# Overview

To familiarize developers with Synergy Schemas, the Synergy Data Language, CU SQL table creation scripts, and associated tools.

# Resources

* [Getting Started With Repository](https://www.synergex.com/docs/versions/v111/index.htm#rps/1_WELCOME_RPS.htm)
* [Synergy Data Language](https://www.synergex.com/docs/versions/v111/index.htm#rps/6_SDL.htm)
* [SQL Coding Standards](http://jobfunc2.cu.net/Job%20Functions/Programmer/Programmer%20Handbook/Tims%20Best%20Practices%20-%20Standards/Database%20Best%20Practices%20-%20SQL%20Coding%20Standards.docx)

# Exercise – Creating a Schema

1. Using Visual Studio, or your preferred text editor, create a new file “**…\Synergy\Schemas\DemoMas.schema**”.
2. In “**DemoMas.schema**” add the following text:

;;; <SUMMARY>

;;; Training Demo Master File.

;;; </SUMMARY>

**Structure** DemoMas

USER DEFINED

**FIELD** DemoCode

TYPE ALPHA

SIZE 5

**FIELD** Description

TYPE ALPHA

SIZE 30

**FIELD** Active

TYPE DECIMAL

SIZE 1

**FIELD** Date

**TEMPLATE** DATE\_TEMPLATE

**FIELD** Comment

TYPE ALPHA

SIZE 72

DIMENSION 4

1. Save the file.
2. Compile the script using: “**…Synergy\BuildSynergyWindowsLibrary.bat**”

# Exercise – Creating a CU SQL Table Creation Script

1. Using Visual Studio, Microsoft SQL Server Management Studio, or your preferred text editor, create a new file “**…\DatabaseDefinitions\DemoMas.dox**”.
2. In “**DemoMas.dox**” add the following text:

--@ <name>Demo Master</name>

--@ <summary>

--@ Training Demo Master file.

--@ </summary>

**create** **table** dbo.DemoMas

(

--@ <summary>

--@ The Demo Code - unique key of the table.

--@ </summary>

DemoCode CHAR( 5 ) **NOT** **NULL**,

--@ <summary>

--@ The DemoMas description.

--@ </summary>

Description VARCHAR( 30 ) **NOT** **NULL**,

--@ <summary>

--@ Is this DemoMas record active?

--@ </summary>

Active NUMERIC( 1 ) **NOT** **NULL**,

--@ <summary>

--@ Date for the DemoMas record.

--@ </summary>

Date NUMERIC( 8 ) **NOT** **NULL**,

--@ <summary>

--@ Comment line 1 for this DemoMas record.

--@ </summary>

Comment1 VARCHAR( 72 ) **NOT** **NULL**,

--@ <summary>

--@ Comment line 2 for this DemoMas record.

--@ </summary>

Comment2 VARCHAR( 72 ) **NOT** **NULL**,

--@ <summary>

--@ Comment line 3 for this DemoMas record.

--@ </summary>

Comment3 VARCHAR( 72 ) **NOT** **NULL**,

--@ <summary>

--@ Comment line 4 for this DemoMas record.

--@ </summary>

Comment4 VARCHAR( 72 ) **NOT** **NULL**,

--@ <summary>

--@ The DemoMas primary key.

--@ </summary>

**CONSTRAINT** PK\_DEMOMAS **PRIMARY** **KEY**( DemoCode )

)

GO

1. Using Microsoft SQL Server Management Studio, execute the table creation script to create the DemoMas table in your personal database.
2. Using Microsoft SQL server Management Studio, view the DemoMas table using the following statement:

**SELECT**

\*

**FROM** dbo.DemoMas

# Discussion

This is just a brief introduction to the Schemas, the Synergy Data Language, CU SQL table creation scripts, and associated tools. All of the subjects we covered have much more detail and capabilities.