

Step 1 - Terminal

<code>dotnet tool install --global dotnet-ef</code>	You will only ever need to run this once as it is a global install not project specific
<code>dotnet new mvc --no-https -o ProjectDirectoryName</code>	Creates new dotnet MVC Project for development

Step 2 - Terminal (Inside Project Directory)

<code>dotnet add package Pomelo.EntityFrameworkCore.MySql --version 3.1.1</code>	Entity Framework Core provider for MySQL DB's
<code>dotnet add package Microsoft.EntityFrameworkCore.Design --version 3.1.5</code>	EF Core tools for DB creation/migration

These two commands must be run in your project folder every time you set up a new MVC project!

Step 3 - appsettings.json && Startup.cs

```
" DBInfo ":
{
  " Name": " MySQLConnection ",
  " ConnectionString": " server=localhost;userid=root;password=root;port=3306;database=SchemaName;SslMode=None"
}

using Microsoft.EntityFrameworkCore;

services.AddDbContext<MyContext>(options => options.UseMySQL(Configuration["DBInfo:ConnectionString"]));

services.AddSession();

app.UseSession();
```



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Step 4 - Context File

```
using Microsoft.EntityFrameworkCore;
namespace ProjDi rNameModels
{
    public class DBCont ext Cla ssNameDbContext
    {
        DBCont ext Cla ssNameDbContext (options) : base(options) { }
        public ModelName> TableName { get; set; }
        Add more tables here
    }
}
```

Sample code for context model file

Step 5 - Model Example

```
using System;
using System.ComponentModel.DataAnnotations;
namespace ProjDi rNameModels
{
    public class ModelName
    {
        [Key]
        public ModelNameId { get; set; }
        Set all properties here
        public DateTime CreatedAt { get; set; } = DateTime.Now;
        public DateTime UpdatedAt { get; set; } = DateTime.Now;
        Set Navigation Properties
    }
}
```

Class model for database table



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Step 6 - Context Dependency Injection

```
using System;
using System.Collections.Generic;
using System.Linq;
using Microsoft.EntityFrameworkCore;
using ProjDi rNameModels;

public HomeController(Context tCl assName context)
{
    _context = context;

    [HttpGet( " ")]
    public IActionResult Index()
    {
        ModelName> tVariableName= _context. TableName.ToList();

        return View();
    }
}
```

Sample of the code required to make DB Context available in controllers

Step 7 - Terminal - Migration

dotnet ef migrations add MigrationName	Creates a migration in preparation for Creating/Updating your DB Schema
dotnet ef database update	Updates Database schema with most recent migration

This step to be done after all previous steps are complete and, preferably, after all models and relationships are in place.



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