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Assignment 06
<https://github.com/arreolaa12/DBFoundations>

Views

Introduction

This week, I learned SQL Views, Functions and Stored Procedures that are commonly created and used in databases for user access in companies. In this assignment, I will explain when to use SQL Views and the similarities and differences of Views, Functions and Stored Procedures.

SQL View

When providing data connection to users in a database, it's best practice to have them use a view. It simplifies complex queries and limits data (columns/rows) for better performance and secure the underlying data (abstraction layer). It provides different access points to certain users to view the data differently and at the same time. In SQL, a Reporting View is created and used to extract data for reporting purposes. Another view is a Base or Basic view where it pulls all data from a table. This will allow to restrict access to tables in a database and give user access to views.

Views, Functions and Stored Procedures

The similarities between a View, Function and Stored Procedure is that all three return values/data from a table in a database. However, all three have slight differences in how they extract data. A View uses the Create and Select clauses. It executes the Select clause at the time of query. Functions also uses the same clauses as Views, but Functions can use parameters to change the results when querying the data. For a Stored Procedure, Execute clause is used instead of Select clause. All are great options when extracting data and providing limited access to the main tables in the database.

Summary

In summary, by Views, Functions and Stored Procedures are important when creating a database. It provides a level of security to users and simplify complex queries.