

Part 66 – Writing re-runnable SQL Server scripts

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In this session we will learn

- Writing re-runnable sql server scripts

SQL Server Video Series

Part 63 - Cursors

Part 64 - Replacing cursors using joins

Part 65 - List all tables in a sql server database using a query

Link to Dot Net Basics, ASP.NET, C#, ADO.NET and SQL Server video series

<http://www.youtube.com/user/kudvenkat/videos?view=1>

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Re-runnable SQL Server Scripts

What is a re-runnable SQL Script?

A re-runnable script is a script, that, when run more than once, will not throw errors.

```
-- This script is not re-runnable
USE [Sample]
Create table tblEmployee
(
    ID int identity primary key,
    Name nvarchar(100),
    Gender nvarchar(10),
    DateOfBirth DateTime
)
```

To make this script re-runnable

1. Check for the existence of the table
 2. Create the table if it does not exist
 3. Else print a message stating, the table already exists
- 

```
Use [Sample]
If not exists (select * from information_schema.tables where table_name = 'tblEmployee')
Begin
    Create table tblEmployee
    (
        ID int identity primary key,
        Name nvarchar(100),
        Gender nvarchar(10),
        DateOfBirth DateTime
    )
    Print 'Table tblEmployee successfully created'
End
Else
Begin
    Print 'Table tblEmployee already exists'
End
```

Re-runnable SQL Server Scripts

Sql server built-in function **OBJECT_ID()**, can also be used to check for the existence

```
IF OBJECT_ID('tblEmployee') IS NULL
Begin
    -- Create Table Script
    Print 'Table tblEmployee created'
End
Else
Begin
    Print 'Table tblEmployee already exists'
End
```

Drop (if the table already exists) and re-create

```
Use [Sample]
IF OBJECT_ID('tblEmployee') IS NOT NULL
Begin
    Drop Table tblEmployee
End
Create table tblEmployee
(
    ID int identity primary key,
    Name nvarchar(100),
    Gender nvarchar(10),
    DateOfBirth DateTime
)
```

Re-runnable SQL Server Scripts

This script is not re-runnable because, if the column exists we get a script error.

```
Use [Sample]
ALTER TABLE tblEmployee
ADD EmailAddress nvarchar(50)
```

To make this script re-runnable, check for the column existence

```
Use [Sample]
if not exists(Select * from INFORMATION_SCHEMA.COLUMNS where COLUMN_NAME='EmailAddress'
and TABLE_NAME = 'tblEmployee' and TABLE_SCHEMA='dbo')
Begin
    ALTER TABLE tblEmployee
    ADD EmailAddress nvarchar(50)
End
Else
BEGin
    Print 'Column EmailAddress already exists'
End
```

Col_length() function can also be used to check for the existence of a column

```
If col_length('tblEmployee','EmailAddress') is not null
Begin
    Print 'Column already exists'
End
Else
Begin
    Print 'Column does not exist'
End
```

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