REQUIREMENT MODEL FOR STUDENT INFORMATION SYSTEM

A thesis submitted to the Graduate School in partial fulfillment of the requirement for the post graduate degree Master of Science (Information Communication Technology) Universiti Utara Malaysia

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ABSTRAK

Pembangunan sistem memerlukan penganalisis sistem menyediakan model sebelum sesuatu sistem itu dibangunkan. Untuk menyediakan model ini, penganalisis sistem perlu mengenalpasti keperluan pelanggan in memahami kehendak dan harapan mereka terhadap sistem yang diingini.

Model keperluan adalah salah satu teknik yang digunakan untuk mengenalpasti keperluan kerana ia memberikan gambaran yang meyeluruh mengenai keperluan sesuatu sistem. Tujuan utama projek ini adalah untuk merekebantuk model keperluan bagi sistem maklumat pelajar untuk kegunaan guru kelas menguruskan keperluan pelajar di sekolah.

Model ini hanya merangkumi fasa pertama dan kedua di dalam Kitaran Hayat Pembangunan Sistem iaitu perancangan dan analisis tanpa menyentuh fasa ketiga dan keempat iaitu rekabentuk dan pelaksanaan sistem. Notasi UML digunakan untuk mereka bentuk model keperluan ini dan pandangan pakar digunakan untuk memperbaiki dan menilai model keperluan yang telah disediakan.

Adalah diharapkan model keperluan ini dapat menjadi panduan yang berguna kepada penganalisis sistem bagi membangunkan Sistem Maklumat Relajar yang serenar.

ABSTRACT

To develop a system, it is necessary for the system's analyst to provide a model. To produce this model, the analyst must identify the user requirement in order to understand the user's need.

Requirement model is one of the techniques used to model out the requirement. Requirement model is a model that gives a complete view of the requirement for the particular system. The purpose of this study is to create a requirement model as a basis to develop a Student Information System so as to assist the class teachers in managing the students' need.

The study is only cover the first and second phase in System Development Life Cycle i.e. planning and analysis and not included the design and implementation phase. The UML graphical notation was used to model out the requirement model by using the use case diagrams and class diagram. Expert review is then provided which will be used to validate the users' requirements. Thus, this study is believed to be essential guidance for system analyst to build the Student Information System in school.

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LIST OF FIGURES

LIST OF ABBREVIATIONS

SIS	Student Information System
SIMS	Student Information Management System
SRS	Student Records System
SMS	Student Management System
OAIS	Reference Model for an Open Archival Information System
ISO	International Organization for Standardization
OAIS	Open Archival Information System
UML	Unified Modeling Language
MoReq	Model Reference for the Management of Electronic Records
ERMS	Electronic Record Management System
AR	Assistant Registrar
JISC	Joint Information System Committee
ELF	E-Learning Framework
SDLC	Systems Development Life Cycle
OOAD	Object - Oriented Analysis and Design
OOA	Object-Oriented Approach
RFP	Request for Proposal
OMG	Object Management Group

CHAPTER ONE
INTRODUCTION

This chapter will discuss in details the problem statement, objective, scope and significance of the project.

1.1 An Overview of The Study

In school the first important client is students. Without students, nobody will play a role as a teacher. Managing student becomes one of the core activities for the teacher. The student information system is designed to help all students learn self-discipline and to develop a positive attitude towards learning and their school lives. The student information system not only manages student progress but it help teacher to improve their instructional effectiveness and prepare their students for state assessment and improve their students' pass rate. School administrator and especially class teacher need an expert system to help them in managing the students.

The class teacher has a lot of responsibility to manage in school especially the function that related to student. Besides teaching, they have to handle the student daily attendance; manage the registration of students and also manage the student assessment. At the same time they have been burden by the task which needs full attention such as treasury of parent teacher association, text book teacher in charge, co-curricular teacher in charge and many other

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