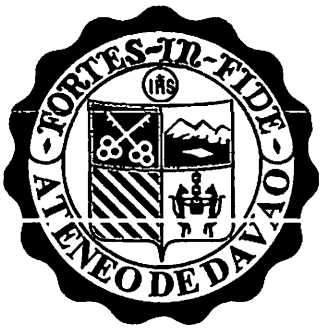
MySQL Query Error Interpreter and Corrector for Windows



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MySQL Query Error Interpreter and Corrector for Windows

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ABSTRACT

Most programmers would likely choose MySQL as the preferably used open source database nowadays. From a list of open source databases, even on a survey that we got from blogs and forums on the internet, MySQL was remarkably popular amongst programmers. However, the only drawback of this database management program was that the user needed to input the whole line of code before they could find out that they have error in the line.

This study generally focuses on a way for the user to notice errors in the line of code before input into the MySQL console. In this manner, it would provide a faster way for programmers, novices and experts alike, to continue coding without the annoyance of retyping the code duet to a single error in the code. We tend to change MySQL as a programmer-friendly open source database that will be easily understood by most programmers, especially the novices.

Keywords:

Database Management Software, IDE Development, MySQL, Visual Studio

CHAPTER 1

INTRODUCTION

1.1 Background of the Study

In encoding on the programming language software, it is inevitable that we will encounter certain problems. Whenever a user types in a lengthy line of code and misses out a single error there is a large chance that the user would not see it until the program returns an error code. This becomes more and more important as more complex our commands become, as well as frustrating the user to no end.

Take MySQL database programming for example; most of its queries are vague and confusing sometimes due to the combination of words and syntaxes to create a function or a certain command. Like most programming languages MySQL also has an error message prompt that will pop up if the line of code is run with errors. However, the drawback of it is that the error message provided by the MySQL is given far too late already; by that time, the user has already inputted the code and would have to input them once more.

1.2 Technology Application Context

The purpose of this thesis study seeks to create a way for complicated error messages made by the MySQL program to be translated into simpler terms for novice programmers using a Microsoft Visual Basic application. This study also answers some of the following questions:

- What are the most common errors the user can make in the process of making databases in MySQL?
- What are the algorithms, concepts, and techniques to point out the specific errors that a user can make in making databases in MySQL?
- What are the algorithms that can be used in the application?

1.3 Objectives of the Study

The objectives of the proponents' study are aimed at the creation of a Visual Basic based project being capable of but not limited to:

- To make MySQL errors simpler to understand and to correct them faster than usual.
- To look up techniques in C# coding language that can either translate errors in MySQL.
- To create an application that will detect code errors while the user types.
- To search for the most common coding errors in MySQL programming and making a list of them for reference.

1.4 Significance of the Study

The main concern of this study is how to an application that corrects the user's line of code before input into the main MySQL program. The importance of this is also to help the programmers have an easier and more efficient way in debugging errors of their programs. With this study, most programmers will more likely prefer MySQL because the errors that the MySQL message box shows will be more specific and detailed. This study also tends to make the MySQL be more like a programmer-friendly open source database creation system by the means of inserting an interpreter on the error message box every time the MySQL finds an error on a program being executed.

1.5 Scope and Limitations of the Study

The main output of this study is a program that provides corrections on certain errors that inserted on the textbox of the program. The program automatically shows the error on the inserted phrase or syntax, the program will read each word and split them, looking for errors and returning messages on how to correct them. The program covers the basic functions of the MySQL Database Management System, including the Create, Read, Update, Delete, and Select statements, the scope of these statements are reduced on what was seen on the www.w3schools.com/. Instead of directly using MySQL as the database for the correction of errors, the program uses an excel document that has keywords for certain errors. The program is limited to reading only one line of commands.

1.6 Definition of Terms

a) Database – a database is an organized collection of data, today typically in digital form. The data are typically organized to model relevant aspects of reality, in a way that supports processes requiring this information.

b) Database Management System (DBMS) – a software package with computer programs that controls the creation, maintenance, and use of a database. It allows organizations to develop databases for various applications.

c) IDE (Integrated Development Environment) – software application designed to provide programmers with a useful facility for software development. IDEs may vary according to programming languages or target software. May or may not be web-based.

d) Syntax – set of rules that defines the combinations of symbols that are considered to be correctly structured programs in that language. The syntax of a language defines its surface form

e) C# (programming language) – C# is a multi-paradigm programming language encompassing strong typing, imperative, declarative, functional, generic, object-oriented (class-based), and component-oriented programming disciplines.