Universiti Teknologi MARA

A Relational Data Model for Traditional Games

Norhapizah Binti Muda

Thesis submitted in fulfillment of the requirements for
Bachelor of Science (Hons) Business Computing
Faculty of Information Technology And
Quantitative Science

November 2006

Acknowledgement

Bismillahirrahmanirrahim...

First of all I would like to express my gratitude to ALLAH s.w.t because giving me a chance to complete my thesis project. Because of His blessing, I enable to finish and submit my report on time. Alhamdulillah...

Then I would like to thanks to Puan Nalini Dharmarajan, my beloved supervisor for guide me to complete this task. Her cooperation, guidance, and help are very important for me to finish this research. Thanks also for your useful advice and encourage, your kindness I can never forget.

I also would like to thanks to Puan Rogayah binti Abdul Majid, our thesis coordinator. Her guide and advice are very useful and help me to finish my work.

A special thanks to En. Mohd. Raizuli bin Mat Jusoh, Assistant Director of National Cultural and Arts Department, Ministry of Culture, Arts and Heritage Malaysia. Without his cooperation and information, I definitely cannot finish my work on time. He does to be interview by me even he got a lot of work to do. Thanks also to En Ismail from Museum Sultan Abdul Aziz Shah, Shah Alam because try to help me get the information. Thank you so much.

Not forget to all my family members, thank you so much for all your support. Especially to my parent, your support and hope encourage me to work hard and finish this work.

Lastly, to all fellow my friends thank you for your help, cooperation, guidance, support, advice and all. I will never forget all you have done to me. Thank you.

Table of Content

Approval ii

Declaration iii

Acknowledgement iv

Table of Content v

List of Table viii

List of Figures ix

List of Abbreviation x

Abstract xi

Chapter 1 1

1.0 Introduction 1

1.1 Research Background 1

1.2 Problem Statement 3

1.3 Research question 3

1.4 Objectives of The Research 3

1.5 Scope of The Research 4

1.6 Significance of The Research 4

1.7 Methodology of the research 4

1.8 Limitation of the research 5

1.9 Overview of The Research 5

Chapter 2 6

2.0 Literature Review 6

2.1 Introduction 6

2.2 Culture 7

2.3 Malay Traditional Games 9

2.4 Relational data model 11

2.5 The step in creating relational data model 13

2.6 Metadata 16

2.7 Cultural database 18

Chapter 3 21
3.0 Research Approach and Methodology 21
3.1 Introduction 21
3.2 Research Design 21
3.3 Research approach 23
3.4 Data collection 25
3.4.1 Primary data 26
3.4.1.1 Interview 26
3.4.2 Secondary data 27
3.4.2.1 Journal 27
3.4.2.2 Books 27
3.4.2.3 Internet 28
Chapter 4 29
4.0 Findings 29
4.1 Introduction 29
4.2 The database application lifecycle 30
4.3 Data requirement 33
4.4 Conceptual model 34
4.4.1 Identify entity types 34
4.4.2 Identify relationship types 37
4.4.3 Identify and associate attributes with entity or relationship types 40
4.4.4 Determine attribute domains 44
4.4.5 Determine candidate and primary key attributes 44
4.4.6 Check model for redundancy 47
4.4.7 Validate conceptual model 47
4.4.8 Review conceptual model 49
4.5 ER-Diagram 49

Abstract

This research is focused on Malay traditional games in Malaysia. The Malay community has a lot of traditional games which are a legacy from the past. Lack of cultural information especially information about Malay traditional games be the cause difficult to access as it makes it for interested parties the information. No systematically document the traditional games information make it more difficult to access the information. Therefore, the effort to create the database for the Malay traditional games can help Malaysians access the information. It will also be kept safely and there is no need to be concerned that the information will be lost. Methodology used in the research through interview with the expert and also form the journals, books and information from the internet. After all information is collected, it will be analyzed to produce the accurate data. The data then, will be use to create a data model for the Malay traditional games.