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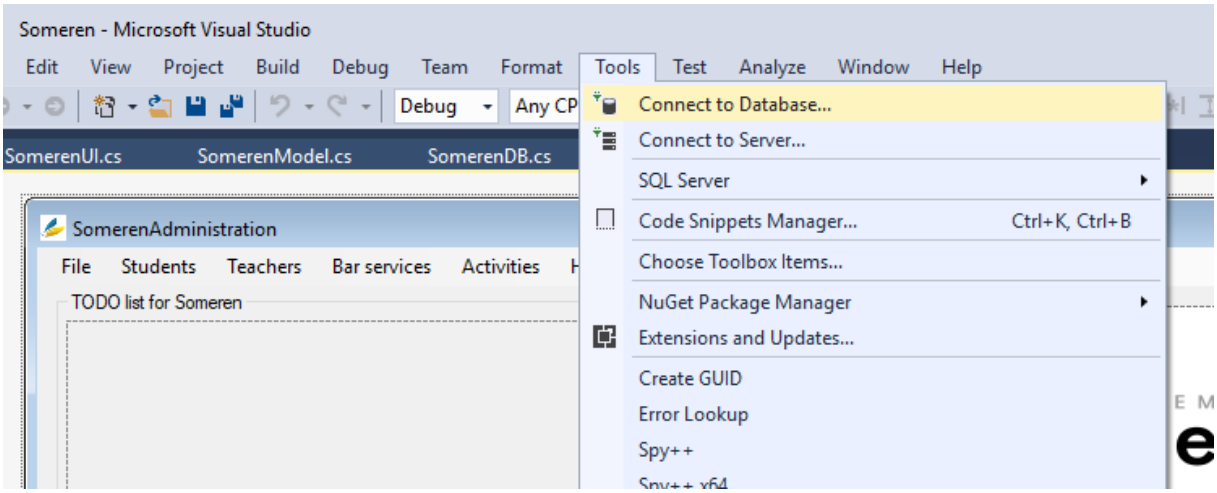
Creating tables using the Database Connector Tool in Visual Studio

As soon as you have finished your ERD and are ready to create your database tables, you need a tool to do so.

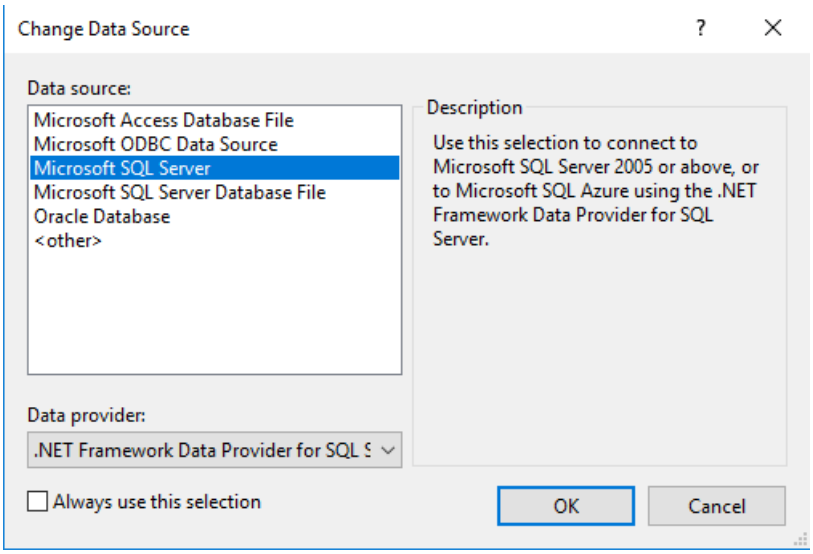
You can use various tools such as SQL Server Management Studio or other commercial packages.

However, a tool called 'Database Connector' is implemented in Visual Studio to give you quick and easy access to your database tables lay-out to use both SQL-DDL (for creating and editing database structure) and SQL-DML (for firing select, update, delete queries) in one developer-friendly user interface.

1. Connecting to your database



a. Go to Tools > Connect to Database…



b. As a Data Source, choose 'Microsoft SQL Server'

c. You need the credentials you have received from the Project Coordinator, they are made available to your group on the File Exchange (BlackBoard) of your group/team.

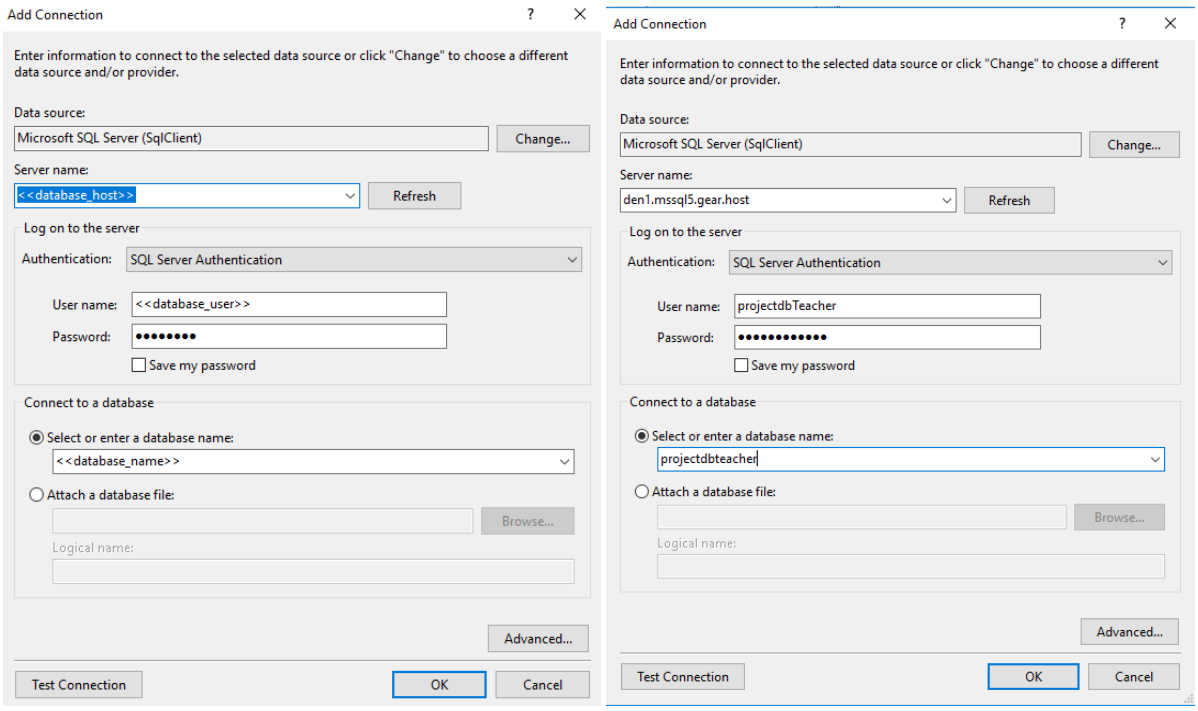
Fill in the credentials you have received.

As authentication method, use ‘SQL Server Authentication’.

Once you have entered the <<database_host>>, <<database_username>> and <<database_password>> (replace with your own credentials from the File Exchange), a list will load with the databases currently connected to your username.

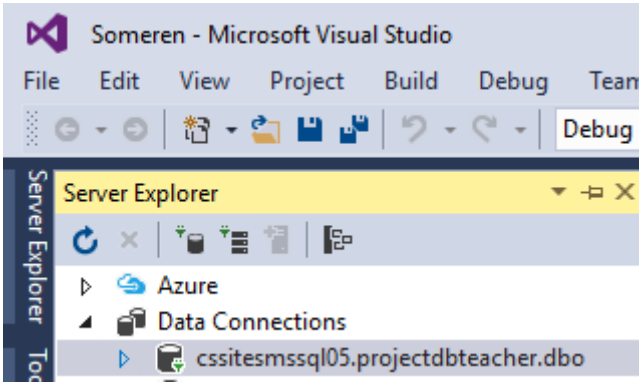
Loading the database names can take a while. If you experience a timeout: please try again.

Select the database name (usually the same as your database_username) provided by File Exchange.



After you have selected or entered a database name, press the ‘Test Connection’ button. If you receive an error, try to retrace your steps to ensure you have used the right credentials. If the test succeeds, press OK and go to step D.

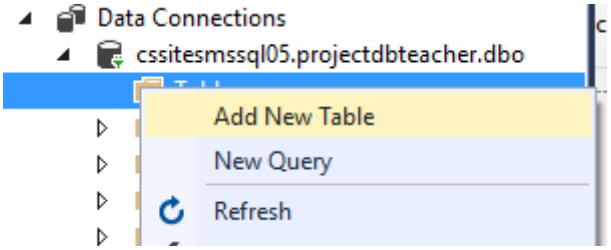
d. In your ‘Server Explorer’ widget, a new Data Connection has been created (as seen in picture below).



2. Creating your first table with the Database Connector Tool

a. When you click on the newly created Data Connection in previous steps, you can expand the list and see that there is a folder named 'Tables'. This is the place to create and manage your database tables.

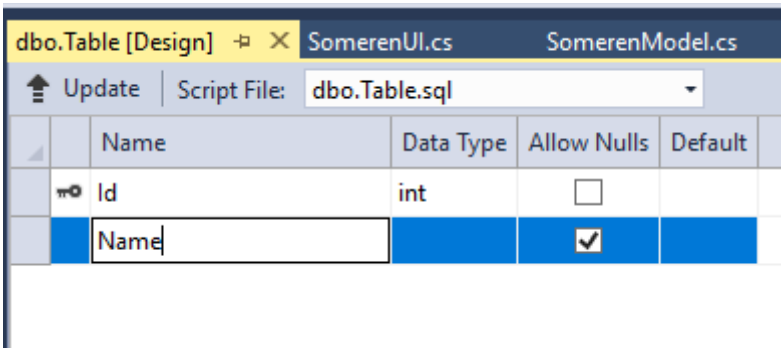
b. When you right click on the 'Tables' folder, you get a Context Menu with several options. Select the option 'Create Table'.



c. The Table Design View will be shown.

Here you can define the columns of your first Table, let's say: the Students table.

A student has an Id and a Name. The Id has already been added automatically, so we need to add the Name attribute (or: column) ourselves.



The Data Type would be 'text', because the name would consist of text, not numbers (int).

When you click on the 'Update' button in the top left corner of the Designer View, a Script Preparation window opens. Once you click on 'Update Database', your changes will be committed to your newly created Table.

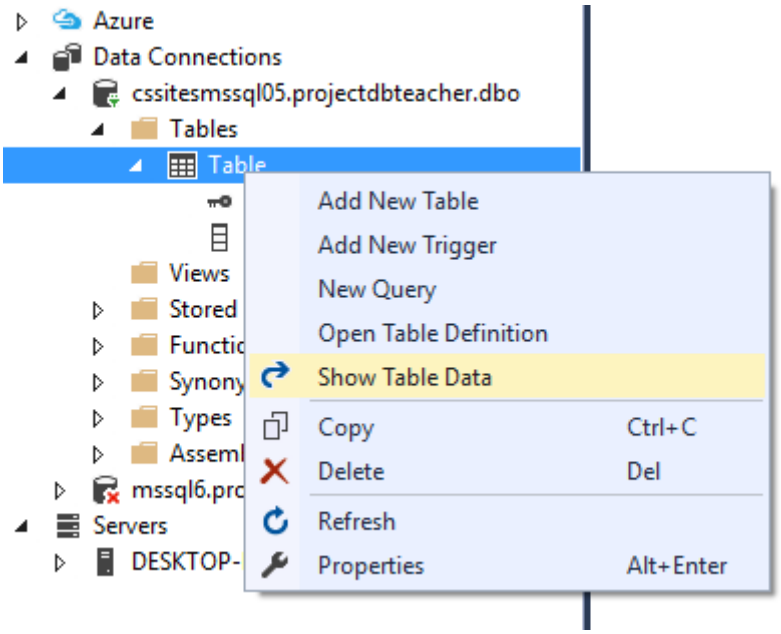
d. By editing the properties (right click on table > Properties) of your newly created Table, you can also rename your table to Students.

3. Adding some example rows

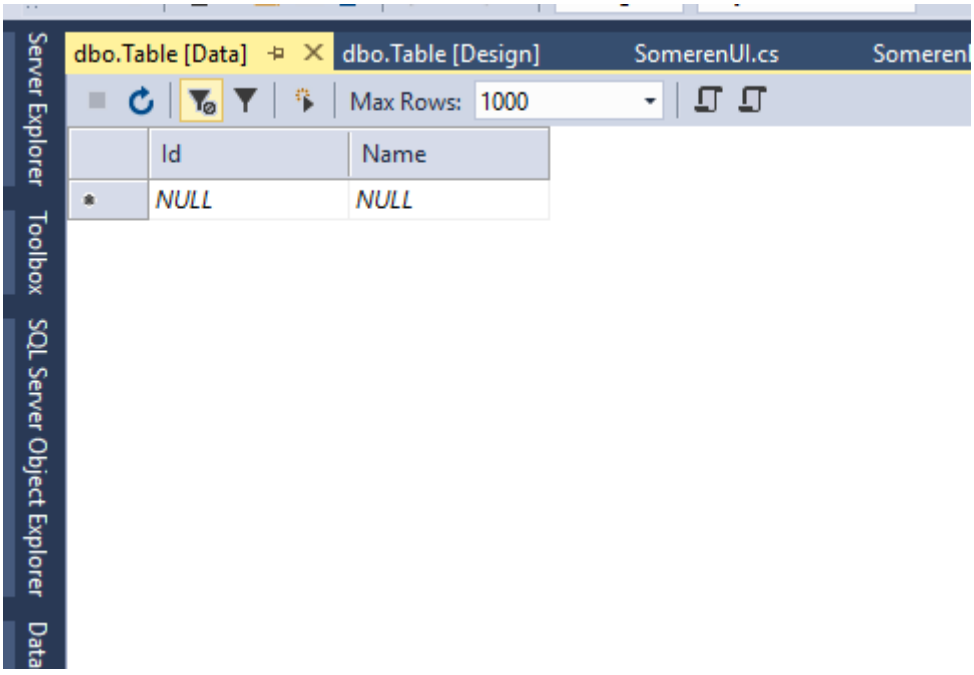
Now that we added our first table structure, we need to fill it with some dummy data.

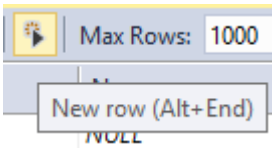
For example the students: Harry, Hermione and Ron.

a. Right click on your newly created table. A context menu will open. Select ‘Show Table Data’



b. You will see of a view of a currently empty table:



c. Click the button with the “New Row” symbol 

d. Fill in the new students ‘Harry’, ‘Hermione’ and ‘Ron’

	Id	Name
	1	Harry
	2	Hermione
	3	Ron
▶*	NULL	NULL

After pressing the ‘Tab key’ to go to the next rule, your table will automatically be updated (a SQL-INSERT query will be executed by the tool for every row you enter).