Error Functions

Within the CATCH block, you can use functions to get detailed error information:

\* ERROR\_NUMBER(): Returns the error number.

\* ERROR\_SEVERITY(): Returns the severity.

\* ERROR\_STATE(): Returns the error state number.

\* ERROR\_PROCEDURE(): Returns the name of the stored procedure or trigger where the error occurred.

\* ERROR\_LINE(): Returns the line number where the error occurred.

\* ERROR\_MESSAGE(): Returns the complete text of the error message.

**Understanding Error Functions in T-SQL**

**Introduction**

In T-SQL (Transact-SQL used in Microsoft SQL Server), error handling is an essential aspect of writing robust and reliable database applications. SQL Server provides several functions that can be used within a CATCH block of a TRY...CATCH construct to retrieve detailed information about errors. Understanding these functions is crucial for diagnosing and responding to errors effectively.

**Error Functions Overview**

* **ERROR\_NUMBER()**
  + Purpose: Returns the error number of the error that caused the CATCH block to be executed.
  + Usage: Useful for identifying the specific error that occurred.
* **ERROR\_SEVERITY()**
  + Purpose: Returns the severity level of the error.
  + Usage: Helps in understanding the nature and seriousness of the error. Severity levels range from 0 to 25.
* **ERROR\_STATE()**
  + Purpose: Returns the state number of the error.
  + Usage: Useful for providing additional information about the error or to distinguish between errors with the same number.
* **ERROR\_PROCEDURE()**
  + Purpose: Returns the name of the stored procedure or trigger in which the error occurred.
  + Usage: Essential for identifying the source of the error in complex systems with multiple procedures and triggers.
* **ERROR\_LINE()**
  + Purpose: Returns the line number where the error occurred.
  + Usage: Helps in pinpointing the exact location in the code where the error was raised, facilitating quicker debugging.
* **ERROR\_MESSAGE()**
  + Purpose: Provides the complete text of the error message.
  + Usage: Offers a detailed description of the error, which is valuable for understanding what went wrong.