

Namespace Checker

Classes

[Firewall](#)

Class for checking the firewall.

Class Firewall

Namespace: [Checker](#)

Assembly: Checker.dll

Class for checking the firewall.

```
public static class Firewall
```

Inheritance

[object](#)  ← Firewall

Inherited Members

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

Methods

CheckIpAndPort(string, int)

Check if a port on a ip is open.

```
public static bool CheckIpAndPort(string ip, int portNumber)
```

Parameters

ip [string](#) 

IP to check

portNumber [int](#) 

Port to check.

Returns

[bool](#) 

State if True or False.

PingIp(string)

Pings an IP.

```
public static bool PingIp(string ip)
```

Parameters

ip [string](#)[↗]

IP to ping.

Returns

[bool](#)[↗]

True or false.

Namespace Checker.Tests

Classes

[FirewallTest](#)

Class FirewallTest

Namespace: [Checker.Tests](#)








Assembly: Checker.Tests.dll

```
[TestClass]
[TestSubject(typeof(Firewall))]
public class FirewallTest
```

Inheritance

[object](#)  ← FirewallTest

Inherited Members

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

Methods

CheckIpAndPortTest()

```
[TestMethod]
public void CheckIpAndPortTest()
```

CheckIpAndPortTest_InvalidIp()

```
[TestMethod]
public void CheckIpAndPortTest_InvalidIp()
```

CheckIpAndPortTest_InvalidPort()

```
[TestMethod]
public void CheckIpAndPortTest_InvalidPort()
```

PingIpTest()

```
[TestMethod]  
public void PingIpTest()
```

PingIpTest_InvalidIp()

```
[TestMethod]  
public void PingIpTest_InvalidIp()
```

Namespace Converter

Classes

[DateTimeConverter](#)

Class for converting DateTime objects.

Enums

[DateTimeConverter.DateTimeModes](#)

Enum for DateTime modes. Represents year, month or day.

Class DateTimeConverter

Namespace: [Converter](#)

Assembly: Converter.dll








Class for converting DateTime objects.

```
public static class DateTimeConverter
```

Inheritance

[object](#)  ← DateTimeConverter

Inherited Members

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

Methods

SplitDateByMode(DateTime, DateTimeModes)

Extracts the Year, Month or Day depending on DateTimeModes Enum.

```
public static int SplitDateByMode(DateTime dt, DateTimeConverter.DateTimeModes mode)
```

Parameters

dt [DateTime](#) 

Source DateTime Object.

mode [DateTimeConverter.DateTimeModes](#)

Mode DateTimeModes.Year, DateTimeModes.Month oder DateTimeModes.Day.

Returns

[int](#) 

Year, Month or day as Integer.

Enum DateTimeConverter.DateTimeModes

Namespace: [Converter](#)

Assembly: Converter.dll

Enum for DateTime modes. Represents year, month or day.

```
public enum DateTimeConverter.DateTimeModes
```

Fields

Day = 2

The day

Month = 1

The month

Year = 0

The year

Namespace Converter.Tests

Classes

[DateTimeConverterTest](#)

Class DateTimeConverterTest

Namespace: [Converter.Tests](#)








Assembly: Converter.Tests.dll

```
[TestClass]
[TestSubject(typeof(DateTimeConverter))]
public class DateTimeConverterTest
```

Inheritance

[object](#)  ← DateTimeConverterTest

Inherited Members

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

Methods

SplitDateByMode_ValidInputs_ReturnsExpectedResult(string, DateTimeModes, int)

```
[TestMethod]
[DataRow(new object?[] { "2023-01-01", DateTimeConverter.DateTimeModes.Year, 2023 })]
[DataRow(new object?[] { "2023-01-01", DateTimeConverter.DateTimeModes.Month, 1 })]
[DataRow(new object?[] { "2023-01-01", DateTimeConverter.DateTimeModes.Day, 1 })]
[DataRow(new object?[] { "2000-12-31", DateTimeConverter.DateTimeModes.Year, 2000 })]
[DataRow(new object?[] { "2000-12-31", DateTimeConverter.DateTimeModes.Month, 12 })]
[DataRow(new object?[] { "2000-12-31", DateTimeConverter.DateTimeModes.Day, 31 })]
[DataRow(new object?[] { "0001-01-01", DateTimeConverter.DateTimeModes.Year, 1 })]
[DataRow(new object?[] { "0001-01-01", DateTimeConverter.DateTimeModes.Month, 1 })]
[DataRow(new object?[] { "0001-01-01", DateTimeConverter.DateTimeModes.Day, 1 })]
[DataRow(new object?[] { "9999-12-31", DateTimeConverter.DateTimeModes.Year, 9999 })]
[DataRow(new object?[] { "9999-12-31", DateTimeConverter.DateTimeModes.Month, 12 })]
[DataRow(new object?[] { "9999-12-31", DateTimeConverter.DateTimeModes.Day, 31 })]
public void SplitDateByMode_ValidInputs_ReturnsExpectedResult(string dateString,
DateTimeConverter.DateTimeModes mode, int expected)
```

Parameters

dateString [string](#)

mode [DateTimeConverter.DateTimeModes](#)

expected [int](#)

Namespace Extensions

Classes

[DateTimeExtensions](#)

Class DateTimeExtensions.

[EnumerableExtensions](#)

Class for IEnumerable Extensions

[StringExtensions](#)

Class StringExtensions.

Class DateTimeExtensions

Namespace: [Extensions](#)

Assembly: Extensions.dll

Class DateTimeExtensions.

```
public static class DateTimeExtensions
```

Inheritance

[object](#)  ← DateTimeExtensions

Inherited Members

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

Methods

ConvertDateTimeToString(DateTime)

Converts a given DateTime Object to yyyy-MM-dd HH:mm:ssZ.

```
public static string ConvertDateTimeToString(this DateTime dt)
```

Parameters

dt [DateTime](#) 

DateTime Object.

Returns

[string](#) 

System.String.

ConvertDateToNumeric(DateTime)

Converts a given DateTime Object to yyyyMMdd.

```
public static int ConvertDateToNumeric(this DateTime dt)
```

Parameters

dt [DateTime](#)

DateTime Object

Returns

[int](#)

Integer numeric DateTime

Class EnumerableExtensions


Namespace: [Extensions](#)

Assembly: Extensions.dll

Class for IEnumerable Extensions

```
public static class EnumerableExtensions
```

Inheritance

[object](#)  ← EnumerableExtensions

Inherited Members

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

Methods

IsEmpty<T>(IEnumerable<T>?)

Checks if the IEnumerable is null or empty

```
public static bool IsEmpty<T>(this IEnumerable<T>? source)
```

Parameters

source [IEnumerable](#)  <T>

IEnumeration to check.

Returns

[bool](#) 

true or false

Type Parameters

T

Type of Source

IsEmpty<T>(IEnumerable<T>?)

Checks if the IEnumerable is not null and not empty

```
public static bool IsNotEmpty<T>(this IEnumerable<T>? source)
```

Parameters

source [IEnumerable](#)<T>

IEnumeration to check

Returns

[bool](#)

true or false

Type Parameters

T

Type of Source

Class StringExtensions

Namespace: [Extensions](#)

Assembly: Extensions.dll

Class StringExtensions.

```
public static class StringExtensions
```

Inheritance

[object](#)  ← StringExtensions

Inherited Members

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

Methods

GetSalutationText(string)

Returns a salutation based on a given gender.

```
public static string GetSalutationText(this string gender)
```

Parameters

gender [string](#) 

Gender

Returns

[string](#) 

Herr oder Frau

ReturnGenderId(string)

Returns a integer based on a given gender.

```
public static int ReturnGenderId(this string gender)
```

Parameters

gender [string](#)

Gender

Returns

[int](#)

Male = 1, Female = 2, Unknown = -1

Namespace Extensions.Tests

Classes

[DateTimeExtensionsTest](#)

[EnumerableExtensionsTest](#)

[StringExtensionsTest](#)

Class DateTimeExtensionsTest

Namespace: [Extensions.Tests](#)








Assembly: Extensions.Tests.dll

```
[TestClass]  
[TestSubject(typeof(DateTimeExtensions))]  
public class DateTimeExtensionsTest
```

Inheritance

[object](#)  ← DateTimeExtensionsTest

Inherited Members

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

Methods

GetDateTimeAsNumber()

```
[TestMethod]  
public void GetDateTimeAsNumber()
```

GetDateTimeAsString()

```
[TestMethod]  
public void GetDateTimeAsString()
```


Class EnumerableExtensionsTest

Namespace: [Extensions.Tests](#)








Assembly: Extensions.Tests.dll

```
[TestClass]
[TestSubject(typeof(EnumerableExtensions))]
public class EnumerableExtensionsTest
```

Inheritance

[object](#)  ← EnumerableExtensionsTest

Inherited Members

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

Methods

IsEmptyTest(IEnumerable<object>?, bool)

```
[TestMethod]
[DataRow(new object?[] { null, true })]
[DataRow(new object?[] { new string[] { "a", "b", "c" }, false })]
public void IsEmptyTest(IEnumerable<object>? source, bool expected)
```

Parameters

source [IEnumerable](#)  <[object](#) >

expected [bool](#) 

IsNotEmptyTest(IEnumerable<object>?, bool)

```
[TestMethod]
[DataRow(new object?[] { null, false })]
[DataRow(new object?[] { new string[] { "a", "b", "c" }, true })]
```

```
[DataRow(new object?[] { new string[] { }, false })]  
public void IsNotEmptyTest(IEnumerable<object>? source, bool expected)
```

Parameters

source [IEnumerable](#) [<object>](#)

expected [bool](#)


Class StringExtensionsTest

Namespace: [Extensions.Tests](#)








Assembly: Extensions.Tests.dll

```
[TestClass]  
[TestSubject(typeof(StringExtensions))]  
public class StringExtensionsTest
```

Inheritance

[object](#)  ← StringExtensionsTest

Inherited Members

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

Methods

GetGenderId()

```
[TestMethod]  
public void GetGenderId()
```

GetSalutation()

```
[TestMethod]  
public void GetSalutation()
```

Namespace Generators

Classes

[DataTableGenerator<T>](#)

Class for generating DataTables from a List of Model objects.

[Hash](#)

Some methods for computing and decoding Hash.

[TemporaryDirectory](#)

A class to create a temporary directory.

[TemporaryFile](#)

Generates a temporary file.

Class DataTableGenerator<T>

Namespace: [Generators](#)

Assembly: Generators.dll

Class for generating DataTables from a List of Model objects.

```
public class DataTableGenerator<T>
```

Type Parameters








T

Modeltyp

Inheritance

[object](#)  ← DataTableGenerator<T>

Inherited Members

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

Constructors

DataTableGenerator(ILogger<DataTableGenerator<T>>)

Constructor

```
public DataTableGenerator(ILogger<DataTableGenerator<T>> logger)
```

Parameters

logger [ILogger](#)  <[DataTableGenerator](#) <T>>

Class logger

Methods

GenerateDataTableFromModelList(IList<T>, bool)

Generates a DataTable from a List of Model objects.

```
public DataTable GenerateDataTableFromModelList(IList<T> modelList, bool withId)
```

Parameters

modelList [IList](#)<T>

List model

withId [bool](#)

Should a ID Field generated.

Returns

[DataTable](#)

DataTable

Class Hash

Namespace: [Generators](#)

Assembly: Generators.dll

Some methods for computing and decoding Hash.

```
public static class Hash
```

Inheritance

[object](#)  ← Hash

Inherited Members

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


Methods

GetHashString(string)

Computes the SHA256 hash for the input string and returns it as a hexadecimal string.

```
public static string GetHashString(string inputString)
```

Parameters

inputString [string](#) 

The string to be hashed.

Returns

[string](#) 



The computed hash as a hexadecimal string.

Exceptions

[TargetInvocationException](#) 

On the .NET Framework 4.6.1 and earlier versions only: The algorithm was used with Federal Information Processing Standards (FIPS) mode enabled, but is not FIPS compatible.


[EncoderFallbackException](#)

A fallback occurred (for more information, see Character Encoding in .NET) -and- [EncoderFallback](#)  is set to [EncoderExceptionFallback](#) .

[ObjectDisposedException](#)

The object has already been disposed.

[ArgumentOutOfRangeException](#)

Enlarging the value of this instance would exceed [MaxCapacity](#) .

Class TemporaryDirectory


Namespace: [Generators](#)

Assembly: Generators.dll

A class to create a temporary directory.

```
public static class TemporaryDirectory
```

Inheritance

[object](#)  ← TemporaryDirectory

Inherited Members

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

Methods

GetTemporaryDirectory()

Erstellt einen temporären Ordner und gibt den Pfad zurück.

```
public static string GetTemporaryDirectory()
```

Returns

[string](#) 

Pfad zum temporären Ordner.

Class TemporaryFile

Namespace: [Generators](#)

Assembly: Generators.dll

Generates a temporary file.

```
public sealed class TemporaryFile : IDisposable
```

Inheritance

[object](#)  ← TemporaryFile

Implements

[IDisposable](#) 

Inherited Members

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

Constructors

TemporaryFile()

Initializes a new instance of the [TemporaryFile](#) class.

```
public TemporaryFile()
```

TemporaryFile(string)

Initializes a new instance of the [TemporaryFile](#) class.

```
public TemporaryFile(string directory)
```

Parameters

directory [string](#) 

The directory.

Properties

FilePath

Gets the file path.

```
public string? FilePath { get; }
```

Property Value

[string](#)[↗]

The file path.

Methods

Dispose()

Performs application-defined tasks associated with freeing, releasing, or resetting unmanaged resources.

```
public void Dispose()
```

~TemporaryFile()

Finalizes an instance of the [TemporaryFile](#) class.

```
protected ~TemporaryFile()
```

Namespace Generators.Tests

Classes

[DataTableGeneratorTest](#)

[DataTableGeneratorTest.TestModel](#)

[TemporaryDirectoryTest](#)

Class DataTableGeneratorTest

Namespace: [Generators.Tests](#)








Assembly: Generators.Tests.dll

```
[TestClass]
[TestSubject(typeof(DataTableGenerator<>))]
public class DataTableGeneratorTest
```

Inheritance

[object](#)  ← DataTableGeneratorTest

Inherited Members

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

Methods

Initialize()

```
[TestInitialize]
public void Initialize()
```

TestGenerateDataTableFromModelListWithId()

```
[TestMethod]
public void TestGenerateDataTableFromModelListWithId()
```

TestGenerateDataTableFromModelListWithoutId()

```
[TestMethod]
public void TestGenerateDataTableFromModelListWithoutId()
```

TestGenerateDataTableFromNullModelList()

```
[TestMethod]
```

```
public void TestGenerateDataTableFromNullModelList()
```

Class DataTableGeneratorTest.TestModel

Namespace: [Generators.Tests](#)

Assembly: Generators.Tests.dll

```
public class DataTableGeneratorTest.TestModel
```

Inheritance

[object](#) ← DataTableGeneratorTest.TestModel

Inherited Members

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

Properties

Id

```
public int Id { get; set; }
```

Property Value

[int](#)

Value

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

Property Value

[string](#)


Class TemporaryDirectoryTest

Namespace: [Generators.Tests](#)








Assembly: Generators.Tests.dll

```
[TestClass]  
[TestSubject(typeof(TemporaryDirectory))]  
public class TemporaryDirectoryTest
```

Inheritance

[object](#)  ← TemporaryDirectoryTest

Inherited Members

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

Methods

GetTemporaryDirectory_ShouldCreateDirectory()

```
[TestMethod]  
public void GetTemporaryDirectory_ShouldCreateDirectory()
```

GetTemporaryDirectory_ShouldHandleConcurrentCalls()

```
[TestMethod]  
public void GetTemporaryDirectory_ShouldHandleConcurrentCalls()
```

GetTemporaryDirectory_ShouldHandleExistingDirectory()

```
[TestMethod]  
public void GetTemporaryDirectory_ShouldHandleExistingDirectory()
```

GetTemporaryDirectory_ShouldReturnUniqueDirectoryPaths()

[TestMethod]

```
public void GetTemporaryDirectory_ShouldReturnUniqueDirectoryPaths()
```

Namespace Patterns

Classes

[Pipeline<T>](#)

Class Pipeline. Used to define the pipeline. More on <https://medium.com/@martinstm/pipeline-pattern-c-e01e2dd7238c>

[Result](#)

Base class for Result pattern.

[Result<T>](#)

Class Result.

Interfaces

[IPipeline<T>](#)

This Interface is used to define the pipeline. More Details on: <https://medium.com/@martinstm/pipeline-pattern-c-e01e2dd7238c>

[IStep<T>](#)

Interface IStep. It is used to define the step in the pipeline.

Interface IPipeline<T>

Namespace: [Patterns](#)

Assembly: Patterns.dll

This Interface is used to define the pipeline. More Details on: <https://medium.com/@martinstm/pipeline-pattern-c-e01e2dd7238c>

```
public interface IPipeline<T>
```

Type Parameters

T

Given Type

Properties

Name

Gets or sets the name of the Pipeline.

```
string Name { get; set; }
```

Property Value

[string](#)

The name.

Steps

Gets the steps.

```
IReadOnlyCollection<IStep<T>> Steps { get; }
```

Property Value

[ICollection](#) <[IStep](#)<T>>

The steps.

Methods

StartAsync(T)

Starts the asynchronous.

```
Task<T> StartAsync(T data)
```

Parameters

data T

The data.

Returns

[Task](#) <T>

Task<T>.

WithStep(IStep<T>)

Adds the step.

```
void WithStep(IStep<T> step)
```

Parameters

step [IStep](#)<T>

The step.

Interface IStep<T>

Namespace: [Patterns](#)

Assembly: Patterns.dll

Interface IStep. It is used to define the step in the pipeline.

```
public interface IStep<T>
```

Type Parameters

T

Given Type

Methods

ExecuteAsync(T)

Executes the asynchronous.

```
Task<T> ExecuteAsync(T data)
```

Parameters

data T

The data.

Returns

[Task](#)[↗]<T>

Task<T>.

Class Pipeline<T>

Namespace: [Patterns](#)

Assembly: Patterns.dll

Class Pipeline. Used to define the pipeline. More on <https://medium.com/@martinstm/pipeline-pattern-c-e01e2dd7238c>

```
public class Pipeline<T> : IPipeline<T> where T : class
```

Type Parameters

T

Given Type

Inheritance

[object](#) ← Pipeline<T>

Implements

[IPipeline](#)<T>

Inherited Members

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

Constructors

Pipeline(string, ILogger<Pipeline<T>>)

Initializes a new instance of the [Pipeline<T>](#) class.

```
public Pipeline(string name, ILogger<Pipeline<T>> logger)
```

Parameters

name [string](#)

The name.

logger [ILogger](#) <[Pipeline](#)<T>>

Instance logger

Properties

Name

Gets or sets the name of the Pipeline.

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

Property Value

[string](#)

The name.

Steps

Gets the steps.

```
public IReadOnlyCollection<IStep<T>> Steps { get; }
```

Property Value

[IReadOnlyCollection](#) <[IStep](#)<T>>

The steps.

Methods

StartAsync(T)

Start as an asynchronous operation.

```
public Task<T> StartAsync(T data)
```

Parameters

data T

The data.

Returns

[Task](#) <T>

A Task<T> representing the asynchronous operation.

WithStep(IStep<T>)

Adds the step.

```
public void WithStep(IStep<T> step)
```

Parameters

step [IStep](#) <T>

The step.

Class Result

Namespace: [Patterns](#)

Assembly: Patterns.dll

Base class for Result pattern.

```
public class Result
```








Inheritance

[object](#)  ← Result

Derived

[Result<T>](#)

Inherited Members

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

Constructors

Result(bool, string)

Initializes a new instance of the [Result](#) class.

```
protected Result(bool isSuccess, string errorMessage)
```

Parameters

isSuccess [bool](#) 

if set to **true** [is success].

errorMessage [string](#) 

The error message.

Properties

ErrorMessage

Gets the error message.

```
public string ErrorMessage { get; }
```

Property Value

[string](#)

The error message.

IsSuccess

Gets a value indicating whether this instance is success.

```
public bool IsSuccess { get; }
```

Property Value

[bool](#)

true if this instance is success; otherwise, **false**.

Methods

Failure(string)

Failures the specified error message.

```
public static Result Failure(string errorMessage)
```

Parameters

errorMessage [string](#)

The error message.

Returns

[Result](#)

Result.

Success()

Successes this instance.

```
public static Result Success()
```

Returns

[Result](#)

Result.

Class Result<T>

Namespace: [Patterns](#)

Assembly: Patterns.dll

Class Result.

```
public class Result<T> : Result
```








Type Parameters

T

Inheritance

[object](#)  ← [Result](#) ← Result<T>

Inherited Members

[Result.IsSuccess](#) , [Result.ErrorMessage](#) , [Result.Success\(\)](#) , [object.Equals\(object\)](#)  ,
[object.Equals\(object, object\)](#)  , [object.GetHashCode\(\)](#)  , [object.GetType\(\)](#)  ,
[object.MemberwiseClone\(\)](#)  , [object.ReferenceEquals\(object, object\)](#)  , [object.ToString\(\)](#) 

Properties

Value

Gets the value.

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

Property Value

T

The value.

Methods

Failure(string)

Failures the specified error message.

```
public static Result<T> Failure(string errorMessage)
```

Parameters

errorMessage [string](#) 

The error message.

Returns

[Result](#)<T>

Result<T>.

Success(T)

Successes the specified value.

```
public static Result<T> Success(T value)
```

Parameters

value T

The value.

Returns

[Result](#)<T>

Result<T>.

See Also

<https://medium.com/@davisaac8/an-alternative-to-try-catch-in-c-b0e5dfafa910> 

Namespace Patterns.Test

Classes

[Result](#)

Class Result

Namespace: [Patterns.Test](#)








Assembly: Patterns.Tests.dll

```
[TestClass]  
[TestSubject(typeof(Result))]  
public class Result
```

Inheritance

[object](#)  ← Result

Inherited Members

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

Methods

GetUserNameById(int)

```
public static Result<string> GetUserNameById(int userId)
```

Parameters

userId [int](#) 

Returns

[Result](#)<[string](#)  >

GetUserNameByIdTest()

```
[TestMethod]  
public void GetUserNameByIdTest()
```

GetUserNameByIdTest_InvalidId()

```
[TestMethod]
```

```
public void GetUserNameByIdTest_InvalidId()
```

Namespace Patterns.Tests

Classes

[PipelineTest](#)


Class PipelineTest

Namespace: [Patterns.Tests](#)








Assembly: Patterns.Tests.dll

```
[TestClass]
[TestSubject(typeof(Pipeline<>))]
public class PipelineTest
```

Inheritance

[object](#)  ← PipelineTest

Inherited Members

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

Methods

Name_PropertyGetSet()

```
[TestMethod]
public void Name_PropertyGetSet()
```

Setup()

```
[TestInitialize]
public void Setup()
```

StartAsync_ExecutesAllStepsInOrderAsync()

```
[TestMethod]
public Task StartAsync_ExecutesAllStepsInOrderAsync()
```

Returns

[Task](#)

StartAsync_ReturnsInitialData_WhenNoStepsAreAddedAsync()

```
[TestMethod]
public Task StartAsync_ReturnsInitialData_WhenNoStepsAreAddedAsync()
```

Returns

[Task](#)

Steps_PropertyReturnsReadOnlyCollection()

```
[TestMethod]
public void Steps_PropertyReturnsReadOnlyCollection()
```

WithStep_AddsStepToPipeline()

```
[TestMethod]
public void WithStep_AddsStepToPipeline()
```

WithStep_ThrowsArgumentNullException_WhenStepsIsNull()

```
[TestMethod]
[ExpectedException(typeof(ArgumentNullException))]
public void WithStep_ThrowsArgumentNullException_WhenStepsIsNull()
```

Namespace Services

Classes

[CsvService](#)

Service for Writing a CSV.

[EmailService](#)

Service for sending emails.

[WebDavService](#)

Service for using WebDav.

Interfaces

[ICsvService](#)

Interface ICsvService

[IEmailService](#)

Interface IEmailService

[IWebDavService](#)

Interface IWebDavService

Class CsvService

Namespace: [Services](#)

Assembly: Services.dll

Service for Writing a CSV.

```
public class CsvService : ICsvService
```








Inheritance

[object](#)  ← CsvService

Implements

[ICsvService](#)

Inherited Members

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


Constructors

CsvService(ILogger<CsvService>)

Constructor

```
public CsvService(ILogger<CsvService> logger)
```

Parameters

logger [ILogger](#)  <[CsvService](#)>

Class logger

Methods

Read<T>(string, string, ClassMap<T>, string)

Reads the specified target name.

```
public IList<T> Read<T>(string targetName, string delimiter, ClassMap<T> map,  
string culture)
```

Parameters

targetName [string](#)

Name of the target.

delimiter [string](#)

The delimiter, like: ";"

map [ClassMap<T>](#)

The map.

culture [string](#)

A culture string like 'en-US'.

Returns

[IList](#) <T>

List<T>.

Type Parameters

T

Exceptions

[ArgumentNullException](#)

WriteAsync<T>(IList<T>, string, string, string)

Writes the CSV asynchronous.

```
public Task WriteAsync<T>(IList<T> list, string targetName, string delimiter,
string culture)
```

Parameters

list [IList](#)<T>

Listen

targetName [string](#)

Path to CSV file.

delimiter [string](#)

Delimiter, zB. ";"

culture [string](#)

A culture string like 'en-US'.

Returns

[Task](#)

Asynchroner Task.

Type Parameters

T

Modeltype

Exceptions

[ArgumentException](#)

If the given **list** is empty.

[ArgumentNullException](#)

If the **list** or **targetName** is empty

[UnauthorizedAccessException](#)

Access is denied for `list` or `targetName`.

[SecurityException](#) 

The caller does not have the required permission.

[DirectoryNotFoundException](#) 

The specified path in `targetName` is invalid (for example, it is on an unmapped drive).

[IOException](#) 

`targetName` includes an incorrect or invalid syntax for file name, directory name, or volume label syntax.

Class EmailService


Namespace: [Services](#)

Assembly: Services.dll

Service for sending emails.

```
public class EmailService : IEmailService
```








Inheritance

[object](#)  ← EmailService

Implements

[IEmailService](#)

Inherited Members

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

Constructors

EmailService(ILogger<EmailService>, IConfiguration)

Constructor for EmailService

```
public EmailService(ILogger<EmailService> logger, IConfiguration configuration)
```

Parameters

logger [ILogger](#)  <[EmailService](#)>

Class logger.

configuration [IConfiguration](#) 

The Configuration object.

Methods

SendMessageAsync(MimeMessage)

Method for sending an email..

```
public Task SendMessageAsync(MimeMessage message)
```

Parameters

message [MimeMessage](#) 

MimeMessage.

Returns

[Task](#) 

Exceptions

[ArgumentNullException](#) 

message ist null.

Interface ICsvService

Namespace: [Services](#)

Assembly: Services.dll

Interface ICsvService

```
public interface ICsvService
```

Methods

Read<T>(string, string, ClassMap<T>, string)

Reads the specified target name.

```
IList<T> Read<T>(string targetName, string delimiter, ClassMap<T> map, string culture)
```

Parameters

targetName [string](#)[↗]

Name of the target.

delimiter [string](#)[↗]

The delimiter.

map [ClassMap<T>](#)

Class Map

culture [string](#)[↗]

Target culture like en-US

Returns

[IList](#)[↗]<T>

List<T>.

Type Parameters

T

WriteAsync<T>(IList<T>, string, string, string)

Writes the asynchronous.

```
Task WriteAsync<T>(IList<T> list, string targetName, string delimiter, string culture)
```

Parameters

list [IList](#)<T>

The list.

targetName [string](#)

Name of the target.

delimiter [string](#)

The delimiter.

culture [string](#)

Target culture like en-US

Returns

[Task](#)

Task.

Type Parameters

T

Interface IEmailService

Namespace: [Services](#)

Assembly: Services.dll

Interface IEmailService

```
public interface IEmailService
```

Methods

SendMessageAsync(MimeMessage)

Sends the message asynchronous.

```
Task SendMessageAsync(MimeMessage message)
```

Parameters

message [MimeMessage](#)

The message.

Returns

[Task](#)

Task.

Interface IWebDavService

Namespace: [Services](#)

Assembly: Services.dll

Interface IWebDavService

```
public interface IWebDavService
```

Methods

DeleteFileAsync(string)

Deletes the file asynchronous.

```
Task<bool> DeleteFileAsync(string remoteFilepath)
```

Parameters

remoteFilepath [string](#) 

The remote filepath.

Returns

[Task](#)  <[bool](#)  >

Task<System.Boolean>.

DownloadFileAsync(string, string)

Downloads the file asynchronous.

```
Task<bool> DownloadFileAsync(string remoteFilepath, string localFilepath)
```

Parameters

`remoteFilepath` [string](#)

The remote filepath.

`localFilepath` [string](#)

The local filepath.

Returns

[Task](#) <[bool](#)>

Task<System.Boolean>.

GetParams()

Gets the wd parameters.

```
WebDavClientParams GetParams()
```

Returns

[WebDavClientParams](#)

WebDavClientParams.

UploadFileAsync(string, string)

Uploads the file asynchronous.

```
Task<bool> UploadFileAsync(string localFilepath, string remoteFilepath)
```

Parameters

`localFilepath` [string](#)

The local filepath.

`remoteFilepath` [string](#)

The remote filepath.

Returns

[Task](#) <[bool](#)>

Task<System.Boolean>.

Class WebDavService

Namespace: [Services](#)

Assembly: Services.dll

Service for using WebDav.

```
public class WebDavService : IWebDavService
```








Inheritance

[object](#)  ← WebDavService

Implements

[IWebDavService](#)

Inherited Members

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

Constructors

WebDavService(IConfiguration, ILogger<WebDavService>)

Constructor for WebDavServiceOptions.

```
public WebDavService(IConfiguration configuration, ILogger<WebDavService> logger)
```

Parameters

configuration [IConfiguration](#) 

IConfiguration

logger [ILogger](#)  <[WebDavService](#)>

logger

Methods

DeleteFileAsync(string)

Deletes a file from server.

```
public Task<bool> DeleteFileAsync(string remoteFilepath)
```

Parameters

remoteFilepath [string](#)

Path to file.

Returns

[Task](#) <[bool](#)>

True oder False.

DownloadFileAsync(string, string)

Downloads a file.

```
public Task<bool> DownloadFileAsync(string remoteFilepath, string localFilepath)
```

Parameters

remoteFilepath [string](#)

Path where the file should be placed..

localFilepath [string](#)

Local File Path.

Returns

[Task](#) <[bool](#)>

True oder False, jenachdem ob erfolgreich.

Exceptions

[Exception](#)

Condition.

[ArgumentException](#)

Wenn *remoteFilepath* oder *localFilepath* null ist.

UploadFileAsync(string, string)

Uploads a file

```
public Task<bool> UploadFileAsync(string localFilepath, string remoteFilepath)
```

Parameters

localFilepath [string](#)

Local Filepath.

remoteFilepath [string](#)

Remote Path where the file should be placed.

Returns

[Task](#) <[bool](#)>

Exceptions

[DirectoryNotFoundException](#)

The specified path *localFilepath* or *remoteFilepath* is invalid, (for example, it is on an unmapped drive).

[IOException](#)

An I/O error occurred while opening the file.


[UnauthorizedAccessException](#)

localFilepath or *remoteFilepath* specified a directory. -or- The caller does not have the required permission.

[FileNotFoundException](#)

The file specified in `localFilepath` or `remoteFilepath` was not found.

[ArgumentException](#)

.`localFilepath` or `remoteFilepath` is a zero-length string, contains only white space, or contains one or more invalid characters. You can query for invalid characters by using the [GetInvalidPathChars\(\)](#)  method.

[NotSupportedException](#)

`localFilepath` or `remoteFilepath` is in an invalid format.

[ArgumentNullException](#)

`localFilepath` or `remoteFilepath` is [null](#) .

[PathTooLongException](#)

The specified path, file name, or both exceed the system-defined maximum length.

Namespace Services.Tests

Classes

[CsvServiceTest](#)

[Foo](#)

Class CsvServiceTest

Namespace: [Services.Tests](#)








Assembly: Services.Tests.dll

```
[TestClass]  
[TestSubject(typeof(CsvService))]  
public class CsvServiceTest
```

Inheritance

[object](#)  ← CsvServiceTest

Inherited Members

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

Methods

SetUp()

```
[TestInitialize]  
public void SetUp()
```

Write_SendsDataToFileAsync()

```
[TestMethod]  
public Task Write_SendsDataToFileAsync()
```

Returns

[Task](#) 

Write_ThrowsException_OnEmptyListAsync()

```
[TestMethod]  
public Task Write_ThrowsException_OnEmptyListAsync()
```

Returns

[Task](#)

Write_ThrowsException_OnEmptyTargetAsync()

```
[TestMethod]  
public Task Write_ThrowsException_OnEmptyTargetAsync()
```

Returns

[Task](#)

Write_ThrowsException_OnNullListAsync()

```
[TestMethod]  
public Task Write_ThrowsException_OnNullListAsync()
```

Returns

[Task](#)

Write_ThrowsException_OnNullTargetAsync()

```
[TestMethod]  
public Task Write_ThrowsException_OnNullTargetAsync()
```

Returns

[Task](#)

Class Foo

Namespace: [Services.Tests](#)








Assembly: Services.Tests.dll

```
public class Foo
```

Inheritance

[object](#)  ← Foo

Inherited Members

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

Properties

Id

```
public int Id { get; set; }
```

Property Value

[int](#) 

Name

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

Property Value

[string](#) 