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IT Foundations of DataBases
Assignment 07

User-Defined Functions

Introduction

In Module 7, we covered varieties of Functions ranging from Aggregate Functions, Conversions, and Logical Functions. In this Module we were introduced to UDFs, which are User-Defined Functions and how we can use this function to help alter data in databases. Later, I discuss and define three different types of functions: Scalar, Inline, and Multi-Statements. Using these functions can be essential for understanding SQL and helps individuals create their own procedures.

SQL UDF Usage

In SQL Server, a SQL UDF is a user-defined function that fabricates types of parameters to data in order to come up with a type of result. This type of function allows an individual to create their own custom functions, such as Scalar, Tabluar, and Tabluar Functions with Multiple Statements. An individual would us Scalar Functions when they want to bring back a single value. A Tabular Function would be used if someone wants to bring back a table of values. Lastly, a Tabluar Function with Multiple Statements allows you to bring back multiple tables and values.

Differences between Scalar, Inline, and Multi-Statement Functions

In SQL Server, there are different functions that can serve different purposes in each database. As previously mentioned, Scalar Functions are utilized when an individual need to return a single value, for example a ‘int’ or ‘varchar’. Unlike a Scalar Function, an Inline Function returns a table of results. These type of Inline Functions can be acquired from SELECT statement. A Multi-Statement differs from these others Functions, because this is a table-valued function that returns multiple statements.

Summary

Overall, this Module was a bit easier for me except for KPI’s. I think I need to go over KPI’s a bit more for me to feel comfortable with this. But, I found it extremely useful to compare Views

and Functions and how they differ. Hopefully, individuals learning SQL can see the differences between these functions and how they can be implemented in manipulating data in the future.