# [DataAnnotations（数据注解）【Code-First 系列】](http://www.cnblogs.com/caofangsheng/p/5023639.html)

EF Code-First提供了一系列的数据注解的特性，你可以将其应用到你的领域类和属性中，数据注解属性重写了EF默认的约定。

[System.ComponentModel.DataAnnotations](http://msdn.microsoft.com/en-us/library/system.componentmodel.dataannotations.aspx" \t "http://www.cnblogs.com/caofangsheng/p/_blank) includes attributes that impacts on nullability or size of the column. 【这个命名空间下，包含影响数据表列的大小和可空性的特性。】

[System.ComponentModel.DataAnnotations.Schema](http://msdn.microsoft.com/en-us/library/system.componentmodel.dataannotations.Schema(v=vs.110).aspx" \t "http://www.cnblogs.com/caofangsheng/p/_blank) namespace includes attributes that impacts the schema of the database.【这个命名空间下，包含影响数据表的特性】

请注意：数据注解仅仅提供你配置选项的子集。完整的配置在EF Fluent  API 中。

## **System.ComponentModel.DataAnnotations Attributes:**

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| **Attribute** | **Description** |
| [Key](http://www.entityframeworktutorial.net/code-first/key-dataannotations-attribute-in-code-first.aspx) | Mark property as EntityKey which will be mapped to PK of the related table.【实体属性中表明了key特性的，将会是数据表的主键】 |
| [Timestamp](http://www.entityframeworktutorial.net/code-first/TimeStamp-dataannotations-attribute-in-code-first.aspx) | Mark the property as a non-nullable timestamp column in the database.【标注列为：不允许为空】 |
| [ConcurrencyCheck](http://www.entityframeworktutorial.net/code-first/concurrencycheck-dataannotations-attribute-in-code-first.aspx) | ConcurrencyCheck annotation allows you to flag one or more properties to be used for concurrency checking in the database when a user edits or deletes an entity.  【这个属性，允许你标注一个或者多个属性，当用户编辑或者删除一个实体的时候，用来做并发检查。】 |
| [Required](http://www.entityframeworktutorial.net/code-first/required-attribute-dataannotations-in-code-first.aspx) | The Required annotation will force EF (and MVC) to ensure that property has data in it.【标注这个属性的字段，不能为空，确保其有数据】 |
| [MinLength](http://www.entityframeworktutorial.net/code-first/maxlength-minlength-dataannotations-attribute-in-code-first.aspx) | MinLength annotation validates property whether it has minimum length of array or string.【用来验证属性是不是有最小的字符串或者数组长度。】 |
| [MaxLength](http://www.entityframeworktutorial.net/code-first/maxlength-minlength-dataannotations-attribute-in-code-first.aspx) | MaxLength annotation is the maximum length of property which in turn sets the maximum length of a column in the database  【给字段设定最大长度。】 |
| [StringLength](http://www.entityframeworktutorial.net/code-first/stringlength-dataannotations-attribute-in-code-first.aspx) | Specifies the minimum and maximum length of characters that are allowed in a data field.【在数据字段中，指定最大和最小的字符长度】 |

**System.ComponentModel.DataAnnotations.Schema Attributes:**

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| **Attribute** | **Description** |
| [Table](http://www.entityframeworktutorial.net/code-first/table-dataannotations-attribute-in-code-first.aspx) | Specify name of the DB table which will be mapped with the class【指定类将映射成的数据表名称】 |
| [Column](http://www.entityframeworktutorial.net/code-first/column-dataannotations-attribute-in-code-first.aspx) | Specify column name and datatype which will be mapped with the property【指定列名】 |
| [Index](http://www.entityframeworktutorial.net/EntityFramework6/index-attribute-in-code-first.aspx) | Create an Index for specified column. (EF 6.1 onwards only)【创建索引，这个是在EF 6.1中才会使用】 |
| [ForeignKey](http://www.entityframeworktutorial.net/code-first/foreignkey-dataannotations-attribute-in-code-first.aspx) | Specify Foreign key property for Navigation property【为导航属性指定外键】 |
| [NotMapped](http://www.entityframeworktutorial.net/code-first/notmapped-dataannotations-attribute-in-code-first.aspx) | Specify that property will not be mapped with database【标注了这个属性的字段，将不会映射到数据表的列中。】 |
| DatabaseGenerated | DatabaseGenerated attribute specifies that property will be mapped to computed column of the database table. So, the property will be read-only property. It can also be used to map the property to identity column (auto incremental column).  【标注了这个特性的属性，将会映射成数据表的计算列字段，所以这个属性将会是只读的。它同样可以用来映射成自动增长列】 |
| [InverseProperty](http://www.entityframeworktutorial.net/code-first/inverseproperty-dataannotations-attribute-in-code-first.aspx) | InverseProperty is useful when you have multiple relationships between two classes.【这个属性是很有用的，当你两个类之间，有多重关系的时候。】 |
| ComplexType | Mark the class as complex type in EF.【标注这个类为复杂类型】 |

我们将在下面的一节中，详细的学到下面的各个属性。