

&lt; Summary

## Methods/Properties

## Information

**Class:** EfCoreModelsLib.DTO.TitlesDto**Assembly:** EfCoreModelsLib**File(s):** C:\Users\shero\source\repos\IMDb-Project\ef-  
models\EfCoreModelsLib\DTO\TitlesDto.cs

## Line coverage

**97%**

Covered lines:	68
Uncovered lines:	2
Coverable lines:	70
Total lines:	132
Line coverage:	97.1%

## Branch coverage

**98%**

Covered branches:	77
Total branches:	78
Branch coverage:	98.7%

## Method coverage

Feature is only available for sponsors

- 🔑 get\_TitleType()
- 🔑 get\_PrimaryTitle()
- 🔑 get\_OriginalTitle()
- 🔑 get\_IsAdult()
- 📦 .ctor()
- 🔑 get\_StartYear()
- 🔑 set\_StartYear(System.Int32)
- 🔑 get\_EndYear()
- 🔑 set\_EndYear(System.Nullable`1<System....)
- 🔑 get\_RuntimeMinutes()
- 🔑 set\_RuntimeMinutes(System.Nullable`1<...)
- 📦 ValidateTitleType()
- 📦 ValidatePrimaryTitle()
- 📦 ValidateOriginalTitle()
- 📦 ValidateStartYear()
- 📦 ValidateEndYear()
- 📦 ValidateRuntimeMinutes()
- 📦 Validate()

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## Metrics

Method	Branch coverage <small>i</small>	Crap Score <small>i</small>	Cyclomatic complexity <small>i</small>	Line coverage
get_TitleType()	100%	1	1	100%
get_PrimaryTitle()	100%	1	1	100%
get_OriginalTitle()	100%	1	1	100%
get_IsAdult()	100%	1	1	100%
.ctor()	100%	1	1	100%
get_StartYear()	100%	1	1	100%
set_StartYear(...)	100%	1	1	100%
get_EndYear()	100%	1	1	100%
set_EndYear(...)	100%	2	2	100%
get_RuntimeMinutes()	100%	1	1	100%
set_RuntimeMinutes(...)	100%	2	2	100%
ValidateTitleType()	100%	12	12	100%
ValidatePrimaryTitle()	100%	22	22	100%
ValidateOriginalTitle()	100%	22	22	100%
ValidateStartYear()	100%	4	4	100%
ValidateEndYear()	83.33%	6	6	84.61%
ValidateRuntimeMinutes()	100%	8	8	100%
Validate()	100%	1	1	100%

## File(s)

C:\Users\shero\source\repos\IMDb-Project\ef-models\EfCoreModelsLib.DTO\TitlesDto.cs

## Methods/Properties

- 🔑 get\_TitleType()
- 🔑 get\_PrimaryTitle()
- 🔑 get\_OriginalTitle()
- 🔑 get\_IsAdult()
- 📦 .ctor()
- 🔑 get\_StartYear()
- 🔑 set\_StartYear(System.Int32)
- 🔑 get\_EndYear()
- 🔑 set\_EndYear(System.Nullable`1<System.Int32>)
- 🔑 get\_RuntimeMinutes()
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- 📦 ValidateTitleType()
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## # Line coverage

```

1
2 namespace EfCoreModelsLib.DTO
3 {
4     public class TitlesDto : IObjectId
5     {
6         private const int SYSTEM_MAX_YEAR = 9999;
7         private const int BUSINESS_MAX_FUTURE_YEARS = 100;
8
9
10        public required string TitleType { get; set; }
11        public required string PrimaryTitle { get; set; }
12        public required string OriginalTitle { get; set; }
13        public bool IsAdult { get; set; }
14        private readonly DateOnly _year = DateOnly.FromDateTime(DateTime.Now);
15
16        private int _startYear;
17        public int StartYear
18        {
19            get => _startYear;
20            set =>
21                // Use Math.Abs to ensure only non-negative values are set
22                _startYear = Math.Abs(value);
23        }
24
25        private int? _endYear;
26        public int? EndYear
27        {
28            get => _endYear;
29            set =>
30                _endYear = value.HasValue ? Math.Abs(value.Value) : (int?)null;
31        }
32
33        private int? _runtimeMinutes;
34        public int? RuntimeMinutes

```

## Methods/Properties

- `get_TitleType()`
- `get_PrimaryTitle()`
- `get_OriginalTitle()`
- `get_IsAdult()`
- `.ctor()`
- `get_StartYear()`
- `set_StartYear(System.Int32)`
- `get_EndYear()`
- `set_EndYear(System.Nullable`1<System...`
- `get_RuntimeMinutes()`
- `set_RuntimeMinutes(System.Nullable`1<...`
- `ValidateTitleType()`
- `ValidatePrimaryTitle()`
- `ValidateOriginalTitle()`
- `ValidateStartYear()`
- `ValidateEndYear()`
- `ValidateRuntimeMinutes()`
- `Validate()`

#	Line	Line coverage
	35	{
13	36	get => _runtimeMinutes;
	37	set =>
77	38	_runtimeMinutes = value.HasValue ? Math.Abs(value.Value) : (in
	39	}
	40	
	41	
	42	
	43	public void ValidateTitleType()
14	44	{
14	45	if (string.IsNullOrWhiteSpace(TitleType) && string.IsNullOrEmpty(T
2	46	{
2	47	throw new ArgumentNullException(nameof(TitleType), "TitleType
	48	}
12	49	if (TitleType.Length is < 5 or > 25    !TitleType.All(char.IsLetter
6	50	{
6	51	throw new ArgumentException("TitleType must be between 5 and 2
	52	}
6	53	}
	54	
	55	public void ValidatePrimaryTitle()
13	56	{
13	57	if (string.IsNullOrWhiteSpace(PrimaryTitle) && string.IsNullOrEmpty(P
2	58	{
2	59	throw new ArgumentNullException(nameof(PrimaryTitle), "Primary
	60	}
11	61	if (PrimaryTitle.Length < 5    PrimaryTitle.Length > 255
598	62	!PrimaryTitle.All(c => char.IsLetter(c)    char.IsWhiteSpace(c
598	63	c == '-'    c == '\'\'    c == ','    c
4	64	{
4	65	throw new ArgumentException("PrimaryTitle must be between 5 an
	66	}
7	67	}
	68	public void ValidateOriginalTitle()
13	69	{

## Methods/Properties

-  `get_TitleType()`
-  `get_PrimaryTitle()`
-  `get_OriginalTitle()`
-  `get_IsAdult()`
-  `.ctor()`
-  `get_StartYear()`
-  `set_StartYear(System.Int32)`
-  `get_EndYear()`
-  `set_EndYear(System.Nullable`1<System...`
-  `get_RuntimeMinutes()`
-  `set_RuntimeMinutes(System.Nullable`1<...`
-  `ValidateTitleType()`
-  `ValidatePrimaryTitle()`
-  `ValidateOriginalTitle()`
-  `ValidateStartYear()`
-  `ValidateEndYear()`
-  `ValidateRuntimeMinutes()`
-  `Validate()`

#	Line	Line coverage
13	70	if (string.IsNullOrWhiteSpace(OriginalTitle) && string.IsNullOrEmpty(nameof(OriginalTitle)))
2	71	{
2	72	throw new ArgumentNullException(nameof(OriginalTitle), "OriginalTitle must be between 5 and 255 characters long")
73		}
11	74	if (OriginalTitle.Length < 5    OriginalTitle.Length > 255
599	75	!OriginalTitle.All(c => char.IsLetter(c)    char.IsWhiteSpace(c)    c == '-'    c == '\''    c == ','    c == '\"'))
599	76	}
4	77	}
4	78	throw new ArgumentException("OriginalTitle must be between 5 and 255 characters long")
79		}
7	80	}
81		
82		public void ValidateStartYear()
10	83	{
10	84	if (StartYear < 1888    StartYear > _year.Year)
4	85	{
4	86	throw new ArgumentOutOfRangeException(nameof(StartYear), "StartYear must be between 1888 and " + _year.Year))
87		}
6	88	}
89		
90		public void ValidateEndYear()
9	91	{
9	92	int currentYear = DateTime.Now.Year;
9	93	int businessLimitYear = currentYear + BUSINESS_MAX_FUTURE_YEARS;
94		
9	95	if (EndYear < _year.Year)
5	96	{
5	97	throw new ArgumentOutOfRangeException(nameof(EndYear), "EndYear must be between " + _year.Year + " and " + businessLimitYear))
98		}
99		
4	100	if (EndYear > businessLimitYear)
1	101	{
1	102	throw new ArgumentOutOfRangeException(nameof(EndYear), \$"EndYear must be between {businessLimitYear} and {SYSTEM_MAX_YEAR}"))
103		}
3	104	if(EndYear > SYSTEM_MAX_YEAR)

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#	Line	Line coverage
0	105	{
0	106	throw new ArgumentOutOfRangeException(nameof(EndYear), \$"EndYe
	107	}
	108	
3	109	}
	110	public void ValidateRuntimeMinutes()
13	111	{
13	112	if (RuntimeMinutes < 60 or > 1440)
6	113	{
6	114	throw new ArgumentOutOfRangeException(nameof(RuntimeMinutes),
	115	}
7	116	}
	117	
	118	
	119	public void Validate()
2	120	{
2	121	ValidatePrimaryTitle();
2	122	ValidateOriginalTitle();
2	123	ValidateTitleType();
1	124	ValidateStartYear();
1	125	ValidateEndYear();
1	126	ValidateRuntimeMinutes();
	127	
1	128	}
	129	
	130	
	131	}
	132	}

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