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Date: Nov 23, 2022
Course: IT FDN 130 A Au 22: Foundations Of Databases & SQL Programming
Github: https://github.com/rmoultonuw/DBFoundation

Assignment 6 - Views

Introduction

In this assignment I learned about SQL views – when they should be used, how to create them, and how they compare to functions and stored procedures.

Views

On the W3Schools site a view is described as a virtual table generated from results returned from an SQL statement. "A view contains rows and columns, just like a real table. The fields in a view are fields from one or more real tables in the database."

Reference: https://www.w3schools.com/sql/sql_view.asp

SQL statements and functions can be included in a view, with the resulting data appearing to come from a single table.

Since views are stored in a database as objects, they are an effective way of making it easier for users to find desired data. They are also used to restrict access in such a way that users see only the data they should – no more and no less.

Functions

Like a view, a custom user-defined function (UDF) is a select statement stored as an object in a database. Notably, the syntax of functions is quite different and arguably more complex – or less familiar, at least – than that of views.

Parameters can be used in functions in order to modify the results of the query at execution time, in the same way that a 'where' clause can be used to modify the results of a view.

Stored Procedures

Stored Procedures are likewise stored in a database, and they are similar to views and functions with one notable exception: They are not restricted to just select statements. In a stored procedure insert, update, and delete statements can be used as well.

Summary

In this module, after learning about SQL views, I practiced creating various views of my own, based on the fairly complex select statements (including multiple joins and subqueries) which I created in the previous module.