

EF 6 → Code First

1. Criar um projeto de consola:

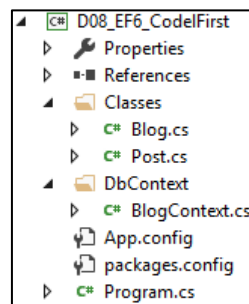
- 1.1. Adicionar ao projeto a EF6.
- 1.2. Criar 2 pastas: Classes e Context.
- 1.3. Criar 2 classes dentro da respetiva pasta.
- 1.4. Criar a classe do contexto dentro da respetiva pasta.
- 1.5. Configurar o ficheiro App.config.
- 1.6. Inserir e listar registos nas tabelas.
- 1.7. Verificar se a base de dados foi criada.

2. Adicionar a referência à EF6:

Botão direito no projeto > Manage NuGet Packages > Browse > Entity Framework > Instalar.

Ver na pasta References do projeto que foi incluída a library EntityFramework.

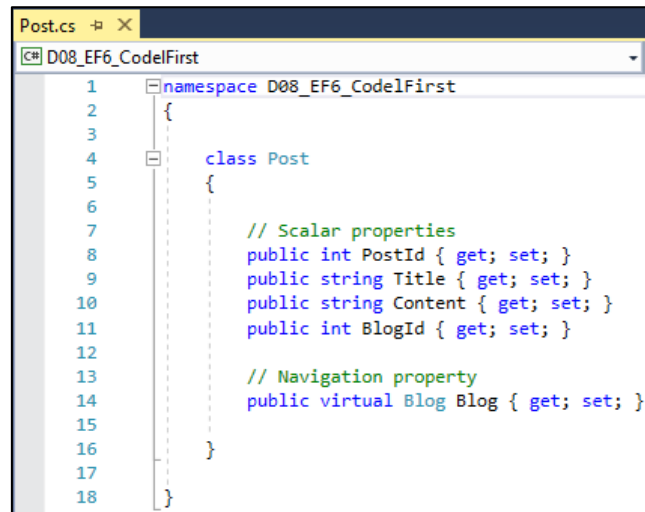
3. Estrutura do projeto:



4. Classe Blog.cs:

```
Blog.cs  + - x
D08_EF6_CodelFirst
1      using System.Collections.Generic;
2
3      namespace D08_EF6_CodelFirst
4      {
5
6          class Blog
7          {
8
9              // Scalar properties
10             public int BlogId { get; set; }
11             public string Name { get; set; }
12
13             // Navigation property
14             public virtual List<Post> Posts { get; set; }
15
16         }
17
18     }
```

5. Classe Post.cs:



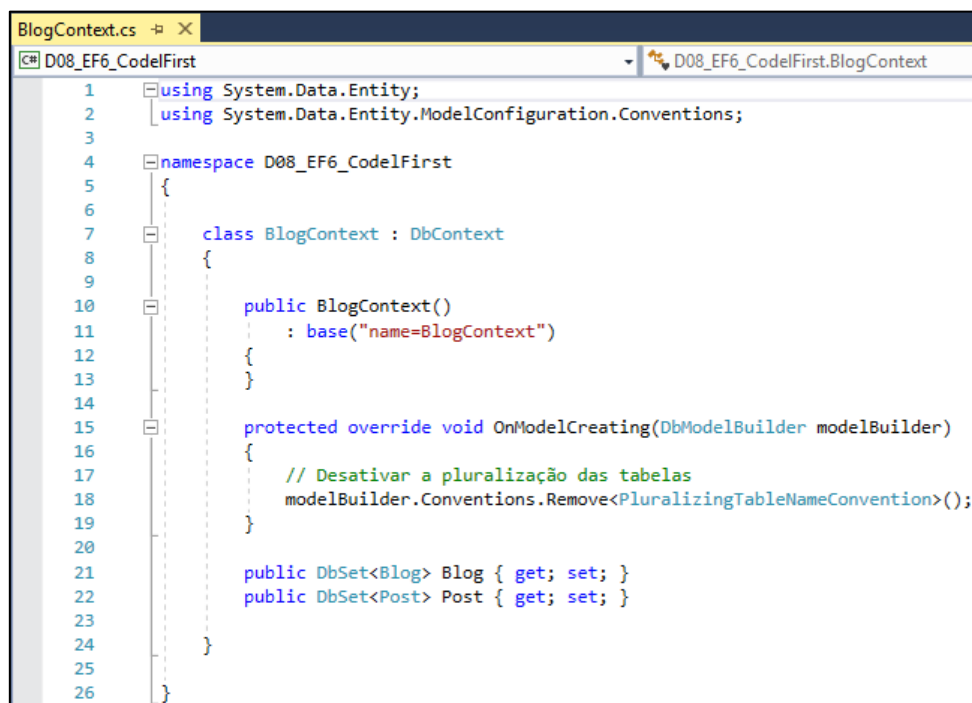
The screenshot shows the `Post.cs` file in Visual Studio. The code is enclosed in a namespace `D08_EF6_CodelFirst` and defines a `Post` class. The class has four scalar properties: `PostId` (int), `Title` (string), `Content` (string), and `BlogId` (int), each with `get` and `set` methods. It also has a navigation property `Blog` of type `Blog` with `get` and `set` methods.

```

1 namespace D08_EF6_CodelFirst
2 {
3
4     class Post
5     {
6
7         // Scalar properties
8         public int PostId { get; set; }
9         public string Title { get; set; }
10        public string Content { get; set; }
11        public int BlogId { get; set; }
12
13        // Navigation property
14        public virtual Blog Blog { get; set; }
15    }
16 }
17
18

```

6. Classe BlogContext.cs:



The screenshot shows the `BlogContext.cs` file in Visual Studio. The code defines a `BlogContext` class that inherits from `DbContext`. It includes the following code:

```

1 using System.Data.Entity;
2 using System.Data.Entity.ModelConfiguration.Conventions;
3
4 namespace D08_EF6_CodelFirst
5 {
6
7     class BlogContext : DbContext
8     {
9
10        public BlogContext()
11            : base("name=BlogContext")
12        {
13        }
14
15        protected override void OnModelCreating(DbModelBuilder modelBuilder)
16        {
17            // Desativar a pluralização das tabelas
18            modelBuilder.Conventions.Remove<PluralizingTableNameConvention>();
19        }
20
21        public DbSet<Blog> Blog { get; set; }
22        public DbSet<Post> Post { get; set; }
23    }
24 }
25
26

```

7. Acrescentar ao ficheiro de configuração App.config a connection string:



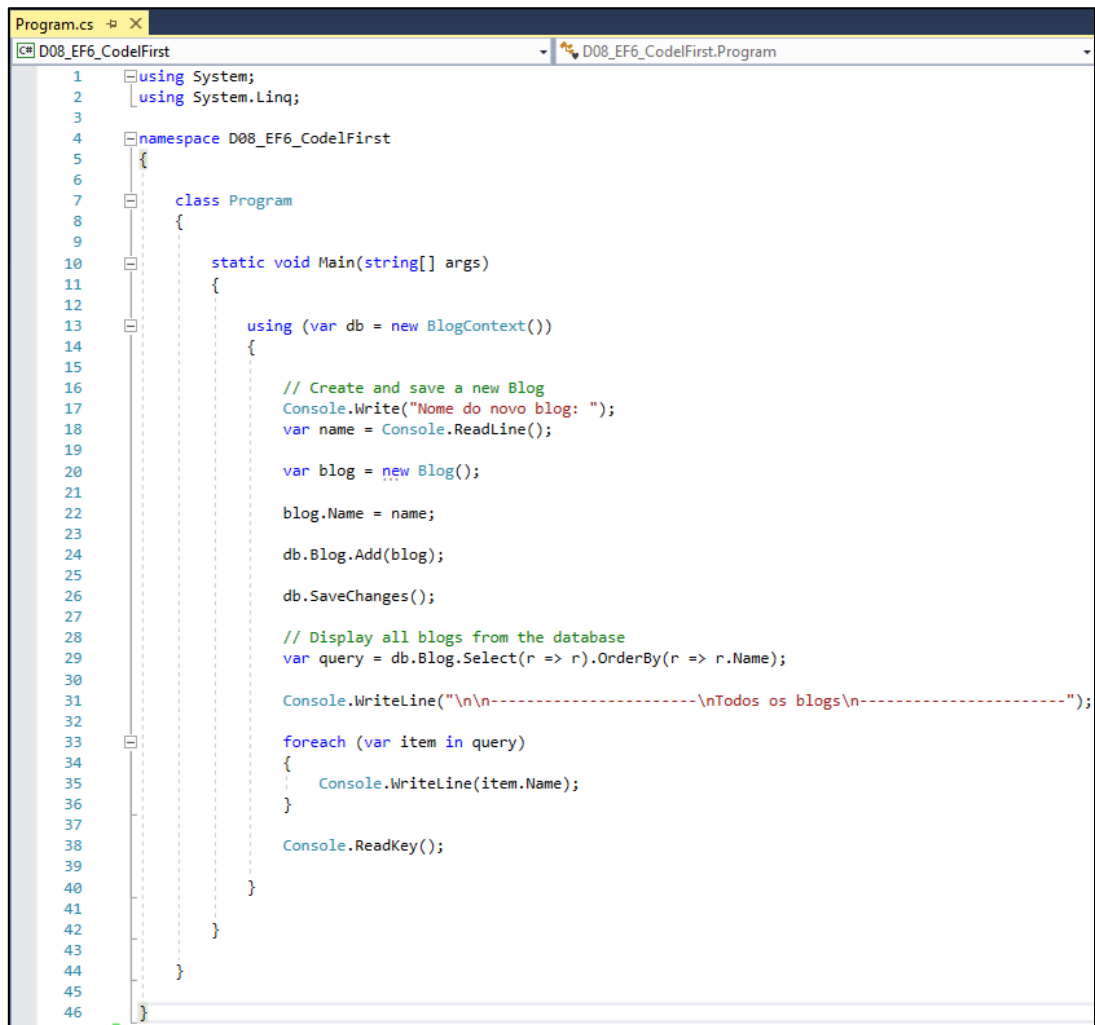
The screenshot shows the `App.config` file in Visual Studio. The XML configuration includes a `connectionStrings` section with an `add` element for the `BlogContext` connection string.

```

1 <?xml version="1.0" encoding="utf-8"?>
2
3 <configuration>
4
5     <configSections>...</configSections>
6
7     <startup>...</startup>
8
9     <entityFramework>...</entityFramework>
10
11     <connectionStrings>
12         <add
13             name="BlogContext"
14             providerName="System.Data.SqlClient"
15             connectionString=
16                 "Data Source=localhost;
17                 Initial Catalog=BlogDB_EF6CodeFirst;
18                 Integrated Security=True;" />
19     </connectionStrings>
20
21 </configuration>
22

```

8. No Program.cs inserir e listar um blog:



```
1  using System;
2  using System.Linq;
3
4  namespace D08_EF6_CodeFirst
5  {
6
7      class Program
8      {
9
10         static void Main(string[] args)
11         {
12
13             using (var db = new BlogContext())
14             {
15
16                 // Create and save a new Blog
17                 Console.Write("Nome do novo blog: ");
18                 var name = Console.ReadLine();
19
20                 var blog = new Blog();
21
22                 blog.Name = name;
23
24                 db.Blog.Add(blog);
25
26                 db.SaveChanges();
27
28                 // Display all blogs from the database
29                 var query = db.Blog.Select(r => r).OrderBy(r => r.Name);
30
31                 Console.WriteLine("\n\n-----\nTodos os blogs\n-----");
32
33                 foreach (var item in query)
34                 {
35                     Console.WriteLine(item.Name);
36                 }
37
38                 Console.ReadKey();
39             }
40         }
41     }
42 }
43
44
45
46 }
```

9. Verificar se a base de dados foi criada:

Ver no SQL Server Object Explorer que as tabelas foram criadas dentro da base de dados:

