# DESIGN DATA WAREHOUSE FOR MEDICAL DATA

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**UNIVERSITI UTARA MALAYSIA 2010** 

# DESIGN DATA WAREHOUSE FOR MEDICAL DATA

A Thesis submitted to Faculty of Information Technology in partial fulfillment of the requirements for the degree Master (Information and Communication Technology),

Universiti Utara Malaysia

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I

### **ABSTRACT**

Organizing and managing the database relations in term of data warehouse technology has been addressed widely in different complex environments. The data warehouse contains a source of valuable data mining. The data contained in the data warehouse is cleaned, integrated, and organized. This study highlighted the existing issues on the medical databases which present a huge number of information across various departments, managing this type of data require time, and laborious tasks to separately access and integrate reliably. Hence, this study aimed to model new medical data warehouse architecture for managing and organizing the medical dataset operation into data warehouse. Technically OLAP has been used to design the proposed architecture, for the hospitable administrators, and top manager and/or sophisticated user can use MDW by using Microsoft SQL Server 2005. Building the proposed architecture adopted by using Microsoft Visual Studio for performing the OLE database operations. The performing process has been tested through the using of use test case technique.

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## **CHAPTER ONE**

### INTRODUCTION

This chapter presents the background of the study, the problem statement, the research question, the objective of study, the significance of study, and scope of the study.

### 1.1 BACKGROUND

Inmon (2002) defines data warehouse as the heart of the architected environment, and is the foundation of all decision support system (DSS) treatment. The work of the DSS analyst in the environmental data warehouse is much easier than in the environment of the classical heritage because there is a single integrated source of data (the data warehouse) and because the granular data in data warehouse is easily accessible.

The data warehouse contains a source of valuable data mining. The data contained in the data warehouse is cleaned, integrated, and organized. And the data are historical. It should be noted that although the data warehouse is an excellent source of data for the minor and the explorer, the data warehouse is often the only source. External data and other data can be freely mixed with data warehouse data as part of their exploration and mining (Akoka et al., 2007).

# The contents of the thesis is for internal user only

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