Universiti Teknologi MARA

Unit Kesihatan Inventory Management System UiTM Kuala Terengganu (UKIMS)

Nur Najaa Binti Mohd Sabri

Thesis submitted in fulfilment of the requirements for Bachelor of Information Technology (Hons.) Business Computing Faculty of Computer and Mathematical Sciences

January 2017

STUDENT DECLARATION

I clarify that this thesis and the project to which it refers is the product of my own and that any idea or quotation from the work of other people, published or otherwise are fully acknowledgement in accordance with the standard referring practices of the discipline.

NUR NAJAA BINTI MOHD SABRI 2014944095

JANUARY 26, 2017

ABSTRACT

Unit Kesihatan Inventory Management System UiTM Kuala Terengganu (UKIMS) is a system that has been developed to assist in managing medicine information in Unit Kesihatan, UiTM Terengganu, Kuala Terengganu Campus (UiTMKT). Currently, Unit Kesihatan is still using the manual process which is the paper-based and all of documents are being kept in separate files. However, some problem arises from this manual process such as problem in finding medicine record. It requires lengthy time to find a particular record of medicine. Therefore, UKIMS has been developed to assist the time consume regarding record searching. UKIMS was developed using Adapted Waterfall Model. This model has six (6) phases which are planning, analysis, design, development, testing and documentation. User-Centered Design (UCD) framework is also implemented in the development of UKIMS as it provides a guideline of end users involvement in each phase. Functionality test being tested by developer and tested based on stated requirements. As for the usability test, it was evaluated by three (3) experts and 30 users. Questionnaires were distributed to the users and evaluation questions were prepared for the experts. Result shows that, the highest mean is for consistency construct (Mean = 4.467, SD=0.57). It shows that most of the respondent are highly satisfy on the consistency of UKIMS. In the future, this system can be enhanced by allowing UiTM Bendahari and Hal Ehwal Pelajar (HEP) to access the system and can directly approve medicine order as it is already linked with Unit Kesihatan.

TABLE OF CONTENTS

CONTE	NT	PAGE
SUPERV	ISOR APPROVAL	ii
STUDEN	NT DECLARATION	iii
ACKNO	WLEDGEMENT	iv
ARSTRA	v	
TADIE	OF CONTENTS	v
	UF CUNTENTS	VI
LISTOF	FIGURES	X
LIST OF	TABLES	xii
CHAPTI	ER ONE: INTRODUCTION	
1.1. 1.2 1.3 1.4 1.5 1.6 1.7 1.8 CHAPTI	Introduction 1.1.1 Current Process Problem Statement Objective Scope Significance Gantt Chart Project Framework Conclusion ER TWO: LITERATURE REVIEW	1 2 5 7 7 7 8 10 12 13
2.1.2.2.2.3.2.4.	 Introduction 2.1.1. Benefit of Web Based Application Management Information System (MIS) Inventory Management System (IMS) 2.3.1. Advantage of Inventory Management System 2.3.2. Component of Inventory Management System Inventory System 2.4.1. Offline Inventory System 2.4.2. Online Inventory System 	15 17 18 19 20 22 23 23 23 24

2.5.	User-Centred Design	24
2.6.	System Development Management	
	2.6.1. Waterfall Model	27
	2.6.2. Spiral Model	29
	2.6.3. Rapid Application Development (RAD) Model	30
	2.6.4. Prototype Model	31
	2.6.5. Extreme Programming	32
2.7.	Similar Existing Inventory System	34
	2.7.1. National Pharmaceutical Control Bureau (NPCB)	34
	2.7.2. Sistem Pengurusan Maritim (SPM)	36
	2.7.3. Institut Pendidikan Guru Kampus Temenggong Ibrahim	37
	2.7.4. University of Malaya	38
	2.7.5. Sistem Pemantauan Pengurusan Aset Jabatan Warisan Negara	40
	2.7.6. Comparison of Existing System	41
2.8.	Implication of Literature Review to System Development	42
2.9.	Conclusion	43

CHAPTER THREE: METHODOLOGY

	31	Introd	uction	45
	3.2 Methodology Overview			46
	5.2	3 2 1	System Development Life Cycle (SDLC)	46
	2.2	J.2.1	System Development Life Cycle (SDLC)	40
	3.3	The P	lanning Phase	50
	3.4	The Analysis Phase		51
		3.4.1	User Requirement	51
		3.4.2	System Requirement	52
	3.5	The D	Design Phase	52
		3.5.1	Process Flow Diagram (PFD)	53
		3.5.2	Context Diagram	54
		3.5.3	Functional Hierarchy Diagram	55
		3.5.4	Data Flow Diagram (DFD)	56
		3.5.5	Entity Relationship Diagram (ERD)	57
		3.5.6	Table of Product	59
		3.5.7	User Interface	62
	3.6	The D	Development Phase	65
		3.6.1	Hardware and Software Requirement	66
	3.7	The Testing Phase		67
		3.7.1	System Testing	67
		3.7.2	System Evaluation	68
	3.8	Concl	usion	71

4