Tasean Cunningham

February 23rd, 2021

Foundations of Databases and SQL Programming

Assignment #6: Views

<https://github.com/Husky711/DBFoundations/upload/main>

**Views**

***Explain when you would use a SQL View***

A view in sql is a virtual table based on a select statement that has been saved to a particular database. A view is used to store code, not entire tables, therefore it is useful in managing space in a database. Views are used for security, ease of use, and consistency across a business. A view gives a programmer security by protecting the integrity and sensitivity of the table by giving users a view of the table but not direct access where one could potentially drop or alter the data on the table. A view gives ease of use by allowing multiple people across the business access to data without having to have the ability to create complex queries. Finally, a view creates consistency across a business by allowing someone to create a repeatable process that can be replicated without having to start from ground zero each time the process is run.

**Explain the differences and similarities between a View, Function, and Stored Procedure.**

A view in sql is a virtual table based on a select statement that has been saved to a particular database. A function accepts parameters, performs an action and returns the result of said action. A stored procedure is a group of sql statements compiled into a single execution plan. One of the differences between a view and a stored procedure is that a view can only accept one select statement while a stored procedure can contain multiple statements. A similarity embedded within this is that they both can accept a select statement. One of the differences between a view and a function is that a view returns a pre-defined statement, and a function returns a single value or single result set. One of the differences between functions and stored procedures is that a function must return a value while a stored procedure may or may not return values. A similarity between a function and stored procedure is that parameters can be passed to both.