

Will Andrews

5/22/2024

Foundations of SQL Programming

DB Foundation Assignment 06

Github : <https://github.com/Rabago85/DBFoundations>

Introduction

In this week's assignment, we covered views, when to use them, and how to enact security. We also lightly touched on functions and stored procedures.

Explain When you would use an SQL View

A view does not store data, but it represents a virtual table. A view is a way to allow limited access to a table for a query. If a table contains sensitive data, a view can be created that allows users to query data in the table in a limited capacity. This also allows the creator of a view to abstract away details about the tables themselves. If an application relies on data from a table that evolves, but queries the view, the view can update its logic so that the application can receive the data it needs in the same form.

Explain the Similarities and Differences Between an View, Function, and Stored Procedure

Views, functions, and stored procedures are objects that belong to a database and are executed in the database's environment. All three can produce a results set with a select statement. However, functions and stored procedures can enact more complex logic and control flow, as well as accept input parameters. If the only need is produced with a select statement, a view might suffice, but if more complex logic is needed, a stored procedure or function would be preferred.

Conclusion

Views are objects stored in a database that represent a virtual table. By creating views, users can access data without actually touching the

table, and thus are a good way to limit what data can be queried and enact security.