REQUIREMENT MODEL FOR CIRCULAR DOCUMENT MANAGEMENT SYSTEM (CDMS)

A dissertation submitted in partial fulfillment of the requirements for the award of the degree of Master of Science (Information Technology) in the Faculty of Information Technology, Universiti Utara Malaysia.

by

NORAINI BINTI OMAR

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

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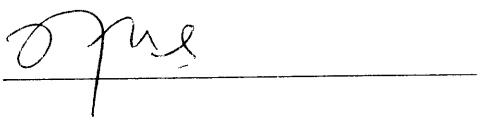
(Signature) : 

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ABSTRAK

Mengenalpasti keperluan merupakan langkah pertama dalam proses merekabentuk sesuatu sistem. Ini amat penting dalam mengukur kejayaan atau kegagalan sesuatu sistem yang dibangunkan. Pemodelan keperluan merupakan salah satu teknik untuk memodelkan keperluan. Model ini memberikan gambaran penuh sesuatu sistem dan mempersembahkan idea tanpa perlu membangunkan sistem yang sebenar. Projek ini dilakukan bertujuan untuk mengenalpasti model keperluan bagi sistem pengurusan dokumen pekeliling (CDMS) dengan menggunakan model *Unified Modeling Language (UML)* serta membuat pengesahan keperluan dengan menggunakan kaedah prototaip. Cadangan CDMS ini adalah bagi menyelesaikan masalah yang wujud dalam pengurusan dokumen pekeliling sesuatu organisasi. Tiga fasa terlibat dalam melaksanakan projek ini iaitu, mengenalpasti keperluan, menganalisa keperluan dan mengesahkan keperluan. Satu set keputusan analisis empat (4) pemodelan keperluan dokumen yang sedia ada dihasilkan. Berdasarkan analisis yang dibuat, keperluan bagi CDMS dikenalpasti. Di samping itu, model-model keperluan yang terdiri daripada gambarajah dan spesifikasi *use case*, gambarajah kelas, gambarajah interaksi dan gambarajah aktiviti serta senarai keperluan bagi CDMS turut dihasilkan. Dapatan daripada hasil kajian ini, diharap ia dapat memberi panduan atau idea dalam menghasilkan sistem pengurusan dokumen yang boleh memenuhi kehendak dan keperluan pengguna.

ABSTRACT

Defining the requirements is the first step in the system design process. It is important to determine the successful or failure of the system. Requirement model is one of the techniques used to model out the requirements. This model will give a complete view of the system and represent idea without have to build an actual system. This project aims to create a requirement model for circular document management system (CDMS) using Unified Modeling Language (UML) based document and made up the necessitate validity through the prototype. Suggestion of CDMS is to solve the problem occur in circular document management in organization. Three main phases were involved in this project to create the requirement model, which are define requirements, analyze requirement and validate requirement model. In addition, a set of analysis result of existing requirement models are produced. Based on the analysis done, requirement for CDMS are produced. Beside that, requirement model of CDMS, which is consists of use case diagram, use case specification, class diagram, interaction diagram, activity diagram and requirement list of CDMS also been created. This requirement model provides a guideline in developing others document management system by specifies a solution that is right for the user's needs.

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"Ma, we laugh and cry together, just because you have me and I have ONLY you. Only God knows how much I love you."

To my sister, **Salina binti Omar**,

"Sis, if we know what would happen tomorrow, maybe we can choose the right path to continue our journey."

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"Abang, adik, all your support make me believe that I'm glad having both of you."

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"Thanks for waiting and still waiting....May Allah make our way much easier."

DEDICATION

In loving memory of a celebration for the lives of my dad:

Omar bin Hj Abdul Ghani

(January 12, 1947 until December 2, 1998)

Dad,

Your love and soul makes me still standing here

and bravely continue this journey.

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LIST OF ABBREVIATIONS

AF	Alternative Flow
ASC	Accredited Standard Committee
BF	Basic Flow
BRM	Business Reference Model
CDMS	Circular Document Management System
DMS	Document Management System
EDMS	Electronic Document Management System
EF	Exception Flow
ERM	Electronic Medical Record
ERMS	Electronic Record Management System
EPA's EDRMS	EPA's Electronic Document Record Management System
FEA	Federal Enterprise Architecture
HAT	HOORA Analysis Tool
HR	Human Resource
HRDM	Health Domain Reference Data Model
INSANIAH	Institut Agama Islam Negeri Kedah
MAMPU	Unit Pemodenan Tadbiran dan Perancangan Pengurusan Malaysia
MoReq	Model Requirement Record Management System
MRAD-1	Model Requirement Analysis Document-1
OIC	Office of Information Collection
OMB	Office of Management and Budget
OMT	Object Modeling Technique
OO	Object Oriented
OOSE	Object Oriented Software Engineering
SA/SD	Structured Analysis and Design
SSDAM	Structured Analysis and Design Method
UML	Unified Modeling Language
WWW	World Wide Web

CHAPTER ONE

BACKGROUND OF THE STUDY

This chapter presents the overview of document management, and document management systems (DMS). Problem statement, objectives, scope, and significance of study are also discussed in this chapter.

1.1 Introduction

Presently, documents like letters, memos or reports are very important in organizations (Bielawski & Boyle, 1997). It archives every activity involved in organisations. The document is a collection of information, authored for the purpose of transferring and preserving knowledge (Koulopoulos & Frappaolo, 1995). A document also known as any piece of written information in any form, produced or received by an organisation or person. It can include databases, website, email messages, word and excel files, letters, and memos. Some of these

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