

ENTITY FRAMEWORK 7 REPOSITORY IN MVC 6

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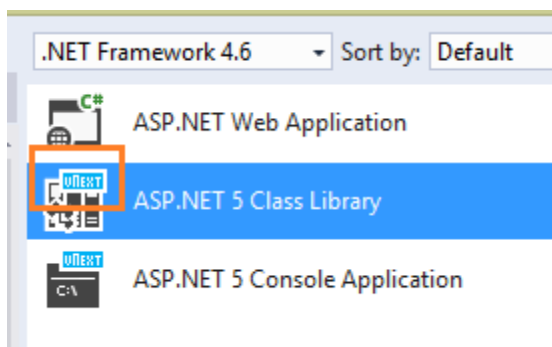
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1, INTRODUCTION

Entity framework 7 is coming for Asp.Net 5 in VS 2015. It can only be used in asp.net 5 library project. It is a brand new entity framework. I will show you what I have done by using this EF 7 repository as data access layer for MVC 6 web application.

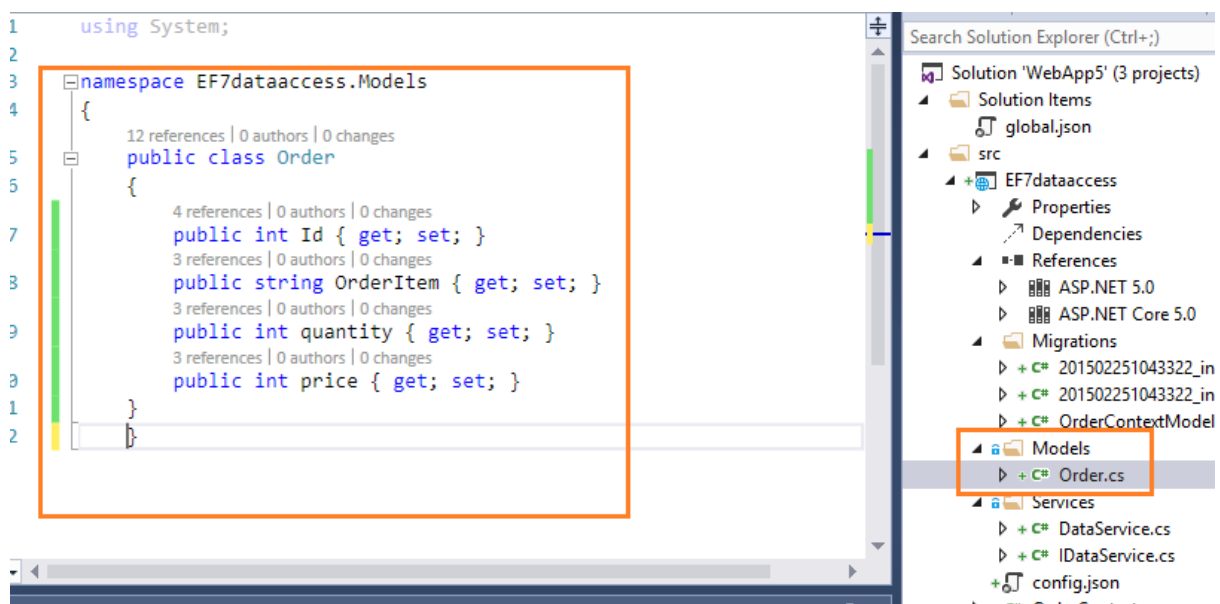
2, GET STARTED

Add an asp.net 5 library project to my existing MVC 6 project as below



This is purely a class library used in asp.net 5 environments only.

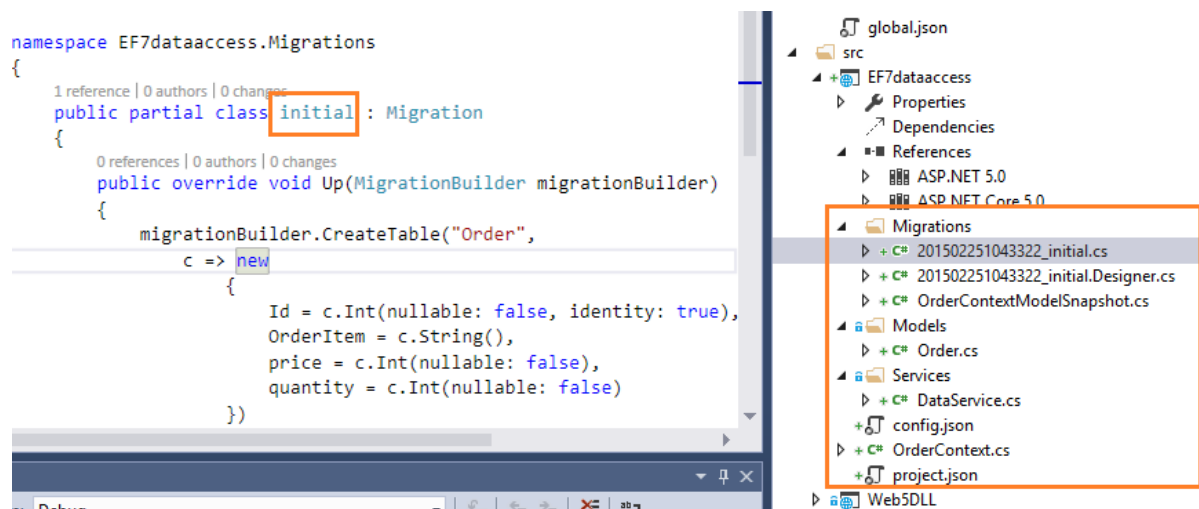
Add a models folder to the project and create a model class called Order that will be the table we will create in SQL server see below



Add a code first class to create a database in SQL server.

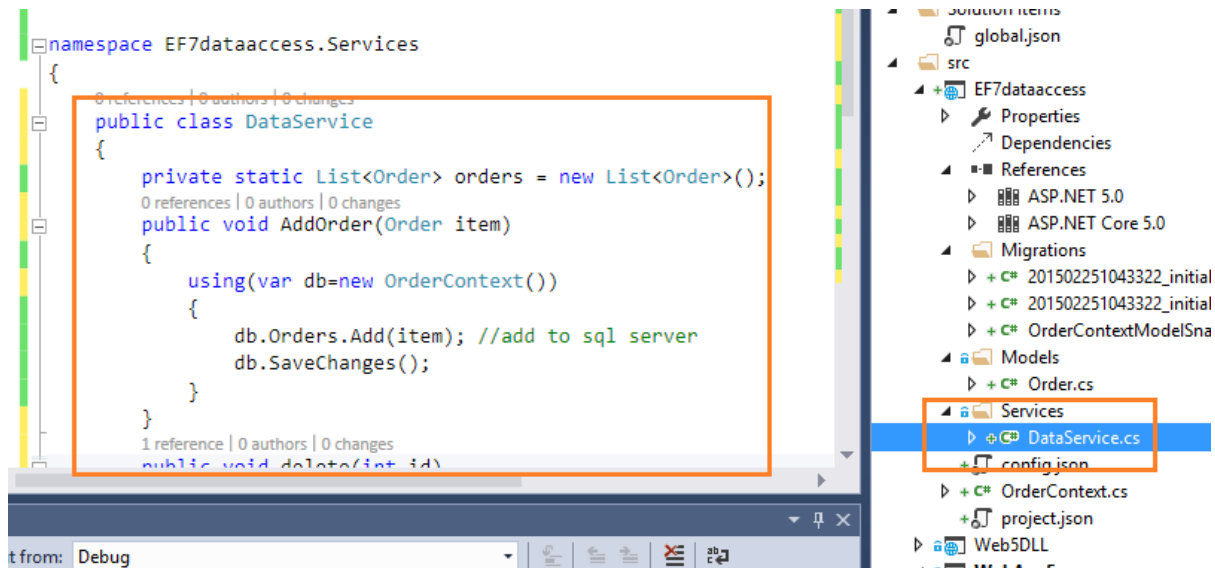
```
6 references | 0 authors | 0 changes
public class OrderContext : DbContext
{
    4 references | 0 authors | 0 changes
    public DbSet<Order> Orders { get; set; } /
    0 references | 0 authors | 0 changes
    protected override void OnConfiguring(DbCo
    {
        builder.UseSqlServer(@"Server: ...; Database: ...; User Id=...; Password=...; TrustServerCertificate=true;")
    }
}
```

This is the same as we did in EF 6. Now EF 7 introduces ef command in project.json to make code first. We need to run k ef migration add "initialblabla" that develops some migration classes for k ef migration apply command that creates database in SQL server. We can see a Migration folder that is created automatically after we run both commands. See below



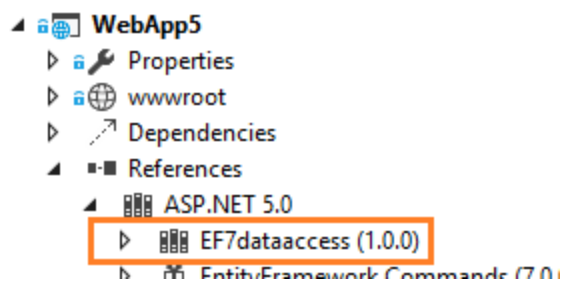
This is the secret of EF 7. That is it. We have database ready to be accessed. Now we can create a repository class to manipulate tables in this database.

Add a services folder and create a Data service class that is the repository class that can talk to DbContext object as EF 6.

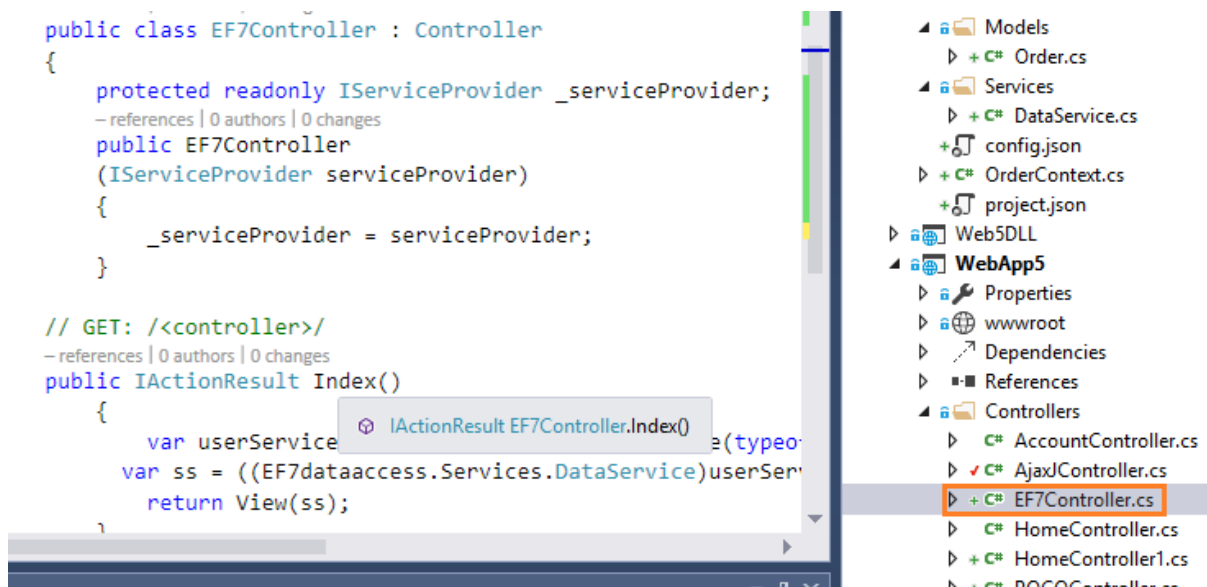


Press F5 to build the project. Now this EF 7 data access layer in MVC 6 has been developed successfully. We can reference it in our MVC 6 project.

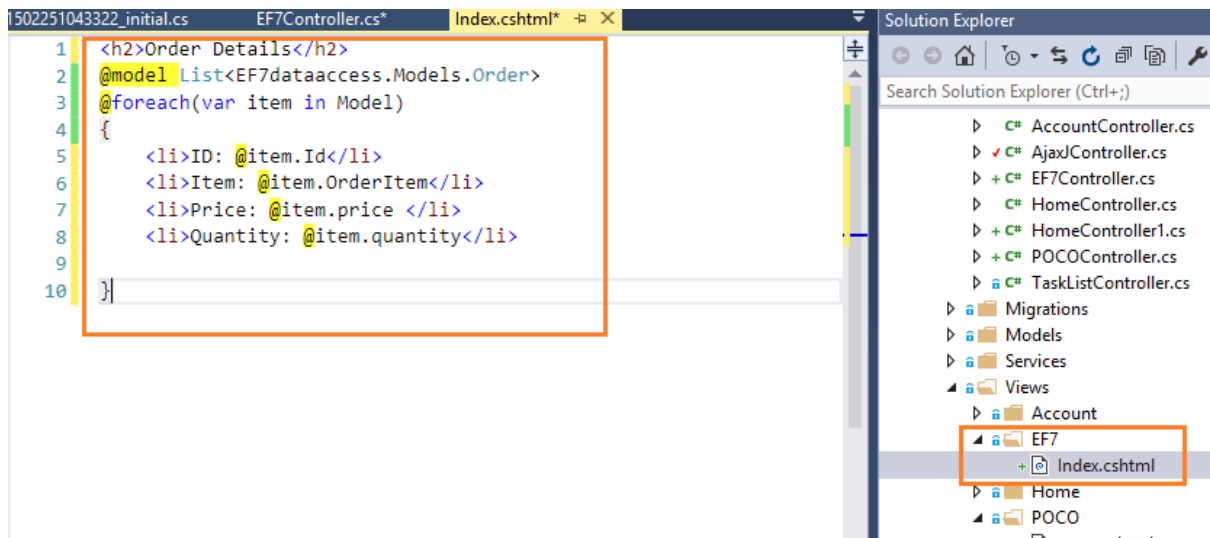
Go to MVC 6 web project to add a reference. This data access layer can be added successfully as below



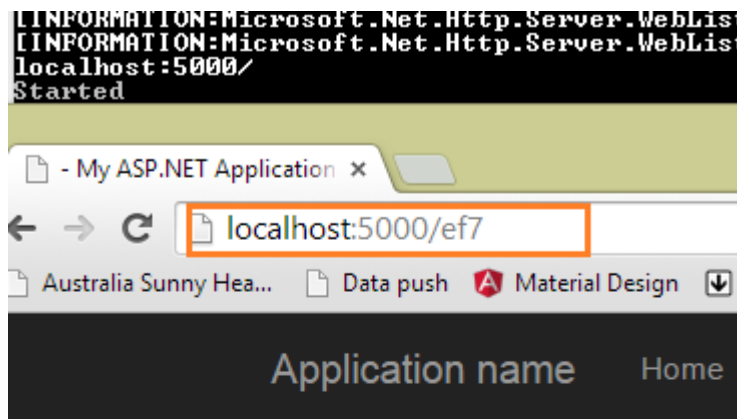
We create a new controller called EF7Controller in MVC 6 as below



We inject the repository class in EF 7 data access layer to controller via IServiceProvider and emit its method to get all order data return from SQL server. We then finally create an EF folder under View and add an index.cshtml as below



Press F5 to run MVC 6 and access to “~/EF7”, we can get final result as below



Order Details

- ID: 1
- Item: Sugar
- Price: 23
- Quantity: 2
- ID: 2
- Item: coffee
- Price: 2
- Quantity: 12
- ID: 3
- Item: salt
- Price: 34
- Quantity: 2

3, SUMMARY

MVC 6 certainly can have its own EF7 based data access layer that could generate code first module for database manipulation as same as EF 6 in MVC 5. Microsoft has successfully migrated EF 6 to EF 7 vid inventing ef command in system that can be used to create database in non .Net environment as well. We can consume EF 7 data as we did in EF 6.