REQUIREMENT MODEL FOR E-COURSES MANAGEMENT SYSTEM IN IRAQI UNIVERSITIES: A CASE STUDY AT THI-QAR UNIVERSITY

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REQUIREMENT MODEL FOR E-COURSES MANAGEMENT SYSTEM IN IRAQI UNIVERSITIES: A CASE STUDY AT THI-QAR UNIVERSITY

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ABSTRACT

The aim of this study is to construct and utilize a requirement model as basis to develop e-courses management system (eCMS) so as to overcome all courses issues in the university in a proper and effective way. This case study which focuses on e-courses activity as the domain of study was conducted at Thi-Qar university. So hopefully that this constructed model will help system developers to understand the requirements to build the system that includes concept, flow and procedures in managing e-courses activities. The observation, interview, and requirement model analysis were used in this study as fact-finding techniques to define the requirements, Unified modeling language (UML) have been used to construct this requirement model that consists of certain model diagrammatical such as use case diagrams, class diagrams, activity diagrams and interaction diagrams (sequence diagrams and collaboration diagrams) and supported by certain textual information like use case specification and requirements list that consisted of 32 functional requirements and 12 non-functional requirements that were needed to construct requirement model for eCMS. However, in this study only functional requirements be captured. This model is validated by using test script technique and sample system (prototype). eCMS is proposed to be a web-based system that enables better communication regardless of time, and location of users. This study provided a better solution to develop eCMS that can be implement at all universities as well as the related education organizations in Iraq.

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LIST OF ABBREVIATIONS

eCMS	e-Course Management System
UML	Unified Modeling Lanaguage
C#	Csharp Programing Lanaguage
CMSs	Course Management Systems
F2F	Face to Face
OOAD	Object Oriented Analysis and Design
OO	Object Oriented
SLDL	Rosetta System Level Design Language
ORM	Object-Relationship Model
CRM	Class-Relationship Model
STM	State-Transition Model
OOSE	Object-Oriented Software Engineering
OMT	Object Modeling Technique
IT	Information Technology
GUI	Graphical User Interface
LMS	Learning Management System
Bb	Blackboard
VLE	Virtual Learning Environments
eSMS	E-School Management System
SIMS	School Information Management System

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CHAPTER ONE

INTRODUCTION

This chapter present the overview of the study, problem statment, research objectives, scope of the study, significance of study and the organization of the report.

1.1 Overview of the study

The main objective of the requirements model construction is to identify the objects of a problem domain, to understand and explain how they intract with one another (Zhang & Wang, 1996). According to Compton and Huggins (2003), a requirement model describes the functionallity of a software system. In addition, Dennis *et al.*(2005) described that a requirement is simply a statement that explain what the system should do or what characteristic it should have. According to Whitten *et al.* (2001), the requirements can be done as functional or non-functional in nature. Before moving into the development phase, the developer shall notify the system requirements on the basis of requirements analysis relevant user's perspective first. In analysis phase, requirement are written from the perspective of the user and it focuses on "what" of the system suppose to be. Developer fouces on user's need, so this is usually described as user requirements in the design phase, user requirements evolve to become more technical and it describes "how" the system will be implemented. Therefore, all requirement should be documented and recorded by using an effective way or technique to model out

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