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https://github.com/vbmok/DBFoundations

Assignment 06 – Views

Introduction

SQL continues to be a tool that is useful for creating and managing relational databases. SQL views, functions, and stored procedures can be used in different situations to interact with the data within databases, from simply data viewing from multiple tables to performing specific tasks with a single call. Understanding how to best utilize these tools is essential to database management.

SQL Views

SQL views can be used when one wants to query multiple tables or needs to visualize large amounts of data. Views also act as an added layer of security, as one can restrict individual or public access to specific columns or rows of data. Views can simplify users' interactions with data by standardizing queries and presenting data in more simplified formats.

Views, Functions, and Stored Procedures

Views are a result of a query that present data from one or more tables in a simplified and straightforward format. Functions are blocks of SQL code that can be used more than once to perform specific tasks and return specific results. Functions are more powerful than views, as they have more power to interact with the data within queries. Stored procedures are stored sets of one or more SQL statements that can be executed by a call. Stored procedures are more structured and allow more manipulation of data within a single call or set of statements.

Summary

SQL views are useful in standardizing and simplifying queries and providing additional data protection by restricting access to the manipulation of data within databases. Views, functions, and stored procedures allow users to interact with and view data on different scales. While views allow users to simply view data, functions allow for the reuse of coded SQL tasks and stored procedures allow for broader procedural interactions in databases with stored sets of SQL statements. Understanding the differences between views, functions, and stored procedures is essential to the most efficient management of databases.