Veneza Tena August 14th, 2024 IT FDN 130A Assignment07 GitHub Link

Functions

Intro

This week we focused more on Functions and having another opportunity to work with GitHub. Specifically, we had a refresher on aggregate functions, learned about some common functions, how to portion out specific data from queries by using partitioned or windowed functions, functions for reporting, User Defined Functions or UDFs, and creating check constraints from UDFs. Overall, we learned more techniques to access data from a database.

When to use a SQL UDF

There are functions that are already established in MS SQL that can serve many purposes. In cases that the already established functions aren't quite relevant to a query needed from a database then a SQL UDF or User Defined Function would be considered. According to Prof. Root (Module07 Notes p. 17), describes UDFs as, "custom functions. There are two basic types of functions; functions that return a table of values and functions that return a single value."

Differences between Scalar, Inline, and Multi-Statement Functions

The commonality between scalar, inline, and multi-statement functions are that they are a type of UDFs the differences lie whether they return a single value or a table of values. Both the inline and multi-statement functions return a table of values with a specified parameter. On the other hand, scalar functions are the only UDF out of the group that is used to return a single value. The inline or considered simple inline function returns single number of rows in a table. In contrast the multi-statement function is used to gather a table of data and can include multiple functions within the function. Each UDF serves a purpose depending on the type of data gathered for reports.

Conclusion

Overall, I learned that there are so many functions available within MS SQL. I will say that I'm not completely comfortable working with functions. I stumbled working on Assignment07 as the questions became a little complex (multi-statement functions). But I had to remember that it's all part of the learning process that with practice things will get a little easier if I don't fall into the trap of overthinking the concepts.