

Everet Wang

November 23, 2021

IT FDN 130 A

Assignment 06

<https://github.com/yogibear24/DBFoundations>

Assignment 06 – Views

Introduction

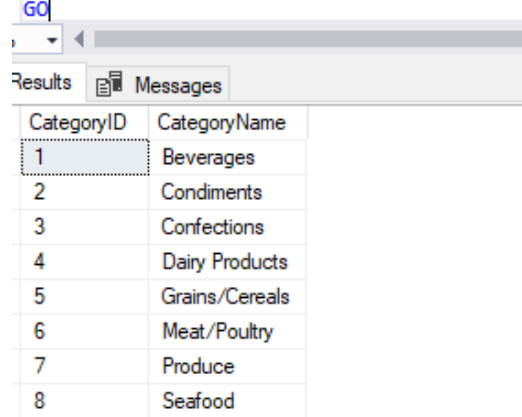
In this paper I will explain when to use a SQL View. I will also go over the differences and similarities between a View, Function, and Stored Procedure.

When to Use a SQL View

SQL Views are used to save a SELECT query within the database for later use (see Figure 1). In addition, Views enable us to create a layer of abstraction from the original database to make code modifications easier (changing the table will not mess up all other queries/code if we use views). Building code directly on our tables may ruin data integrity. Different types of Views include Reporting Views and Basic Views.

```
GO
CREATE VIEW vCategories
WITH SCHEMABINDING
AS
SELECT CategoryID, CategoryName
FROM dbo.Categories; -- Need dbo. here
GO

Select * From [dbo].[vCategories]
GO
```



CategoryID	CategoryName
1	Beverages
2	Condiments
3	Confections
4	Dairy Products
5	Grains/Cereals
6	Meat/Poultry
7	Produce
8	Seafood

Figure 1: An example of a SQL View. The View is similar to a SELECT statement, and it can be used for later usage such as selecting from the View when needed.

The Differences and Similarities Between a View, Function, and Stored Procedure

Views, Functions, and Stored Procedures are all similar in that they all produce results similar to SELECT Statements. However, the differences between them are that Stored Procedures cannot be selected from, while Functions and Views can be. Functions and Stored Procedures, unlike Views, can return tables of values as well as single values. In addition, Functions and Stored Procedures can take in parameter arguments, unlike Views.

Summary

I have learned a lot about Views, Functions, and Stored Procedures in this module, such as with the situations in when to use a SQL View, as well as the similarities and differences between Views, Functions, and Stored Procedures, and we have specifically discussed in-detail about most of these topics in this writeup.