

Namespace NullaryThunk.Funky.Core. Options

Classes

[Nothing<T>](#)

An [Option<T>](#) that has no meaningful value.

[O](#)

[OptionFunctions](#)

[Something<T>](#)

An [Option<T>](#) that has a meaningful value.

Interfaces

[ISomething<T>](#)

An [Option<T>](#) that has a meaningful value.

[Nothing](#)

An object with no meaningful value. Represents the absence of a value.

[Option<T>](#)

Represents the possibility of a T. An [Option<T>](#) can be either [Something<T>](#) or [Nothing<T>](#). If it is a [Something<T>](#) then it contains a value of . Use pattern matching to match on an [Option<T>](#)

[Something](#)

An [Option<T>](#) that has no meaningful value.

Interface ISomething<T>

Namespace: [NullaryThunk.Funky.Core.Options](#)

Assembly: NullaryThunk.Funky.Core.dll

An [Option<T>](#) that has a meaningful value.

```
public interface ISomething<out T> : Option<T>, Something
```

Type Parameters

T

The type of the meaningful value contained within.

Extension Methods

[O.ToSomething<T>\(T\)](#) , [OptionFunctions.SomethingOr<T>\(Option<T>, T\)](#) ,
[OptionFunctions.SomethingOr<T, R>\(Option<T>, Func<T, R>, R\)](#)

Properties

Value

```
T Value { get; }
```

Property Value

T

Interface Nothing

Namespace: [NullaryThunk.Funky.Core.Options](#)

Assembly: NullaryThunk.Funky.Core.dll

An object with no meaningful value. Represents the absence of a value.

```
public interface Nothing
```

Extension Methods

[O.ToSomething<T>\(T\)](#)

Class Nothing<T>

Namespace: [NullaryThunk.Funky.Core.Options](#)

Assembly: NullaryThunk.Funky.Core.dll

An [Option<T>](#) that has no meaningful value.

```
public record Nothing<T> : Option<T>, Nothing, IEquatable<Nothing<T>>
```

Type Parameters

T

The type of the meaningful value.

Inheritance

[object](#) ← Nothing<T>

Implements

[Option<T>](#), [Nothing](#), [IEquatable](#)<[Nothing<T>](#)>

Inherited Members

[object.Equals\(object\)](#) , [object.Equals\(object, object\)](#) , [object.GetHashCode\(\)](#) ,
[object.GetType\(\)](#) , [object.MemberwiseClone\(\)](#) , [object.ReferenceEquals\(object, object\)](#) ,
[object.ToString\(\)](#)

Extension Methods

[O.ToSomething<T>\(T\)](#) , [OptionFunctions.SomethingOr<T>\(Option<T>, T\)](#) ,
[OptionFunctions.SomethingOr<T, R>\(Option<T>, Func<T, R>, R\)](#)

Class O

Namespace: [NullaryThunk.Funky.Core.Options](#)

Assembly: NullaryThunk.Funky.Core.dll

```
public static class O
```

Inheritance

[object](#) ← O

Inherited Members

[object.Equals\(object\)](#) , [object.Equals\(object, object\)](#) , [object.GetHashCode\(\)](#) ,
[object.GetType\(\)](#) , [object.MemberwiseClone\(\)](#) , [object.ReferenceEquals\(object, object\)](#) ,
[object.ToString\(\)](#)

Methods

Nothing<T>()

Creates a [Nothing<T>\(\)](#).

```
public static Nothing<T> Nothing<T>()
```

Returns

[Nothing<T>](#)

An instance of [Nothing<T>\(\)](#)

Type Parameters

T

The underlying type of the meaningful value.

Somethings<T>(IEnumerable<Option<T>>)

Extracts the underlying values from a sequence of [Option<T>](#) items, returning only the values wrapped in [Something<T>](#)

```
public static IEnumerable<T> Somethings<T>(this IEnumerable<Option<T>> options)
```

Parameters

options [IEnumerable<Option<T>>](#)

A sequence of optional values

Returns

[IEnumerable<T>](#)

A sequence of values.

Type Parameters

T

The underlying type of the meaningful value.

ToSomething<T>(T)

Lifts a meaningful value into a [Something<T>](#).

```
public static Something<T> ToSomething<T>(this T value)
```

Parameters

value T

The meaningful value.

Returns

[Something<T>](#)

A [Something<T>](#) containing the meaningful value.

Type Parameters

T

The type of the meaningful value.

Class OptionFunctions

Namespace: [NullaryThunk.Funky.Core.Options](#)

Assembly: NullaryThunk.Funky.Core.dll

```
public static class OptionFunctions
```

Inheritance

[object](#) ← OptionFunctions

Inherited Members

[object.Equals\(object\)](#) , [object.Equals\(object, object\)](#) , [object.GetHashCode\(\)](#) ,
[object.GetType\(\)](#) , [object.MemberwiseClone\(\)](#) , [object.ReferenceEquals\(object, object\)](#) ,
[object.ToString\(\)](#)

Methods

SomethingOr<T>(Option<T>, T)

```
public static T SomethingOr<T>(this Option<T> opt, T ifNone)
```

Parameters

opt [Option](#)<T>

ifNone T

Returns

T

Type Parameters

T

SomethingOr<T, R>(Option<T>, Func<T, R>, R)

```
public static R SomethingOr<T, R>(this Option<T> opt, Func<T, R> mapper, R ifNone)
```

Parameters

opt [Option](#)<T>

mapper [Func](#)<T, R>

ifNone R

Returns

R

Type Parameters

T

R

Interface Option<T>

Namespace: [NullaryThunk.Funky.Core.Options](#)

Assembly: NullaryThunk.Funky.Core.dll

Represents the possibility of a T. An [Option<T>](#) can be either [Something<T>](#) or [Nothing<T>](#). If it is a [Something<T>](#) then it contains a value of . Use pattern matching to match on an [Option<T>](#)

```
public interface Option<out T>
```

Type Parameters

T

The underlying value type.

Extension Methods

[O.ToSomething<T>\(I\)](#) , [OptionFunctions.SomethingOr<T>\(Option<T>, T\)](#) ,
[OptionFunctions.SomethingOr<T, R>\(Option<T>, Func<T, R>, R\)](#)

Interface Something

Namespace: [NullaryThunk.Funky.Core.Options](#)

Assembly: NullaryThunk.Funky.Core.dll

An [Option<T>](#) that has no meaningful value.

```
public interface Something
```

Extension Methods

[O.ToSomething<T>\(T\)](#)

Class Something<T>

Namespace: [NullaryThunk.Funky.Core.Options](#)

Assembly: NullaryThunk.Funky.Core.dll

An [Option<T>](#) that has a meaningful value.

```
public record Something<T> : ISomething<T>, Option<T>,
    Something, IEquatable<Something<T>>
```

Type Parameters

T

The type of the meaningful value.

Inheritance

[object](#) ← Something<T>

Implements

[ISomething<T>](#), [Option<T>](#), [Something](#), [IEquatable<Something<T>>](#)

Inherited Members

[object.Equals\(object\)](#) , [object.Equals\(object, object\)](#) , [object.GetHashCode\(\)](#) ,
[object.GetType\(\)](#) , [object.MemberwiseClone\(\)](#) , [object.ReferenceEquals\(object, object\)](#) ,
[object.ToString\(\)](#)

Extension Methods

[OptionFunctions.SomethingOr<T>\(Option<T>, T\)](#) ,
[OptionFunctions.SomethingOr<T, R>\(Option<T>, Func<T, R>, R\)](#) , [O.ToSomething<T>\(T\)](#)

Constructors

Something(T)

An [Option<T>](#) that has a meaningful value.

```
public Something(T Value)
```

Parameters

Value T

The meaningful value.

Properties

Value

The meaningful value.

```
public T Value { get; init; }
```

Property Value

T

Operators

implicit operator Something<T>(T)

Implicitly converts a value of type T into a [Something<T>](#).

```
public static implicit operator Something<T>(T value)
```

Parameters

value T

The value to wrap.

Returns

[Something<T>](#)

A [Something<T>](#) containing the provided value.

Namespace NullaryThunk.Funky.Core. Tests.Options

Classes

[OptionGenerators](#)

[OptionTests](#)

[SomethingOrTests](#)

Class OptionGenerators

Namespace: [NullaryThunk.Funky.Core.Tests.Options](#)

Assembly: NullaryThunk.Funky.Core.Tests.dll

```
public static class OptionGenerators
```

Inheritance

[object](#) ← OptionGenerators

Inherited Members

[object.Equals\(object\)](#) , [object.Equals\(object, object\)](#) , [object.GetHashCode\(\)](#) ,
[object.GetType\(\)](#) , [object.MemberwiseClone\(\)](#) , [object.ReferenceEquals\(object, object\)](#) ,
[object.ToString\(\)](#)

Properties

Integers

```
public static Gen<int> Integers { get; }
```

Property Value

Gen<[int](#)>

Methods

OptionOfInt()

```
public static Arbitrary<(int Value, Option<int> Option)> OptionOfInt()
```

Returns

Arbitrary<([int](#) [Value](#), [Option<int](#)> [Option](#))>

OptionsOfInt()

```
public static Arbitrary<Option<int>[]> OptionsOfInt()
```

Returns

Arbitrary<[Option<int>\[\]](#)>

Class OptionTests

Namespace: [NullaryThunk.Funky.Core.Tests.Options](#)

Assembly: NullaryThunk.Funky.Core.Tests.dll

```
[TestFixture]
public class OptionTests
```

Inheritance

[object](#) ← OptionTests

Inherited Members

[object.Equals\(object\)](#) , [object.Equals\(object, object\)](#) , [object.GetHashCode\(\)](#) ,
[object.GetType\(\)](#) , [object.MemberwiseClone\(\)](#) , [object.ReferenceEquals\(object, object\)](#) ,
[object.ToString\(\)](#)

Extension Methods

[O.ToSomething<T>\(T\)](#)

Methods

ArbitraryOptionIntTest()

```
[Test]
public static void ArbitraryOptionIntTest()
```

CastingIntToSomethingHasSameValueAsOriginalInt()

```
[Test]
public static void CastingIntToSomethingHasSameValueAsOriginalInt()
```

SomethingHasAllSomethingsFromOriginal()

```
[Test]
```

```
public static void SomethingsHasAllSomethingsFromOriginal()
```

Class SomethingOrTests

Namespace: [NullaryThunk.Funky.Core.Tests.Options](#)

Assembly: NullaryThunk.Funky.Core.Tests.dll

```
[TestFixture]
public class SomethingOrTests
```

Inheritance

[object](#) ← SomethingOrTests

Inherited Members

[object.Equals\(object\)](#) , [object.Equals\(object, object\)](#) , [object.GetHashCode\(\)](#) ,
[object.GetType\(\)](#) , [object.MemberwiseClone\(\)](#) , [object.ReferenceEquals\(object, object\)](#) ,
[object.ToString\(\)](#)

Extension Methods

[O.ToSomething<T>\(T\)](#)

Methods

Nothing_Yields_Value_Of_IfNone(int, int)

```
[Test]
public static void Nothing_Yields_Value_Of_IfNone(int value, int ifNone)
```

Parameters

value [int](#)

ifNone [int](#)

Something_Yields_Value_Of_Something(int, int)

```
[Test]
public static void Something_Yields_Value_Of_Something(int value, int ifNone)
```

Parameters

value [int](#)

ifNone [int](#)

With_Nothing_Nullary_Yields_Same_As_Without(int, int)

[Test]

```
public static void With_Nothing_Nullary_Yields_Same_As_Without(int value,  
int ifNone)
```

Parameters

value [int](#)

ifNone [int](#)

With_Something_Nullary_Yields_Same_As_Without(int, int)

[Test]

```
public static void With_Something_Nullary_Yields_Same_As_Without(int value,  
int ifNone)
```

Parameters

value [int](#)

ifNone [int](#)