

# Çekirdek Verilerle Veritabanını Tohumlamak

27 Şubat 2020 Perşembe 00:00

<https://docs.microsoft.com/tr-tr/aspnet/core/tutorials/first-mvc-app/working-with-sql?view=aspnetcore-3.1&tabs=visual-studio-code>



```
PS C:\Users\erkan\source\repos\2019\Bahar\Programlama_III\BosAspNetCore> dotnet new --list
Kullanım: new [seceenekler]

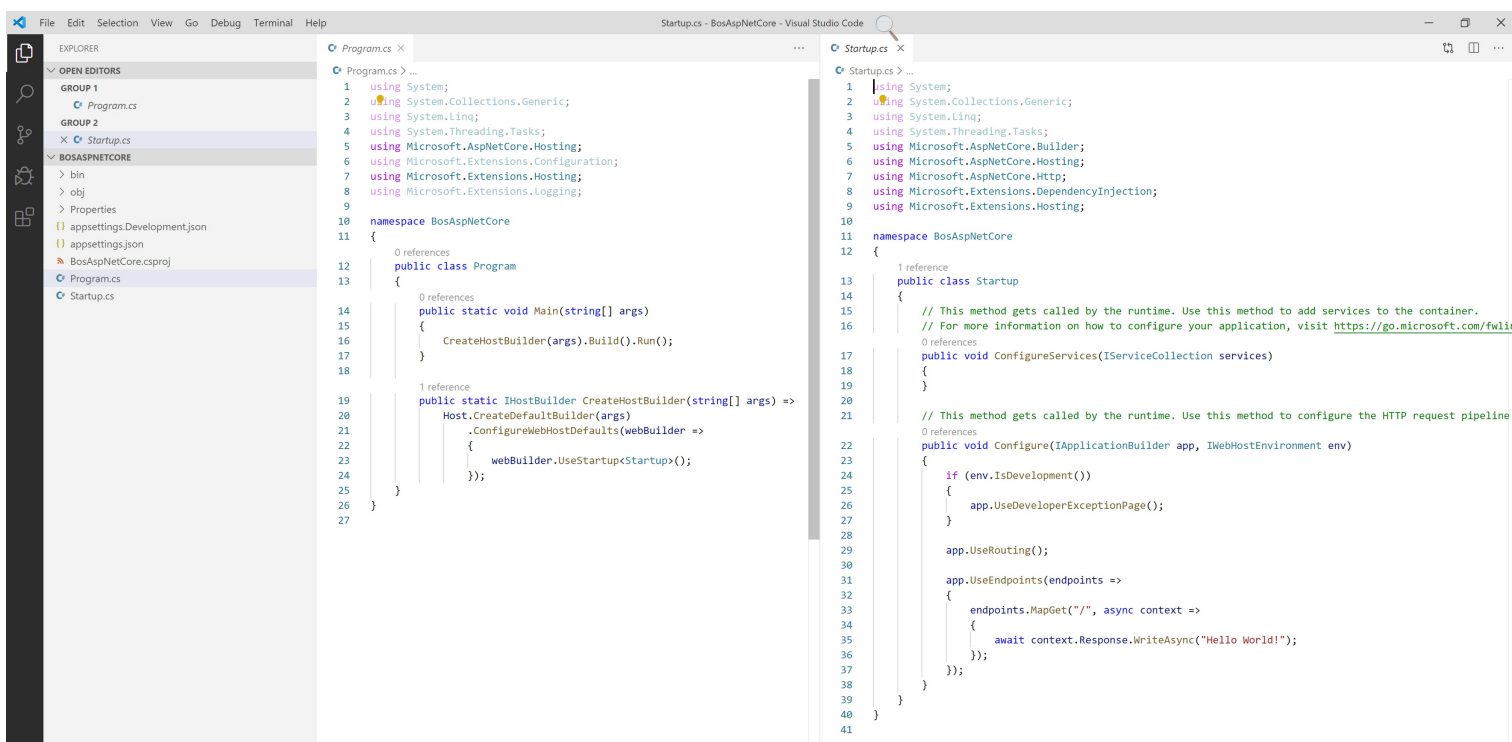
Seceenekler:
-h, --help            Displays help for this command.
-l, --list            Lists templates containing the specified name. If no name is specified, lists all templates.
-n, --name            The name for the output being created. If no name is specified, the name of the current directory is used.
-o, --output          Location to place the generated output.
-i, --install         Installs a source or a template pack.
-u, --uninstall      Uninstalls a source or a template pack.
--nuget-source        Specifies a NuGet source to use during install.
--type               Filters templates based on available types. Predefined values are "project", "item" or "other".
--dry-run            Displays a summary of what would happen if the given command line were run if it would result in a template creation.
--force              Forces content to be generated even if it would change existing files.
--lang, --language   Filters templates based on language and specifies the language of the template to create.
--update-check       Check the currently installed template packs for updates.
--update-apply       Check the currently installed template packs for update, and install the updates.
```

Templates	Short Name	Language	Tags
Console Application	console	[C#], F#, VB	Common/Console
Class Library	classlib	[C#], F#, VB	Common/Library
WPF Application	wpf	[C#]	Common/WPF
WPF Class Library	wpflib	[C#]	Common/WPF
WPF Custom Control Library	wpfcustomcontrollib	[C#]	Common/WPF
WPF User Control Library	wpfusercontrollib	[C#]	Common/WPF
Windows Forms (WinForms) Application	winforms	[C#]	Common/WinForms
Windows Forms (WinForms) Class Library	winformslib	[C#]	Common/WinForms
Worker Service	worker	[C#]	Common/Worker/Web
Unit Test Project	mstest	[C#], F#, VB	Test/MSTest
NUnit 3 Test Project	nunit	[C#], F#, VB	Test/NUnit
NUnit 3 Test Item	nunit-test	[C#], F#, VB	Test/NUnit
xUnit Test Project	xunit	[C#], F#, VB	Test/xUnit
Razor Component	razorcomponent	[C#]	Web/ASP.NET
Razor Page	page	[C#]	Web/ASP.NET
MVC ViewImports	viewimports	[C#]	Web/ASP.NET
MVC ViewStart	viewstart	[C#]	Web/ASP.NET
Blazor Server App	blazorserver	[C#]	Web/Blazor
ASP.NET Core Empty	web	[C#], F#	Web/Empty
ASP.NET Core Web App (Model-View-Controller)	mvc	[C#], F#	Web/MVC
ASP.NET Core Web App	webapp	[C#]	Web/MVC/Razor Pages
ASP.NET Core with Angular	angular	[C#]	Web/MVC/SPA
ASP.NET Core with React.js	react	[C#]	Web/MVC/SPA
ASP.NET Core with React.js and Redux	reactredux	[C#]	Web/MVC/SPA
Razor Class Library	razorclasslib	[C#]	Web/Razor/Library/Razor Class Library
ASP.NET Core Web API	webapi	[C#], F#	Web/WebAPI
ASP.NET Core gRPC Service	grpc	[C#]	Web/gRPC
dotnet gitignore file	gitignore		Config
global.json file	globaljson		Config
NuGet Config	nugetconfig		Config
Dotnet local tool manifest file	tool-manifest		Config
Web Config	webconfig		Config
Solution File	sln		Solution
Protocol Buffer File	proto		Web/gRPC

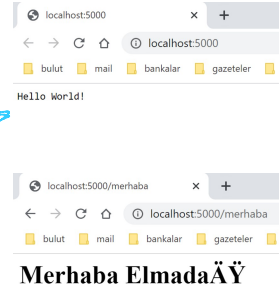
```
PS C:\Users\erkan\source\repos\2019\Bahar\Programlama_III\BosAspNetCore> dotnet new web
The template "ASP.NET Core Empty" was created successfully.

Processing post-creation actions...
Running 'dotnet restore' on C:\Users\erkan\source\repos\2019\Bahar\Programlama_III\BosAspNetCore\BosAspNetCore.csproj...
108,59 ms içinde C:\Users\erkan\source\repos\2019\Bahar\Programlama_III\BosAspNetCore\BosAspNetCore.csproj için geri yükleme işlemi tamamlandı.

Restore succeeded.
```



```
Startup.cs x
Startup.cs > ...
// This method gets called by the runtime. Use this method to configure the m
0 references
22 public void Configure(IApplicationBuilder app, IWebHostEnvironment env)
23 {
24     if (env.IsDevelopment())
25     {
26         app.UseDeveloperExceptionPage();
27     }
28
29     app.UseRouting();
30
31     app.UseEndpoints(endpoints =>
32     {
33         endpoints.MapGet("/", async context =>
34         {
35             await context.Response.WriteAsync("Hello World!");
36         });
37         endpoints.MapGet("/merhaba", async context =>
38         {
39             await context.Response.WriteAsync("<h1>Merhaba Elmadağ</h1>");
40         });
41     });
42 }
43 }
44 }
```



```
Program.cs x
Program.cs > ...
6 using Microsoft.Extensions.Configuration;
7 using Microsoft.Extensions.Hosting;
8 using Microsoft.Extensions.Logging;
9
10 namespace BosProje
11 {
12     0 references
13     public class Program
14     {
15         0 references
16         public static void Main(string[] args)
17         {
18             var host = CreateHostBuilder(args).Build();
19             Console.WriteLine("Sunucu başlatılıyor...");
20             host.Run();
21         }
22
23         1 reference
24         public static IHostBuilder CreateHostBuilder(string[] args) =>
25         {
26             Host.CreateDefaultBuilder(args)
27                 .ConfigureWebHostDefaults(webBuilder =>
28                 {
29                     webBuilder.UseStartup<Startup>();
30                 });
31         }
32     }
33 }
```

```
Sunucu başlatılıyor...
info: Microsoft.Hosting.Lifetime[0]
      Now listening on: https://localhost:5001
info: Microsoft.Hosting.Lifetime[0]
      Now listening on: http://localhost:5000
info: Microsoft.Hosting.Lifetime[0]
      Application started. Press Ctrl+C to shut down.
info: Microsoft.Hosting.Lifetime[0]
      Hosting environment: Development
info: Microsoft.Hosting.Lifetime[0]
      Content root path: C:\Users\erkan\source\repos\2019\Bahar\Programlama_III\BosProje
```

```
Program.cs x
Program.cs > ...
6 using Microsoft.Extensions.Configuration;
7 using Microsoft.Extensions.Hosting;
8 using Microsoft.Extensions.Logging;
9
10 namespace BosProje
11 {
12     0 references
13     public class Program
14     {
15         0 references
16         public static void Main(string[] args)
17         {
18             var host = CreateHostBuilder(args).Build();
19             Console.WriteLine("Sunucu başlatılıyor...");
20             SeedData.Initialize();
21             host.Run();
22         }
23
24         1 reference
25         public static IHostBuilder CreateHostBuilder(string[] args) =>
26         {
27             Host.CreateDefaultBuilder(args)
28                 .ConfigureWebHostDefaults(webBuilder =>
29                 {
30                     webBuilder.UseStartup<Startup>();
31                 });
32         }
33     }
34 }
```

```
SeedData.cs x
SeedData.cs > ...
1 using System;
2 namespace BosProje
3 {
4     1 reference
5     public static class SeedData
6     {
7         1 reference
8         public static void Initialize()
9         {
10             Console.WriteLine("Çekirdek veriler yazılıyor...");
11         }
12     }
13 }
```

```
PS C:\Users\erkan\source\repos\2019\Bahar\Programlama_III\BosProje> dotnet run
Sunucu başlatılıyor...
Çekirdek veriler yazılıyor...
info: Microsoft.Hosting.Lifetime[0]
      Now listening on: https://localhost:5001
info: Microsoft.Hosting.Lifetime[0]
      Now listening on: http://localhost:5000
info: Microsoft.Hosting.Lifetime[0]
      Application started. Press Ctrl+C to shut down.
info: Microsoft.Hosting.Lifetime[0]
      Hosting environment: Development
info: Microsoft.Hosting.Lifetime[0]
      Content root path: C:\Users\erkan\source\repos\2019\Bahar\Programlama_III\BosProje
```

```
Program.cs X
Program.cs > {} ETicaret > ETicaret.Program > Main(string[] args)
1 using System;
2 using System.Collections.Generic;
3 using System.Linq;
4 using System.Threading.Tasks;
5 using ETicaret.Data;
6 using Microsoft.AspNetCore.Hosting;
7 using Microsoft.Extensions.Configuration;
8 using Microsoft.Extensions.Hosting;
9 using Microsoft.Extensions.Logging;
10
11 namespace ETicaret
12 {
13     0 references
14     public class Program
15     {
16         0 references
17         public static void Main(string[] args)
18         {
19             var host = CreateHostBuilder(args).Build();
20             Console.WriteLine("Hostu başlatıyorum...");
21             SeedData.Initialize();
22             host.Run();
23         }
24         1 reference
25         public static IHostBuilder CreateHostBuilder(string[] args) =>
26             Host.CreateDefaultBuilder(args)
27                 .ConfigureWebHostDefaults(webBuilder =>
28                 {
29                     webBuilder.UseStartup<Startup>();
30                 });
31     }
}
```

```
EXPLORER
SEEDDATA.CS X
Data > SeedData > {} ETicaret.Data
1 using System;
2 namespace ETicaret.Data
3 {
4     1 reference
5     public static class SeedData
6     {
7         1 reference
8         public static void Initialize()
9         {
10             Console.WriteLine("Veritabanı öğeleri burada eklenecek");
11         }
12     }
}
```

```
PS C:\Users\erkan\source\repos\2019\Bahar\Programlama_III\A3-ETicaretSQLite_VeritabaniTohumlama> dotnet run
Hostu başlatıyorum...
Veritabanı öğeleri burada eklenecek
Info: Microsoft.AspNetCore.DataProtection.KeyManagement.XmlKeyManager[0]
User profile is available. Using 'C:\Users\erkan\AppData\Local\ASP.NET\DataProtection-Keys' as key repository and Windows DPAPI to encrypt keys at rest.
Info: Microsoft.Hosting.Lifetime[0]
Now listening on: https://localhost:5001
Info: Microsoft.Hosting.Lifetime[0]
Now listening on: http://localhost:5000
Info: Microsoft.Hosting.Lifetime[0]
Application started. Press Ctrl+C to shut down.
Info: Microsoft.Hosting.Lifetime[0]
Hosting environment: Development
Info: Microsoft.Hosting.Lifetime[0]
Content root path: C:\Users\erkan\source\repos\2019\Bahar\Programlama_III\A3-ETicaretSQLite_VeritabaniTohumlama
```

```
Program.cs X
Program.cs > ...
1 using System;
2 using System.Collections.Generic;
3 using System.Linq;
4 using System.Threading.Tasks;
5 using ETicaret.Data;
6 using Microsoft.AspNetCore.Hosting;
7 using Microsoft.Extensions.Configuration;
8 using Microsoft.Extensions.DependencyInjection;
9 using Microsoft.Extensions.Hosting;
10 using Microsoft.Extensions.Logging;
11
12 namespace ETicaret
13 {
14     1 reference
15     public class Program
16     {
17         0 references
18         public static void Main(string[] args)
19         {
20             var host = CreateHostBuilder(args).Build();
21             Console.WriteLine("Hostu başlatıyorum...");
22             using (var scope = host.Services.CreateScope())
23             {
24                 var services = scope.ServiceProvider;
25                 try
26                 {
27                     SeedData.Initialize(services);
28                 }
29                 catch (Exception ex)
30                 {
31                     ILogger<Program> logger = requiredService<ILogger<Program>>();
32                     logger.LogError(ex, "Veritabanı tohumlanırken hata oluştu.");
33                 }
34             }
35             host.Run();
36         }
37         1 reference
38         public static IHostBuilder CreateHostBuilder(string[] args) =>
39             Host.CreateDefaultBuilder(args)
40                 .ConfigureWebHostDefaults(webBuilder =>
41                 {
42                     webBuilder.UseStartup<Startup>();
43                 });
44     }
45 }
```

```
SeedData.cs X
Data > SeedData > {} ETicaret.Data
1 using System;
2 using System.Collections.Generic;
3 using System.Linq;
4 using ETicaret.Models;
5 using Microsoft.EntityFrameworkCore;
6 using Microsoft.Extensions.DependencyInjection;
7
8 namespace ETicaret.Data
9 {
10     1 reference
11     public static class SeedData
12     {
13         1 reference
14         public static void Initialize(IServiceProvider serviceProvider)
15         {
16             using (var context = new ETicaretContext(
17                 serviceProvider.GetRequiredService<DbContextOptions<ETicaretContext>>())
18             {
19                 context.Database.Migrate();
20                 // Herhangi bir urun varsa
21                 if (context.Urunler.Any())
22                 {
23                     return; // Veritabanı zaten tohumlanmış
24                 }
25                 context.Urunler.AddRange(
26                 new Urun
27                 {
28                     Ad = "Düdüklü",
29                     Açıklama = "Rahat, sık ve ucuz.",
30                     Fiyat = 99.99M,
31                     Resimler = new List<Resim>
32                     {
33                         new Resim(DosyaAdi = "10090547481639.jpg"),
34                         new Resim(DosyaAdi = "10768547579954.jpg"),
35                         new Resim(DosyaAdi = "1028547678255.jpg"),
36                         new Resim(DosyaAdi = "10316547746754.jpg"),
37                     }
38                 },
39                 new Urun
40                 {
41                     Ad = "Canta",
42                     Açıklama = "Rahat, sık ve pahalı...",
43                     Fiyat = 99.99M,
44                     Resimler = new List<Resim>
45                     {
46                         new Resim(DosyaAdi = "canta.jfif")
47                     }
48                 }
49             );
50             context.SaveChanges();
51         }
52     }
53 }
54
55
56
```

```
var logger = serviceProvider.GetRequiredService<ILogger<Program>>();
logger.LogInformation("Veritabanı başarıyla tohumlandı.");
```

```
Info: Microsoft.EntityFrameworkCore.Database.Command[20100]
Executing DbCommand [Parameters=[@p0='?' (Size = 10), @p1='?'], CommandType='Text', CommandTimeout='30']
INSERT INTO "Resimler" ("DosyaAdi", "UrunId")
VALUES (@p0, @p1);
SELECT "Id"
FROM "Resimler"
WHERE changes() = 1 AND "Id" = last_insert_rowid();
Info: ETicaret.Program[0]
Veritabanı başarıyla tohumlandı.
Info: Microsoft.AspNetCore.DataProtection.KeyManagement.XmlKeyManager[0]
User profile is available. Using 'C:\Users\erkan\AppData\Local\ASP.NET\DataProtection-Keys' as key repository and Windows DPAPI to encrypt keys at rest.
Info: Microsoft.Hosting.Lifetime[0]
Now listening on: https://localhost:5001
Info: Microsoft.Hosting.Lifetime[0]
Now listening on: http://localhost:5000
Info: Microsoft.Hosting.Lifetime[0]
Application started. Press Ctrl+C to shut down.
```