

Part 56 – Error Handling in SQL Server 2005 & Later versions

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In this session we will learn

- Error handling in SQL server 2005 and later versions

Prerequisite:

Part 18 - Stored procedures

Part 55 - Error Handling in SQL Server 2000

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Error handling

With the introduction of Try/Catch blocks in SQL Server 2005, error handling in sql server, is now similar to programming languages like C#, and java.

Error Handling in SQL Server 2000 - @@Error

Error Handling in SQL Server 2005 & later - Try...Catch

tblProduct			
ProductId	Name	UnitPrice	QtyAvailable
1	Laptops	2340	90
2	Desktops	3467	50

tblProductSales		
ProductSalesId	ProductId	QuantitySold
1	1	10
2	1	10

RAISERROR('Error Message', ErrorSeverity, ErrorState)

Create and return custom errors

Severity level = 16 (indicates general errors that can be corrected by the user)

State = Number between 1 & 255. RAISERROR only generates errors with state from 1 through 127.

Try/Catch Syntax

```
--Syntax:
BEGIN TRY
    { Any set of SQL statements }
END TRY
BEGIN CATCH
    [ Optional: Any set of SQL statements ]
END CATCH
[Optional: Any other SQL Statements]
```

```
--System Functions to retrieve
--error information:
ERROR_NUMBER ()
ERROR_MESSAGE ()
ERROR_PROCEDURE ()
ERROR_STATE ()
ERROR_SEVERITY ()
ERROR_LINE ()
```

Any set of SQL statements, that can possibly throw an exception are wrapped between BEGIN TRY and END TRY blocks. If there is an exception in the TRY block, the control immediately jumps to the CATCH block. If there is no exception, CATCH block will be skipped, and the statements, after the CATCH block are executed.

Errors trapped by a CATCH block are not returned to the calling application. If any part of the error information must be returned to the application, the code in the CATCH block must do so by using RAISERROR() function.

In the scope of the CATCH block, there are several system functions, that are used to retrieve more information about the error that occurred. These functions return NULL if they are executed outside the scope of the CATCH block. **TRY/CATCH cannot be used in a user-defined functions.**

Additional Resources

- PRAGIM Home Page:

- www.PragimTech.com

- Resources:

- ASP.NET Interview Questions
- www.VenkatASPInterview.Blogspot.com
- C# Interview Questions
- www.VenkatCSharpInterview.Blogspot.com
- SQL Server Interview Questions
- www.venkatsqlinterview.Blogspot.com