**Tax Management – Copenhagen**

Database Design – Created the database in Sql Server –

Username: danskeuser

Password: dansbe@123

DB Name : CopenhagenTaxDB

Tables Created

User\_Master - To store user details – Currently not used – Inserted one record manually and hardcoded the id in the WebAPI

Muncipality\_Master – To store Muncipality details

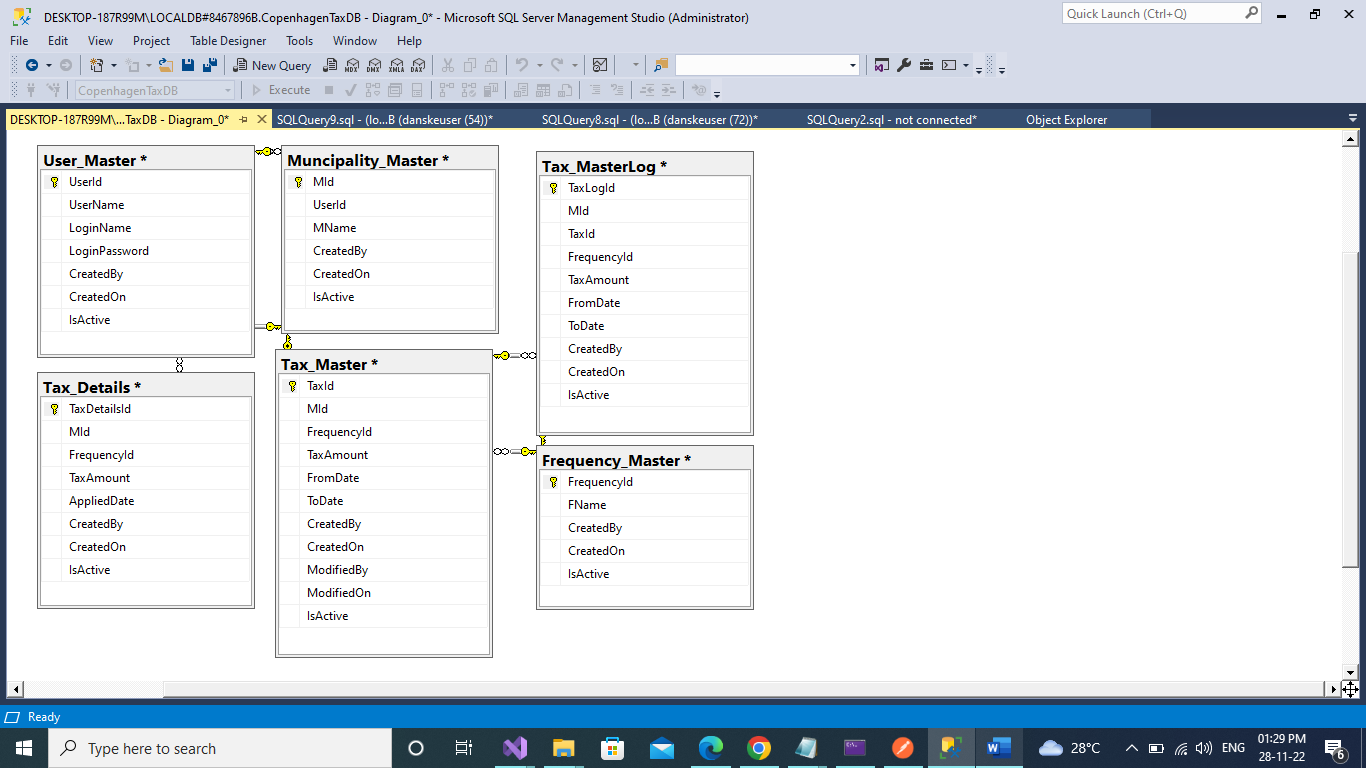
Tax\_Master – To store the tax details of the municipality for the specified periods

Tax\_Details – To store tax applied details on each date based on scheduled job [not implemented]

Tax\_MasterLog – To keep history of the Tax\_Master in case of update and delete

Frequency\_Master - To store the frequency details

All tables are created based on Normalization [Primary – Foreign key]



**DB Scripts**

**User\_Master**

/\*To Save User Credentials\*/

CREATE TABLE User\_Master(

UserId INT PRIMARY KEY IDENTITY(1,1),

UserName NVARCHAR(50) NOT NULL,

LoginName NVARCHAR(100) NOT NULL,

LoginPassword NVARCHAR(100) NOT NULL,

CreatedBy INT ,

CreatedOn DATETIME,

IsActive INT);

INSERT INTO User\_Master(UserName,LoginName,LoginPassword,CreatedBy,CreatedOn,IsActive) VALUES

('Mary','mary.renjith@gmail.com','Test',1,GETDATE(),1)

**Muncipality\_Master**

/\*To Store Muncipality Details\*/

CREATE TABLE Muncipality\_Master(

MId INT PRIMARY KEY IDENTITY(1,1),

UserId INT NOT NULL,

MName NVARCHAR(100) NOT NULL,

CreatedBy INT ,

CreatedOn DATETIME,

IsActive INT);

INSERT INTO Muncipality\_Master(UserId,MName,CreatedBy,CreatedOn,IsActive) VALUES(1,'Copenhagen',1,GETDATE(),1)

**Tax\_Master**

/\*To Store Tax configuration\*/

CREATE TABLE Tax\_Master(

TaxId INT PRIMARY KEY IDENTITY(1,1),

MId INT NOT NULL,

FrequencyId INT NOT NULL,

TaxAmount Decimal(3,2),

FromDate DATETIME,

ToDate DATETIME,

CreatedBy INT ,

CreatedOn DATETIME,

ModifiedBy INT,

ModifiedOn DATETIME,

IsActive INT);

**Tax\_Details**

/\*To store applied tax details of each muncipality by the job scheduler\*/

CREATE TABLE Tax\_Details(

TaxDetailsId INT PRIMARY KEY IDENTITY(1,1),

MId INT NOT NULL,

FrequencyId INT,

TaxAmount Decimal(3,2),

AppliedDate DATETIME,

CreatedBy INT ,

CreatedOn DATETIME,

IsActive INT);

**Tax\_MasterLog**

/\*To Store Tax\_Master History\*/

CREATE TABLE Tax\_MasterLog(

TaxLogId INT PRIMARY KEY IDENTITY(1,1),

MId INT NOT NULL,

TaxId INT NOT NULL,

FrequencyId INT NOT NULL,

TaxAmount Decimal(3,2),

FromDate DATETIME,

ToDate DATETIME,

CreatedBy INT ,

CreatedOn DATETIME,

IsActive INT);

**Frequency\_Master**

/\*To store frequency details\*/

CREATE TABLE Frequency\_Master(

FrequencyId INT PRIMARY KEY IDENTITY(1,1),

FName NVARCHAR(30),

CreatedBy INT ,

CreatedOn DATETIME ,

IsActive INT

)

INSERT INTO TaxFrequency\_Master(FName,CreatedBy,CreatedOn,IsActive) VALUES('Yearly',1,GETDATE(),1)

INSERT INTO TaxFrequency\_Master(FName,CreatedBy,CreatedOn,IsActive) VALUES('Monthly',1,GETDATE(),1)

INSERT INTO TaxFrequency\_Master(FName,CreatedBy,CreatedOn,IsActive) VALUES('Weekly',1,GETDATE(),1)

INSERT INTO TaxFrequency\_Master(FName,CreatedBy,CreatedOn,IsActive) VALUES('Daily',1,GETDATE(),1)

USE [CopenhagenTaxDB]

GO

/\*\*\*\*\*\* Object: StoredProcedure [dbo].[AddTax] Script Date: 28-11-22 06:34:16 AM \*\*\*\*\*\*/

SET ANSI\_NULLS ON

GO

SET QUOTED\_IDENTIFIER ON

GO

/\* procedure to insert Tax configuration to Tax\_Master \*/

CREATE PROCEDURE [dbo].[AddTax] (

@UserId INT,

@MId INT,

@FrequencyId INT,

@TaxAmount Decimal(3,2),

@FromDate DATETIME,

@ToDate DATETIME,

@TaxId INT OUTPUT)

AS

BEGIN

BEGIN TRY

BEGIN TRANSACTION

IF NOT EXISTS (SELECT \* FROM Tax\_Master WHERE ((@FromDate BETWEEN FromDate AND ToDate) OR (@ToDate BETWEEN FromDate AND ToDate)) AND FrequencyId = @FrequencyId AND Mid=@MId)

BEGIN

INSERT INTO Tax\_Master(MId,FrequencyId,TaxAmount,FromDate,ToDate,CreatedBy,CreatedOn,IsActive) VALUES(@MId,@FrequencyId,@TaxAmount,@FromDate,@ToDate,@UserId,GETDATE(),1)

SET @TaxId = @@IDENTITY

END

ELSE

SET @TaxId = 0

COMMIT TRANSACTION

END TRY

BEGIN CATCH

-- Transaction uncommittable

IF (XACT\_STATE()) = -1

ROLLBACK TRANSACTION

-- Transaction committable

IF (XACT\_STATE()) = 1

COMMIT TRANSACTION

END CATCH

END

USE [CopenhagenTaxDB]

GO

/\*\*\*\*\*\* Object: StoredProcedure [dbo].[GetTaxDetails] Script Date: 28-11-22 09:48:00 AM \*\*\*\*\*\*/

SET ANSI\_NULLS ON

GO

SET QUOTED\_IDENTIFIER ON

GO

CREATE PROCEDURE [dbo].[GetTaxDetails]

@MId INT,

@Date datetime

As

BEGIN

-- SET NOCOUNT ON added to prevent extra result sets from

-- interfering with SELECT statements.

SET NOCOUNT ON;

BEGIN TRY

SELECT MM.MName, @Date AS givenDate, FM.FName, TM.TaxAmount

FROM Tax\_Master TM INNER JOIN Muncipality\_Master MM ON TM.MId = MM.MId

INNER JOIN Frequency\_Master FM ON TM.FrequencyId = FM.FrequencyId

WHERE (@Date BETWEEN TM.FromDate AND TM.ToDate) AND TM.MId = @MId

END TRY

BEGIN CATCH

/\* Log Error \*/

END CATCH

END

GO