< Previous Next >

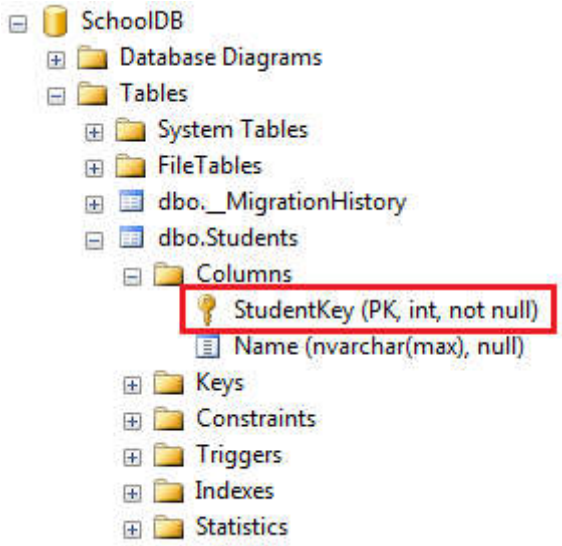
Data Annotations - Key Attribute in EF 6 & EF Core

The Key attribute can be applied to a property in an entity class to make it a key property and the corresponding column to a PrimaryKey column in the database. The default convention creates a primary key column for a property whose name is `Id` or `<Entity Class Name>Id`. The Key attribute overrides this default convention.

```
using System.ComponentModel.DataAnnotations;

public class Student
{
    [Key]
    public int StudentKey { get; set; }
    public string StudentName { get; set; }
}
```

As you can see in the above example, the `Key` attribute is applied to the `StudentKey` property of the `Student` entity class. This will override the default conventions and create a primary key column `StudentKey` in the `Students` table in the database as shown below.



The Key attribute can be applied to a property of any primitive data type except unsigned integers.

EF 6:

In EF 6, the Key attribute along with the `Column` attribute can be applied to multiple properties of an entity class which will create composite primary key columns in the database.

EF Core does not support creating a composite key using the `Key` attribute. You have to use the Fluent API `HasKey()` function in EF Core.

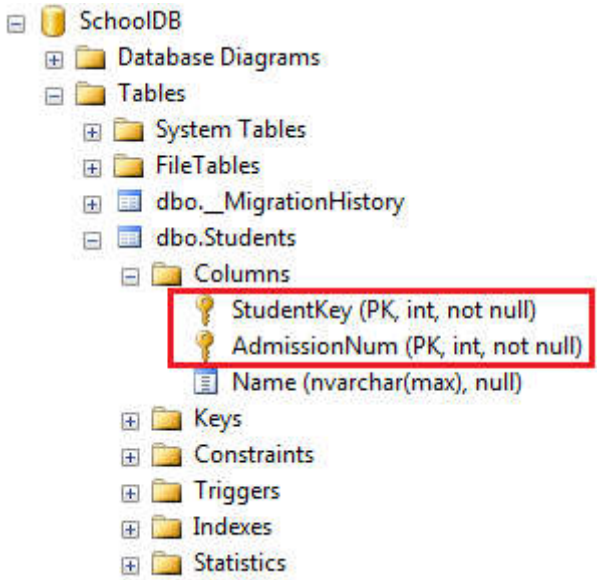
```
using System.ComponentModel.DataAnnotations;

public class Student
{
    [Key]
    [Column(Order=1)]
    public int StudentKey { get; set; }

    [Key]
    [Column(Order=2)]
    public int AdmissionNum { get; set; }

    public string StudentName { get; set; }
}
```

The above code creates composite primary key columns `StudentKey` and `AdmissionNum` in the `Students` table as shown below.



Note: In EF 6, the `Key` attribute creates a PK with an identity column when applied to a single integer type property. The composite key does not create an identity column for the integer property.

Download EF 6 Code-First Demo Project from Github

Previous Next

Useful Resources

Fastest Way to Insert using EF Extensions

Learn C#, MVC, ASP.NET Core, LINQ, etc.

Entity Framework Courses on Pluralsight

ENTITYFRAMEWORKTUTORIAL

Learn Entity Framework using simple yet practical examples on EntityFrameworkTutorial.net for free. Learn Entity Framework DB-First, Code-First and EF Core step by step. While using this site, you agree to have read and accepted our terms of use and privacy policy.

feedback@entityframeworktutorial.net

TUTORIALS

- EF Basics
- EF Core
- EF 6 DB-First
- EF 6 Code-First

E-MAIL LIST

Subscribe to EntityFrameworkTutorial email list and get EF 6 and EF Core Cheat Sheets, latest updates, tips & tricks about Entity Framework to your inbox.

Email address GO

We respect your privacy.