Querying with Transact-SQL

Lab 11 – Error Handling and Transactions

Overview

In this lab, you will use Transact-SQL to implement error handling and transactions in the **AdventureWorksLT** database.

What You'll Need

 An SQL Server Database instance with the **AdventureWorksLT** sample database.

Challenge 1: Logging Errors

You are implementing a Transact-SQL script to delete orders, and you want to handle any errors that occur during the deletion process.

Tip: Review the documentation for THROW and TRY…CATCH in the Transact-SQL Language Reference.

1. Throw an error for non-existent orders

You are currently using the following code to delete order data:

```
DECLARE @SalesOrderID int = <the_order_ID_to_delete>

DELETE FROM SalesLT.SalesOrderDetail WHERE SalesOrderID = @SalesOrderID;

DELETE FROM SalesLT.SalesOrderHeader WHERE SalesOrderID = @SalesOrderID;
```

This code always succeeds, even when the specified order does not exist. Modify the code to check for the existence of the specified order ID before attempting to delete it. If the order does not exist, your code should throw an error. Otherwise, it should go ahead and delete the order data.

2. Handle errors

Your code now throws an error if the specified order does not exist. You must now refine your code to catch this (or any other) error and print the error message to the user interface using the PRINT command.

Next Steps

Well done! You've completed the *Querying with Transact-SQL* course, and you should now have a basic knowledge of the core Transact-SQL statements and syntax. To deepen your knowledge of Transact-SQL, check out the following resources:

- **Transact-SQL Reference**. This online documentation includes a detailed reference to TransactSQL keywords and syntax.
- **T-SQL Querying** (Microsoft Press, 2015), by Itzik Ben-Gan, Adam Machanic, Dejan Sarka, and Kevin Farlee. This book gives database developers and administrators a detailed look at the internal architecture of T-SQL and is the comprehensive programming reference for T-SQL querying.