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IT Foundations of Database Management

Assignment 06

<https://github.com/YEOC995/DBFoundations>

**Views, Functions, and Stored Procedures**

# **Introduction:**

When writing complex code, it can be saved as a sql file on your computer for storage. However, that is usually not good practice when in a company. To be able to save complex code for everyone to access, a view, function, or stored procedure would be good practice. This paper will focus on when views are used and briefly explains the differences and similarities of views, functions, and stored procedures.

# **When to Use a View:**

A view stores a complex sql code directly to the database instead of on a personal machine. For example, if you wish to create a table that shows only managers and employees, you would use code to create the select statement and then a view can be created. This is stored as a table and can be accessed instead of the main table it is stored in for security purposes and simplicity purposes. It is also consistent by “hiding complex queries, logic, and calculations in views…rather than rewriting it in separate queries” (<https://www.sqlservertutorial.net/sql-server-views/>, External Site, 2020).

# **Views, Functions, and Stored Procedures:**

## Similarities:

The similarity between views, functions, and stored procedures lies in the fact the code created can be saved in the database directly instead of in a text file for others to use in their code. The way each operates is what makes them different.

## Differences:

Views, as lightly explained in When to Use a View, can show data from multiple tables in a complex select query and be saved for others to use and are static. Stored procedures “are a fixed data selection which returns a predefined result” (<https://stackoverflow.com/questions/5194995/what-is-the-difference-between-a-stored-procedure-and-a-view#:~:text=A%20SQL%20View%20is%20a,based%20on%20SQL%20SELECT%20query.&text=View%20is%20simple%20showcasing%20data,store%20procedure%20executes%20sql%20statements.>, External Site, Swissben, 2020). The main difference between views and functions is that a function can accept parameters whereas views can’t and can be directly used in a select clause (<https://sqlhints.com/tag/views-vs-user-defined-functions/>, Basavaraj Biradar, External Site, 2020).

# **Summary:**

As can be seen, each type of stored data can do similar things, yet produce vastly different responses when executed. Depending on the situation and the result needed, views, functions, and stored procedures are very handy and helpful.