APPLICATION OF TECHNOLOGY ACCEPTANCE MODEL ON DATABASE NORMALIZER

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Universiti Utara Malaysia
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APPLICATION OF TECHNOLOGY ACCEPTANCE MODEL 
ON DATABASE NORMALIZER

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Universiti Utara Malaysia

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ABSTRACT

Normalization is one of the most important activities in database designing. The good database design is the database that meets user requirements and designed its structure carefully. Therefore, this study focused on developing a database normalization application that helps database designers to perform the normalization process automatically and improves the database designing by avoiding the problems of carrying out normalization manually which has many drawbacks such as time consuming, prone to errors and requires more than one skilled user. The main objective of this study is to develop a database normalizer application to normalize the database tables up to the third normal form (3NF). This study provides a normalization algorithm to perform the 1NF, 2NF, and 3NF automatically based on Microsoft Access and SQL Server databases. Experiment was conducted to check the functionality in performing the normalization process. The experiment result showed that the prototype achieved the result successfully as expected and fulfills the requirements and rules of normalization processes. Moreover, a questionnaire based on the Technology Acceptance Model technique has been adopted to ensure of the prototype level in terms of easiness of use, and satisfaction.
Dedication

Specially dedicated to
My beloved father and mother
To my siblings and family
Thanks for all the encouragement and support
ACKNOWLEDGEMENT

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CHAPTER ONE

INTRODUCTION

1.1 Background

Data has become one of the important strategic resources for many organizations from industry, and government. The tradition data resource had been managed by a file processing system that requires no special data management techniques. Now, data has been stored and manipulated through database management systems (DBMS) as the need for information processing has become necessary.

In 1972, Relational databases has been proposed by Dr. Codd as stated in Connolly and Begg (2004) which are widely used in almost commercial applications to store, manipulate and use huge data for a specific enterprises and decision making. The success of relational database modeled for any enterprise is depending on the design of relational schema (Bahmani, Naghibzadeh, & Bahmani, 2008). Process of designing databases is referring to the activities that are related to the design of the database structure for storing and managing end-user data. The good database design is that database which meets all user requirements and designed its structure carefully (Rob & Coronel, 2009). Database design is an essential phase of working with databases where it affects a good DBMS to work poorly with a badly designed database. Therefore, to have a proper database design, database designer should identify exactly the expected use of database such as process of designing a data warehouse database that requires identifying the historical data also designing a centralized database involve using a centralized approach which is differs from that one in distributed database (Rob & Coronel, 2009).
The contents of the thesis is for internal user only
REFERENCES


