

Date: 05/20/2024
Name: Michaela Sylvia
Course: IT FDN 130A
Assignment 06

Understanding Views, Functions, and Stored Procedures

Introduction

There are various ways to manage and store your queries such as views, functions, and stored procedures to name a few. These can help to make managing your data easier, more secure, and more efficient. They are also a way to control access to your data in order to provide more consistent results for future reusability. Overall, they play a crucial role in making sure databases run smoothly and effectively.

Views

A view is a named select statement whose code is stored in a database. (Root, 2020a) These can be used to view specific reports, and while they can be used for simple queries, are often used to save a complex select statement. While a view does not store data itself, it can be helpful to provide virtual tables that contain subqueries, joins, and further constraints. You can also use a view as a security measure, by restricting access to certain data in the main tables. They are generally helpful by allowing others to query using simpler statements.

Views vs. Functions vs. Stored Procedures

While views, functions, and stored procedures are all able to manipulate and simplify data, there are some key differences. Functions, also known as a user defined function, varies from a view by performing a specific task that returns specific value or table. (Root, 2020b) A view cannot accept parameters, while you can query for specifics with functions. Stored procedures are collection of one more SQL statements that help query for specific data or tasks. (Root, 2020c) A stored procedure is not a table that you can select from, but rather something that you execute in order to query for your data. Stored procedures can accept parameters, and are able to perform a series of functions which make them useful when you have a complex code.

Conclusion

To summarize, views, functions, and stored procedures are all ways to simplify complex queries, with the added benefits of making your code easier to be re-used in the future, and allowing for enhanced security. While views provide a structured way to access data, functions are able to perform specific tasks and data manipulations, and stored procedures help to simplify the most complex of queries. The use all three allows for efficient and secure database systems.

Works Cited

- Root, R. (2020a, August 10). *Creating views functions and stored procedures part 1*. YouTube.
https://www.youtube.com/watch?v=N_rPXAj-74o&list=PLfycUyp06LG8cefs0gA38wO7nFrRjD5Ad&index=1
- Root, R. (2020b, August 10). *Creating views functions and stored procedures part 3*. YouTube.
<https://www.youtube.com/watch?v=wdMk2YG2sBo&list=PLfycUyp06LG8cefs0gA38wO7nFrRjD5Ad&index=4>
- Root, R. (2020c, August 10). *Creating views functions and stored procedures part 4*. YouTube.
<https://www.youtube.com/watch?v=22yz763fAg0&list=PLfycUyp06LG8cefs0gA38wO7nFrRjD5Ad&index=5>