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Prof Root

Foundations Of Databases & SQL Programming

[jimsharma206/DBFoundations (github.com)](jimsharma206/DBFoundations)

Module 6: Views, Functions, and Stored Procedures

Introduction

Module 6 focused on the application of views, which are saved queries. Views are useful for three primary reasons. First, they allow the developer to show the data to another user without granting them permission to alter the dataset. Second, views allow the developer to save complex queries, which can be useful if the developer needs to constantly reexamine the same subset of data. Third, views permit the developer to save the data even after they've altered the overall schema. In addition, we investigated similarities and differences between views, functions, and stored procedures. They are all used in SQL to control and examine data. Functions allow the developer to create specific calculations with an input, while stored procedures permit the developer to create a process that is executed in a specific order.

Explain When to use an SQL View

There are three primary reasons to use views in SQL. First, views are used for security purposes. Specifically, views permit a user to access the data without being granted permission to edit. Second, views are useful because they allow the developer to save reoccurring queries. Consequently, if there is a subset of the data that needs to be reexamined weekly, the developer can pull up the saved view. Third, views allow the developer to save data from an original schema once the schema has been altered. This could be useful if the developer is restructuring the dataset.

Differences and Similarities between a View, Function, and Stored Procedure

Views, functions, and stored procedures are all objects used to control and investigate data. Views permit the user to control the security parameters and save subsets of data, while functions are custom built calculations. To note, functions can return a single value or an entire table. On the other hand, stored procedures are not limited to select statements. They permit the user to perform tasks in a certain order.

Conclusion

In conclusion, views, also known as saved queries, are useful for three reasons. First, they allow the developer to give another user a means to access the data without permission to alter the database. Second, views provide a means for saving complex queries. Third, views can be used to view saved data

even after the schema of the larger database has been transformed. Furthermore, we examined similarities and differences between views, functions, and stored procedures. Specifically, they are all utilized to control and investigate data. Functions give the developer the means to create specific calculations, while stored procedures permit the developer to execute actions in a certain order.