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September 5, 2021

IT FDN 130 A

Assignment 05

SQL Views

# Introduction

This week, I learned about SQL Views, Function and Stored Procedure. The purpose of this memo is to document the use case of these SQL concepts.

# When to use a SQL View

A SQL View is used to store a complex SELECT statement into the database so that the end users can easily retrieve the output of that SELECT statement in the future without having to rewrite the complex statement from scratch.

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

A View and a Function are very similar to each other as they are both used to store a complex Select statement to allow end users to obtain an output from the database. However, unlike views, we can define parameters in a function to change the results of the query as the Select statement is executed. For example, we can declare a variable as the parameter for the function and filter the output of the Select statement to a specific value of one of the columns by setting the variable accordingly. This has the same result as using a Where clause when executing a View. A Stored Procedure also functions similarly to a View but it is a set of SQL commands that you execute instead of selecting from in a View.

# Summary

SQL View, Function and Store Procedure are three important tools to implement the abstraction layer for end users of relational database to maximize their efficiency while allowing the SQL developers to maintain scalable queries to help support them. Each of them has their own use case that users should keep in mind to determine the appropriate method to use to satisfy the business requirement of their SQL query.