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https://github.com/bdvesel21/DBFoundations

## Assignment 06 – Views, Functions, and Stored Procedures

**Introduction**

The focus in class this week was on creating views and understanding their role versus a function or stored procedure.  In this paper, I will explain further their uses, similarities, and differences.

**When to Use a View**

A view is a saved select query that displays like its own table. Queries can be run against it, and the view can be modified in some cases like a table in the database. An administrator might use a saved view instead of a table when there is sensitive information that shouldn't be displayed to everyone, or when there are multiple tables that are complexly joined together to create the result set. Views can also allow you to modify data in some cases that shouldn't be altered in the original table. Lastly, an administrator can also restrict access to both tables and views to specific groups of users.

**Similarities and Differences of Views, Functions, and Stored Procedures**

There are a couple of commonalities between the three, such as they all contain select statements and can all be seen in the sys comments section of a database. All three also start by using the CREATE command. But of the three, views and functions are the closest, the major difference being that parameters can be added to functions to change the results of the query. Views and functions are also both treated like tables, using a select from to show the results, but stored procedures have a different syntax. Instead of selecting, stored procedures use the EXECUTE command. Stored procedures can also contain many statements, not one like functions or views, and can include other commands such as alter, create, and delete.

**Conclusion**

Views, functions, and stored procedures may look similar in many cases, but can provide a variety of different functions for a user or database administrator.

# Citations

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W3 Schools. (2021, November 23). *SQL Views*. W3 Schools. https://www.w3schools.com/sql/sql_view.asp