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**Course:** DB Foundation (SQL)

**Github:** https://github.com/guillermo-dominguez/DBFoundations

# Assignment 6- Views

# Introduction

In this write-up, I will explain SQL views and when to use them. I will also explain the differences and similarities between a View, Function, and Stored Procedure.

# SQL Views and When to Use Them

SQL Views help store the results of select statements in a database. There are two types of views: 1) reporting views, which are used to extract data from tables for reporting purposes, and 2) base views, which represent entire tables and are used to restrict access so that users can see data in the abstract, and only see the data that the programmer allows them to see. A feature of views is that there are restrictions to inserting data into them, in order to protect the tables that represent them. Views are updated as tables get updated so that users do not have to manually re-update them. Views can also use the schema-binding option to keep tables from changing so much that the views do not work anymore (Module 6 notes). Views are also extremely helpful for beginner SQL users, as they can simply select a view to see the data, instead of having to build complex code to arrive at the same solution.

# Differences and Similarities between Views, Functions and Stored Procedures

Like views, functions and stored procedures provide the results of named statements. However, functions can not only return a table of values but also return a single value (scalar). Functions can also use parameters to change the results in both tables and in scalars. Stored procedures are similar to functions but are more flexible as they are not limited to SELECT statements. Most simple tasks can be done by the three actions, however views are often more simple and the recommended way to proceed.

# Summary

In this assignment, I explained SQL views and when to use the, I also explained the differences and similarities between a View, Function, and Stored Procedure.