

EFCoreNewDatabase ASPDotNETCore

Jacob Duenke

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Tutorial from: Getting Started with EF Core on ASP.NET Core with a New database

Prerequisites

Install the following: - Visual Studio 2017 version 15.7 or later with these workloads: - ASP.NET and web development (under Web & Cloud) - .NET Core cross-platform development (under Other Toolsets) - .NET Core 2.1 SDK or higher

Create a new project

- Open Visual Studio
- Select **Create a new project**
 - Select **ASP.NET Core Web Application**
 - * Enter **FriendsApp** in the *Project name* field
- In the Create a new ASP.NET Core Web Application screen:
 - Select **.NET Core** and **ASP.NET Core 2.0** or higher
 - Select the **Empty** project template
 - Make sure that Authentication is set to **No Authentication**

Install Entity Framework Core

- For this tutorial, you don't have to install a provider package because the tutorial uses SQL Server.
 - The SQL Server provider package is included in the Microsoft.AspNetCore.App metapackage.

Create the models

- Right-click on the **FriendsApp** Project Name (not the Solution Name above) and select **Add > New Folder**
 - Enter **Models** as the folder name
- Right-click on the **Models** folder and select **Add > Class**
 - Enter **Person.cs** as the file name
- Replace the contents of the file with the following code: **Person.cs code**

```

using Microsoft.EntityFrameworkCore;
using System.Collections.Generic;

namespace FriendsApp.Models
{
    public class Person
    {
        public int ID {get; set;}
        public string FirstName {get; set;}
        public string LastName {get; set;}
        public int Age {get; set;}
        public string Gender {get; set;}
    }
}

```

- Right-click on the *Models* folder and select *Add > Class*
– Enter *FriendsContext.cs* as the file name
- Replace the contents of the file with the following code: *FriendsContext.cs code*

```

using Microsoft.EntityFrameworkCore;
using System.Collections.Generic;

namespace FriendsApp.Models
{
    public class FriendsContext : DbContext
    {
        public FriendsContext(DbContextOptions<FriendsContext> options)
            : base(options)
        { }

        public DbSet<Person> People { get; set; }
    }
}

```

Register the context with dependency injection

- In the *Startup.cs* file, add the following: *Startup.cs > using statements*

```

using FriendsApp.Models;
using Microsoft.EntityFrameworkCore;

Startup.cs > ConfigureServices()

public void ConfigureServices(IServiceCollection services)
{

```

```

services.AddMvc();

string connection = @"Server=(localdb)\mssqllocaldb;Database=Friendship;Trusted_Connection=
services.AddDbContext<FriendsContext>
    (options => options.UseSqlServer(connection));
}

```

Startup.cs > Configure

```

public void Configure(IApplicationBuilder app, IHostingEnvironment env)
{
    app.UseStaticFiles();
    app.UseMvc(routes =>
    {
        routes.MapRoute(
            name: "Default",
            template: "{controller}/{action}/{id?}",
            defaults: new { controller = "People", action = "Index" }
        );
    });
}

```

Create the database

- Select *Tools > NuGet Package Manager > Package Manager Console*
- Run the following commands one at a time: “EFCore database migration commands Add-Migration InitialCreate

then

Update-Database ““

Create a controller and views

- Right-click on the *FriendsApp* Project Name (again, not the Solution Name above) and select *Add > New Folder*
 - Enter *Controllers* as the folder name
- Right-click on the *Controllers* folder and select *Add > Controller*
 - Select *MVC Controller with views, using Entity Framework*
 - * Set Model class to *Person* and Data context class to *FriendsContext*
 - * Make sure that *Use a Layout Page* is *not* selected.

Import ASP.NET Core Tag Helpers

- Right-click on the *Views* folder and select *Add > New Item*
 - On the left, navigate to *ASP.NET Core > Web > ASP.NET*
 - * Select *Razor View Imports* and leave the default ****_ViewImports.cshtml**** file name
- Replace the contents of the file with the following code: “*_ViewImports.cshtml* code @addTagHelper *, Microsoft.AspNetCore.Mvc.TagHelpers

Run the application

- On your keyboard, press CTRL + F5 to start without debugging
 - Displayed in the browser is an empty list of Persons, or Friends
- Click Create New to add your first Friend
 - Explore the rest of the options available

(Optional) Add style to your application

- Select ****Tools > NuGet Package Manager > Package Manager Console****
- Run the following command as one single line:

Bootstrap installation commands libman install twitter-bootstrap@4.0.0-alpha.6
-destination FriendsApp/wwwroot/lib/bootstrap/dist -provider cdnjs “

- Navigate to each individual view .cshtml file
 - In the *< head >* section, add
`< link href="~/lib/bootstrap/dist/css/bootstrap.css" rel="stylesheet" />`
 - In the *< body >* tag, add
`style="margin: 20px; padding: 20px; box-shadow: 0 1px 5px rgba(104, 104, 104, 0.8);"`
 - In every *< a asp-action >* tag, add
`class="btn btn-info"`
 - In every *< table >* tag, add
`class="table table-striped"`