

Coding .NET Assessment

Andrei Bulai

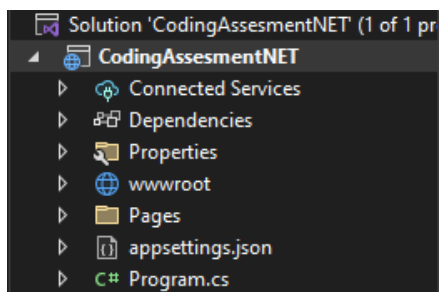
Backend : ASP.NET (MVC) with SQL Server DB

Frontend : Web Pages MVC

Next, I will present the necessary steps to be able to create an ASP.NET backend connected to a database, in this case, SQL Server.

1. In Visual Studio:

- Create New Project
- Select ASP.NET Core Web App



1. Download SQL Server (Express) and test connection

```
C:\Users\Andrei.Bulai>sqlcmd -S localhost
Canceling connection...

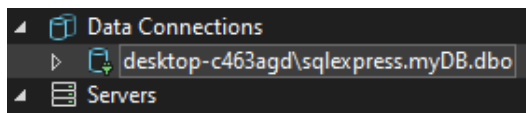
C:\Users\Andrei.Bulai>sqlcmd -S localhost\SQLEXPRESS
1> select @@version
2> go

-----
Microsoft SQL Server 2022 (RTM) - 16.0.1000.6 (X64)
Oct  8 2022 05:50:25
Copyright (C) 2022 Microsoft Corporation
Express Edition (64-bit) on Windows 10 Enterprise 10.0 <X64> (Build 19H45: ) (Hypervisor)

(1 rows affected)
1>
```

2. Creating SQL Server database:

- View -> Server Explorer
- Connect to Database -> Add Connection -> Microsoft SQL Server -> Change Data Source -> Ok.
Server name: .\sqlexpress
Database name: myDB



- Creating Tables:

➤ Owners

The screenshot shows a SQL query window with the following code:

```

1 CREATE TABLE Owners (
2     id INT NOT NULL PRIMARY KEY IDENTITY,
3     firstName VARCHAR(255) NOT NULL,
4     lastName VARCHAR(255) NOT NULL,
5     driverLicense VARCHAR(255) NOT NULL UNIQUE,
6 );
7
8 INSERT INTO Owners (firstName, lastName, driverLicense)
9 VALUES
10 ('Andrei', 'Bulai', '20359023'),
11 ('Luis', 'Rodrigues', '42353340'),
12 ('Sara', 'Herbello', '52963002'),
13 ('Marius', 'Lungu', '21001554')

```

The status bar indicates '90 %' and '1 row(s) affected'. Below the query window, the 'Data Connections' pane shows the 'Tables' folder expanded, listing 'Owners'. To the right, a table view displays the data:

id	firstName	lastName	driverLicense
1	Andrei	Bulai	20359023
2	Luis	Rodrigues	42353340
3	Sara	Herbello	52963002
4	Marius	Lungu	21001554
NULL	NULL	NULL	NULL

➤ Vehicles

The screenshot shows a SQL query window with the following code:

```

1 CREATE TABLE Vehicles (
2     id INT NOT NULL PRIMARY KEY IDENTITY,
3     brand VARCHAR(255) NOT NULL,
4     vin VARCHAR(255) NOT NULL,
5     color VARCHAR(255) NOT NULL,
6     year VARCHAR(255) NOT NULL,
7     ownerId INT FOREIGN KEY REFERENCES Owners(id)
8 );
9
10 INSERT INTO Vehicles (brand, vin, color, year, ownerId)
11 VALUES
12 ('Volkswagen', 'RD-CT-25-UGI', 'gray', '2009', 1),
13 ('Nissan', 'RD-CT-25-NDU', 'blue', '2022', 1),
14 ('BMW', 'AA-10-20', 'white', '2021', 2),
15 ('Lamborghini', 'AA-11-21', 'black', '2022', 2)

```

The status bar indicates '90 %' and 'No issues found'. Below the query window, the 'Data Connections' pane shows the 'Tables' folder expanded, listing 'Vehicles'. To the right, a table view displays the data:

id	brand	vin	color	year	ownerId
1	Volkswagen	RD-CT-25-UGI	gray	2009	1
2	Nissan	RD-CT-25-NDU	blue	2022	1
3	BMW	AA-10-20	white	2021	2
4	Lamborghini	AA-11-21	black	2022	2
NULL	NULL	NULL	NULL	NULL	NULL

➤ Claims


```

0 references
public void OnPost()
{
    ownerInfo.firstName = Request.Form[key: "firstName"];
    ownerInfo.lastName = Request.Form[key: "lastName"];
    ownerInfo.driverLicense = Request.Form[key: "driverLicense"];

    if (ownerInfo.firstName.Length == 0 || ownerInfo.lastName.Length == 0 || ownerInfo.driverLicense.Length == 0)
    {
        errorMessage = "All the fields are required";
        return;
    }

    // save Owner to DB

    ownerInfo.firstName = ""; ownerInfo.lastName = ""; ownerInfo.driverLicense = "";
    successMessage = "New Owner Added Correctly";
}

```

Demo app (screenshots)

List of Clients

[New Client](#)

ID	Name	Email	Phone	Address	Created At	Action
1	Bill Gates	bill.gates@microsoft.com	+123456789	New York, USA	5/13/2022 9:57:59 AM	Edit Delete
2	Elon Musk	elon.musk@spacex.com	+111222333	Florida, USA	5/13/2022 9:57:59 AM	Edit Delete

New Client

Name

Email

Phone

Address