Tutorial 14

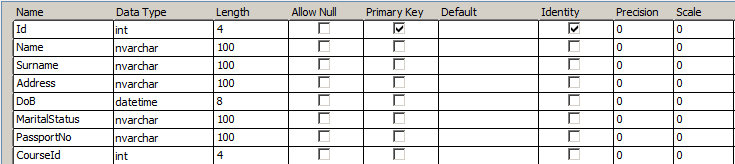
Exercise I - Requirements

Think of possible entities (things) that should be recorded for applicants’ admission in WIUT. Draw a simple ER diagram of the entities.

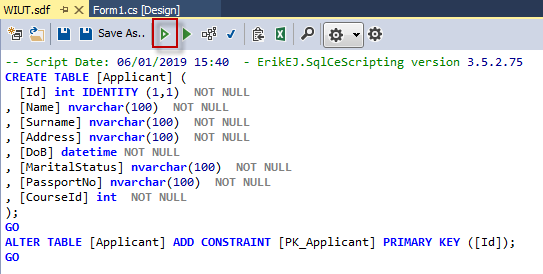
Programming Exercise II – New project

You will have to resemble the structure created in Exercise I in a .Net project.

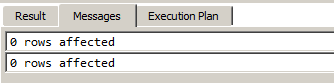
1. If you haven’t do so before, install SQL Server CE tools. Run SQLite\_and\_SQL\_Server\_Compact\_Toolbox\_v4.8.735.vsix file available on intranet.
2. Create new project in Visual Studio. Call it WIUT.
3. Go to Tools -> SQLite/Sql Server Compact Toolbox
4. Right-click the Data Connections, select Add SQL Server Compact 4.0 Connection. Click on Create button and navigate to the project folder. Call it WIUT.sdf as click on Ok button.
5. Create Applicant table in the database:



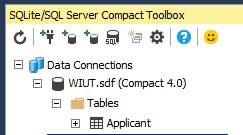
Once you’re done with the structure, click Script button and execute the script with “play” button from the toolbar:



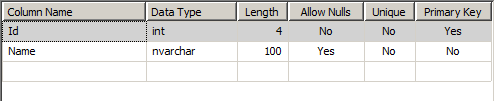
If everything went OK you should see the following in the bottom part of the window:



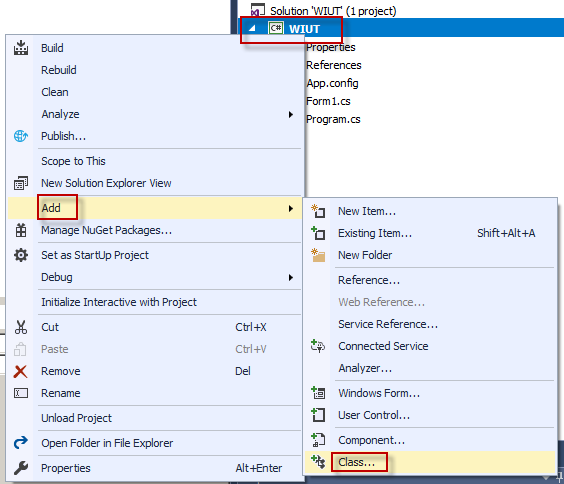
and new table should be shown in the database tree:



1. Create Course table in the database:



1. Resemble corresponding classes in your C# project. Set up member variables, properties and constructors.
   1. Right click the project and select Add -> New class



* 1. Name the class as the database table
  2. Add properties for each of the database fields
  3. Add parameterless constructor
  4. Add constructor with all the fields

1. Create FormLoad event in the Form1 and create an applicant and a course. Show some properties of the applicant in messagebox:

private void Form1\_Load(object sender, EventArgs e)

{

var bis = new Course("BIS");

var applicant = new Applicant("Anna",

"Kozlova",

"T. Malik 100/15",

new DateTime(1995, 4, 10),

"Single",

"AA 123456",

bis);

MessageBox.Show($"{applicant.Name} is on {applicant.Course.Name}");

}

Home work

Recap SQL statements used to retrieve, create, update and delete data from a database.