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GitLab URL: https://github.com/burgerad/DatabasesSQLClass.git

Assignment 06 - Views, Functions, and Stored Procedures

Introduction

In SQL, Views, Functions, and Store Procedures are important tools that are used to select data that can be used for reporting requirements. Below, use cases for Views will be discussed as well as comparisons between Views, Functions, and Stored Procedures.

Use of a View

Views should be used in situations where the data needs to be presented or shown, but not changed. Downstream users can use views and manipulate what is shown in the view without changing the information in the database. Information can be tailored for the appropriate audience. Views are also useful to show only what needs to be shown to the user. So in some instances, such as when personal information is being stored, that information can be hidden from certain users.

Views, Functions, and Stored Procedures

Views, Functions, and Stored Procedures are similar, but do have some differences that should be discussed. All have the ability of using a Select statement to choose the pertinent information. While Views and Functions must use the Select Statement, Stored Functions do not have this requirement. Functions have the ability to use a parameter to accomplish various table queries while Views use a similar method with the Where clause. However, Functions can use a scalar parameter to establish a new column base on analyzed data within the row. Stored Procedures are in a way their own unique animal. A Stored Procedure is a script that is executed. Where Views and Functions are more limited, Store Procedures are better for more complex reporting purposed.

Summary

To briefly summarize, Views are an important tool when it is necessary to report out on information in the tables. They can be tailored to the user and can restrict showing certain information when necessary. Views, Functions, and Stored Procedures all can work similarly when creating views by using a select

statement, although Views and Functions are more limited and Stored Procedures allow for more complex reporting with script execution.