UNIVERSITI TEKNOLOGI MARA

ISLAMIC VALUE SENSITIVE DESIGN FOR PSYCHOLOGY CLINIC INFORMATION SYSTEM

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Thesis submitted in fulfillment
of the requirements for the degree of
Master of Science

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AUTHOR'S DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the result of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any other degree of qualification.

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ABSTRACT

The existing system used by the Hospital Universiti Sains Malaysia (HUSM) Psychology Clinic infringes on several values of both the direct and indirect stakeholders of the system. Most alarmingly, patient's privacy is violated due to the insufficient control on who can access the patients' files. Because psychologists are ethically bounded by their profession to put the highest care on safeguarding the privacy of these psychological progress notes, a migration to a more secure system was decided. This new system's major concern is to make sure the values of the stakeholders are addressed. In order to do this a design methodology that highlights how to embed values into the system itself, Value Sensitive Design (VSD) was chosen. VSD argues that a focus on values needs to be done even before the design stage of the system development. It recommends that direct and indirect stakeholders be identified, the values important to them recognized and reference is made to works in philosophy and ethics in order to define how the values should be managed. This study extracted the definition of values from Islamic traditions of Qur'an and Sunnah and combined it with design suggestions by system design literatures to design and develop a prototype that managed to address the ethical concerns of the stakeholders. From the study, an Islamic Value Sensitive Design (IVSD) model was formed, which is an extension of the existing methodology of Value Sensitive Design. This IVSD model can be beneficial for any future study that wants to address ethical issues from an Islamic perspective. The prototype has shown that the IVSD model can be used to develop a system that embeds Islamic values in its construction which also addresses users' needs and concerns.

TABLE OF CONTENTS

	Page
AUTHOR'S DECLARATION	**ii**
ABSTRACT	**iii**
ACKNOWLEDGEMENTS	**iv**
TABLE OF CONTENTS	**v**
LIST OF TABLE	**ix**
LIST OF FIGURES	**x**
CHAPTER ONE: INTRODUCTION	1
1.1 Introduction	1
1.2 Problem Statement	2
1.3 Objectives	3
1.4 Scope	3
1.5 Significance of Research	3
CHAPTER TWO: LITERATURE REVIEW	5
2.1 Information System	5
2.2 Information System Design	5
2.3 Ethical Issues of Information System	6
2.4 Professional Code of Ethics	8
2.4.1 Software Engineering Code of Ethics and Professional Practice	8
2.4.2 ACM Code of Professional Ethics	10
2.4.3 American Psychological Association's (APA) Ethical Principles of Pyschologist and Code of Conduct	12
2.4.4 Effectiveness of Code of Ethics	13
2.5 Ethical Information System Design	14
2.5.1 Participatory Design	15
2.5.2 Effective Technical and Human Implementation of Computer-based Systems	16
2.5.3 Value Sensitive Design	16
2.6 Islamic Ethics	18
2.6.1 Analysis of ACM Code of Ethics from Islamic Perspectives	19
2.6.2 Islamic Ethics in Software Engineering	19

2.7 Islamic Value Sensitive Design 20
2.7.1 Islamic Perspectives on Human Values 20
2.7.2 Human Welfare 20
2.7.3 Ownership and Property 21
2.7.4 Privacy 22
2.7.5 Freedom from Bias 22
2.7.6 Universal Usability 23
2.7.7 Trust 24
2.7.8 Autonomy 24
2.7.9 Informed Consent 25
2.7.10 Accountability 25
2.7.11 Identity 25
2.7.12 Calmness 26
2.7.13 Environmental Sustainability 26
2.8 Psychology Clinic Softwares in the Market 27
2.8.1 TheraQuick 27
2.8.2 BMCase Case Management Software 27
2.8.3 TheraphyNotes 28
2.9 Conclusion 28

CHAPTER THREE: METHODOLOGY 30
3.1 Introduction 30
3.2 Research Approach and Methodology 31
3.2.1 Knowledge Acquisition 31
3.2.2 Analysis 31
3.2.3 Design 32
3.2.4 Implementation 32
3.2.5 Testing 33

CHAPTER FOUR: VALUE SENSITIVE DESIGN ANALYSIS OF SYSTEM 34
4.1 Value Sensitive Design Analysis 34
4.2 Conceptual Investigation 34
4.2.1 Stakeholders Identification 34
4.2.2 Values Identification 37
4.3 Empirical Investigation 38