper).

Nama Penyelia Utama
(Name of Main Supervisor): **MISS MAWARNY BT. REJAB**

Tandatangan
(Signature) : _____ Tarikh (Date): _____

Nama Penyelia Kedua
(Name of 2nd Supervisor): **MRS MUSRIFAH BT. MAHMOD**

Tandatangan
(Signature) : _____ Tarikh (Date): _____

PERMISSION TO USE

In presenting this thesis in partial fulfilment of the requirements for a postgraduate degree from Universiti Utara Malaysia, I agree that the University Library may make it freely available for inspection. I further agree that permission for copying of this thesis in any manner, in whole or in part, for scholarly purposes may be granted by my supervisor, in her absence, by the Dean of the Faculty of Information Technology. It is understood that any copying or publication or use of this thesis or parts thereof for financial gain should not be allowed without my written permission. It is also understood that due recognition shall be given to me and to Universiti Utara Malaysia for any scholarly use which may be made of any material from my thesis.

Request for permission to copy or to make use of material in this thesis, in whole or in part should be addressed to:

Dean of the Faculty of Information Technology

Universiti Utara Malaysia

06010 UUM Sintok

Kedah Darul Aman

ABSTRAK

Persidangan merupakan suatu majlis yang formal bagi penyelidik ataupun golongan-golongan intelek untuk berkumpul dan mengambil bahagian di dalam suatu perbincangan disamping berkongsi pendapat dan ilmu pengetahuan diantara sesama mereka. Selain daripada persidangan, terdapat juga majlis-majlis ilmu yang lain seperti simposium, bengkel dan seminar. Persidangan yang biasa dijalankan terbahagi kepada dua kategori iaitu persidangan di peringkat antarabangsa dan kebangsaan. Kedua-duanya saling berbeza diantara satu sama lain dan memerlukan suatu mekanisme untuk menguruskannya secara efektif. Mekanisme yang penting untuk menguruskan persidangan dikenali sebagai Pengurusan Persidangan. Pada masa kini ianya diuruskan oleh *Conference Management System* (CMS) apabila timbulnya suatu keperluan kepada suatu sistem berkomputer bagi pengurusan persidangan. Bagi menyediakan suatu sokongan yang efektif kepada CMS, pembangun ataupun penganalisa sistem hendaklah memahami dengan lebih teliti dan menyeluruh keperluan-keperluan yang diperlukan bagi membina sistem tersebut. Oleh yang demikian, kajian ini telah dilakukan bagi merekabentuk model keperluan bagi CMS dan diharapkan dapat memberikan sumbangan kepada penyelesaian masalah tersebut. Dalam kajian ini, *Unified Modeling Language* (UML) telah digunakan sepenuhnya bagi merekabentuk senibina CMS. Kajian ini juga menggunakan *Unified Software Development Process* (USDP) yang direka khusus bagi penggunaan sistem berasaskan objek dan ianya hanya tertumpu kepada pengenalpastian keperluan fungsi CMS sahaja. Kajian ini diakhiri dengan perbincangan penemuan serta kekangan dan halangan yang dihadapi di samping mengesyorkan kajian yang lebih lanjut di dalam bidang ini.

ABSTRACT

Conference is known as an event for researchers or educationists to collaborate among themselves and exchange new scientific knowledge besides the symposium, workshop and seminar. It is divided into two categories which are the international conference and local conference. These two categories which differ from each other need a mechanism to handle them effectively. An important mechanism for conducting and managing conferences are known as Conference Management. Currently, it is handled by Conference Management System (CMS) as the need for computerized system is in demand. In order to built an effective support for CMS, the developers or system analysts need to thoroughly understand the requirements to build the system. Thus, this study which is to design requirement model for CMS have most contributed to solve the problem. The Unified Modeling Language (UML) has been utilized to design the architecture of the CMS. The study uses the Unified Software Development Process (USDP) which consists of inception, elaboration, construction and transition phase. However, this study only focuses on capturing the functional requirements. This study was concluded by discussing the findings as well as constraints and limitations arising during the course of producing the model, and the recommendation for future study in this domain.

ACKNOWLEDGEMENTS

First of all, I would like to extend my sincere thanks to my supervisors, Cik Mawarny Md. Rejab and Pn. Musyrifah Mahmod for the never ending support they gave me and supervisions, knowledge sharing and assistance in the course of my study.

My deepest thanks go to my family (Hj. Abd Samad, Hjh. Asmah and Jamaluddin) for their love, support, and understanding.

My appreciation also goes to all my fellow colleagues and friends (especially goes to Nadia Diyana, Mohd. Fidzwan, Nini Aniza) who had provided guidance and ideas as well as encouragement that has definitely encouraged me to complete this dissertation.

Last but not least, a special thanks to all those who had lent a helping hand in allowing me to materialized this study.

TABLE OF CONTENT

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

Acronym	Meaning
CMS	Conference Management System
IEEE	Institute of Electrical and Electronics Engineers
HTML	Hypertext Markup Language
HTTP	Hyper Text Transfer Protocol
PC	Program Committee
UML	Unified Modeling Language
USDP	Unified Software Development Process
UUM	Universiti Utara Malaysia
WWW	World Wide Web

LIST OF APPENDICES

CHAPTER 1

INTRODUCTION

1.1 Introduction

Conference is a place where participants obtain knowledge as well as exchange ideas among them. An important mechanism for conducting and managing conferences are known as Conference Management. It is feasible to use web-based technologies to the conferences at national or international level. This technology can help people or organization who wants to organize a conference or want to join the conference. Thus, in the past few decades, an electronic form for conference management has been developed and widely used by conference committee in order to conduct conferences which are faster and reliable. In order to ensure the development of conference management system (CMS) is running smoothly, analysts or developers of the system need to understand all the requirements needed to build the system and whether they will meet the user's requirements. The users of CMS are conference participant, organizers, Program Chair (PC) member and authors. Thus, a requirements model is

The contents of the thesis is for internal user only

REFERENCES

Bennett, S., McRobb, S. & Farmer, R. (2002). *Object Oriented System Analysis and Design Using UML* (2nd ed.). Berkshire: McGraw-Hill Education.

Booch, G., Rumbaugh, J., Jacobson, I. (1999). *The Unified Modeling Language: User Guide*. Addison-Wesley, Boston.

Brito, I., Moreira, A. & Araujo, J. (2002). *A Requirements Model for Quality Attributes.* Retrieved July 9, 2005 from

Commence (2005). *Commence Conference Management System: Conference and Meeting Management with Electronic Notification and Committee Exchanges.* Retrieved July 1, 2005 from

Conallen, J. (2000). *Building Web Applications with UML.* Addison Wesley Longman, Inc.

Dennis, A. & Wixom, B. H. (2000). *System Analysis and Design: An Applied Approach.* John Wiley & Sons, Inc.

DeWald, M. A. (2005). *Meetings Organization Manual.* Retrieved July 1, 2005 from

Fink, T., Koch, M. & Pauls, K. (2004). *An MDA Approach to Access Control Specifications Using MOF and UML Profiles.* Retrieved June 17, 2005 from

Gol, O., Nafalski, A., Nguyen, T. D. & Tran, Q. T. (2004). *The Development of Online Conference Management Tools as a Student Project.* Retrieved July 3, 2005 from

Halvorsen, P., Lund, K., Goebel, V., Plagemann, T., Preuß, T. & Koenig, H. (1998). *Architecture, Implementation, and Evaluation of ConfMan: Integrated WWW and DBS Support for Conference Organization.* Retrieved June 17, 2005 from

Halvorsen, P., Lund, K., Goebel, V., Plagemann, T., Preuß, T. & Koenig, H. (1999). *ConfMan: Integrated WWW and DBS Support for Conference Organization.* Retrieved June 17, 2005 from

Hoffer, J. A., George, J. F. & Valacich, J. S. (2002). *Modern Systems Analysis & Design* (3rd ed.). Upper Saddle River, New Jersey: Prentice Hall.

Jacobson, I., Booch, G. & Rumbaugh, J (1999). *The Unified Software Development Process* Retrieve June 21, 2005 from

Jacobson, I., Christerson, M., Jonsson, P. & Övergaard, G. (2004). *Object-Oriented Software Engineering: A Use Case Driven Approach* (revised.). Harlow, England: Addison-Wesley.

Johnston, L., Peters, D., Schneider, J. G. & Wellen, U. (2001). *Requirements Analysis in Distributed Software Engineering Education – An Experience Report.* Retrieved July 7, 2005 from

Kurose, J. F. & Ross, K. W. (2003). *Computer Networking: A Top-down Approach Featuring the Internet* (2nd ed.). Addison-Wesley, Boston.

Raventos, R (2005). *A Conceptual Schema for Conference Management Application.* Retrieved June 12, 2005 from

Schmuller, J. (2002). *SAMS Teach Yourself UML in 24 Hours* (2nd ed.). SAMS Publishing, Indiana.

Snodgrass, R. (1999). *Summary of Conference Management Software.* Retrieved June 17, 2005 from

Sommerville, I. (2001). *Software Engineering* (6th ed.). Harlow, England: Addison-Wesley.

Turban, E., Leidner, D., McLean, E. & Wetherbe, J. (2006). *Information Technology for Management: Transforming Organizations in the Digital Economy* (5th ed.). Hoboken, New Jersey: John Wiley & Sons, Inc.

Wan Hussain. W. I. (2005). *Personal Communication.* August 9, 2005

Whitten, J. L., Bentley, L. D. & Dittman, K. C. (2001). *Systems Analysis and Design Methods* (5th ed.). Boston: McGraw-Hill.

Wikipedia (2005). *Requirement.* Retrieved July 1, 2005 from