Namespace Checker

Classes

<u>Firewall</u>

Class for checking the firewall.

Class Firewall

State if True or False.

Namespace: Checker Assembly: Checker.dll Class for checking the firewall. public static class Firewall **Inheritance** <u>object</u>

← Firewall **Inherited Members** object.Equals(object) ♂, object.Equals(object, object) ♂, object.GetHashCode() ♂, object.GetType() ♂, **Methods** ChecklpAndPort(string, int) Check if a port on a ip is open. public static bool CheckIpAndPort(string ip, int portNumber) **Parameters** ip <u>string</u> □ IP to check portNumber <u>int</u>♂ Port to check. Returns **bool** ☑

Pinglp(string)

```
Pings an IP.
```

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

Parameters

ip <u>string</u>♂

IP to ping.

Returns

<u>bool</u>♂

True or false.

Namespace Converter

Classes

<u>DateTimeConverter</u>

Class for converting DateTime objects.

Enums

DateTimeConverter.DateTimeModes

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

Class DateTimeConverter

Namespace: <u>Converter</u>
Assembly: Converter.dll

Class for converting DateTime objects.

public static class DateTimeConverter

Inheritance

<u>object</u> □ ← DateTimeConverter

Inherited Members

<u>object.Equals(object)</u> <u>object.Equals(object, object)</u> <u>object.GetHashCode()</u> <u>object.GetType()</u> <u>object.MemberwiseClone()</u> <u>object.ReferenceEquals(object, object)</u> <u>object.ToString()</u> <u>object.ToString() object.ToString() ob</u>

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 <u>DateTime</u> □

Source DateTime Object.

mode DateTimeConverter.DateTimeModes

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

Returns

<u>int</u>♂

Year, Month or day as Integer.

Enum DateTimeConverter.DateTimeModes

Namespace: <u>Converter</u>
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 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

<u>object</u> ∠ ← DateTimeExtensions

Inherited Members

 $\underline{object.Equals(object)} \ \ \ \ \ \underline{object.Equals(object, object)} \ \ \ \ \ \underline{object.MemberwiseClone()} \ \ \ \ \underline{object.ReferenceEquals(object, object)} \ \ \ \ \underline{object.ToString()} \ \ \ \ \underline{object.ToString()} \ \ \ \ \underline{object.ToString()} \ \ \underline{object.ToStr$

Methods

ConvertDateTimeToString(DateTime)

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

public static string ConvertDateTimeToString(this DateTime dt)

Parameters

dt <u>DateTime</u> ☑

DateTime Object.

Returns

<u>string</u> □

System.String.

ConvertDateToNumeric(DateTime)

Converts a given DateTime Object to yyyMMdd.

public static int ConvertDateToNumeric(this DateTime dt)

Parameters

dt <u>DateTime</u>♂

DateTime Object

Returns

<u>int</u>♂

Integer numeric DateTime

Class EnumerableExtensions

Namespace: <u>Extensions</u>
Assembly: Extensions.dll

Class for IEnumerable Extensions

public static class EnumerableExtensions

Inheritance

<u>object</u> *□* ← EnumerableExtensions

Inherited Members

 $\underline{object.Equals(object)} \ \ \ \ \ \underline{object.Equals(object, object)} \ \ \ \ \ \underline{object.MemberwiseClone()} \ \ \ \ \underline{object.ReferenceEquals(object, object)} \ \ \ \ \underline{object.ToString()} \ \ \ \ \underline{object.ToString()} \ \ \ \ \underline{object.ToString()} \ \ \underline{object.ToStr$

Methods

IsEmpty<T>(IEnumerable<T>?)

Checks if the IEnumerable is null or empty

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

Parameters

source <u>IEnumerable</u> < < T >

IEnumeration to check.

Returns

bool₫

true or false

Type Parameters

IsNotEmpty<T>(IEnumerable<T>?)

Checks if the IEnumerable is not null and not empty

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

Parameters

source <u>IEnumerable</u>♂<T>

IEnumeration to check

Returns

bool ♂

true or false

Type Parameters

Т

Type of Source

Class StringExtensions

Namespace: Extensions
Assembly: Extensions.dll
Class StringExtensions.

public static class StringExtensions
Inheritance

Inherited Members

<u>object</u> < StringExtensions

Methods

GetSalutationText(string)

Returns a salutation based on a given gender.

public static string GetSalutationText(this string gender)

Parameters

gender <u>string</u>♂

Gender

Returns

<u>string</u> □

Herr oder Frau

ReturnGenderId(string)

Returns a integer based on a given gender.

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

Parameters

gender <u>string</u>♂

Gender

Returns

<u>int</u>♂

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

Namespace Generators

Classes

DataTableGenerator<T>

Class for generating DataTables from a List of Model objects.

Hash

Some methods for computing and decoding Hash.

<u>TemporaryDirectory</u>

A class to create a temporary directory.

TemporaryFile

Generates a temporary file.

Class DataTableGenerator<T>

Namespace: <u>Generators</u>
Assembly: Generators.dll

Class for generating DataTables from a List of Model objects.

public class DataTableGenerator<T>

Type Parameters

Т

Modeltyp

Inheritance

object d ← DataTableGenerator<T>

Inherited Members

 $\underline{object.Equals(object)} \ \ \ \ \ \underline{object.Equals(object, object)} \ \ \ \ \ \underline{object.MemberwiseClone()} \ \ \ \ \ \underline{object.ReferenceEquals(object, object)} \ \ \ \ \underline{object.ToString()} \ \ \ \underline{object.ToString()} \ \ \ \underline{object.ToString()} \ \ \ \underline{object.ToString()} \ \ \underline{object.T$

Constructors

DataTableGenerator(ILogger < DataTableGenerator < T > >)

Constructor

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

Parameters

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

List model

withId <u>bool</u>♂

Should a ID Field generated.

Returns

DataTable

Class Hash

Namespace: <u>Generators</u>
Assembly: Generators.dll

Some methods for computing and decoding Hash.

```
public static class Hash
```

Inheritance

<u>object</u>

✓ Hash

Inherited Members

 $\underline{object.Equals(object)} \ \ \ \ \ \underline{object.Equals(object, object)} \ \ \ \ \ \underline{object.MemberwiseClone()} \ \ \ \ \underline{object.ReferenceEquals(object, object)} \ \ \ \ \underline{object.ToString()} \ \ \ \ \underline{object.ToString()} \ \ \ \ \underline{object.ToString()} \ \ \underline{object.ToStr$

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 $\underline{\mathsf{string}}$

The string to be hashed.

Returns

<u>string</u> ☑

The computed hash as a hexadecimal string.

Exceptions

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.

$\underline{EncoderFallbackException} \, \square$

A fallback occurred (for more information, see Character Encoding in .NET) -and- <u>EncoderFallback</u> is set to <u>EncoderExceptionFallback</u>.

$\underline{ObjectDisposedException} \, \square$

The object has already been disposed.

Enlarging the value of this instance would exceed MaxCapacity ...

Class TemporaryDirectory

Namespace: <u>Generators</u>
Assembly: Generators.dll

A class to create a temporary directory.

public static class TemporaryDirectory

Inheritance

<u>object</u> < ← Temporary Directory

Inherited Members

 $\underline{object.Equals(object)} \ \ \ \ \ \underline{object.Equals(object, object)} \ \ \ \ \ \underline{object.MemberwiseClone()} \ \ \ \ \underline{object.ReferenceEquals(object, object)} \ \ \ \ \underline{object.ToString()} \ \ \ \ \underline{object.ToString()} \ \ \ \ \underline{object.ToString()} \ \ \underline{object.ToStr$

Methods

GetTemporaryDirectory()

Erstellt einen temporären Ordner und gibt den Pfad zurück.

public static string GetTemporaryDirectory()

Returns

<u>string</u> ☑

Pfad zum temporären Ordner.

Class TemporaryFile

Namespace: <u>Generators</u>
Assembly: Generators.dll

Generates a temporary file.

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

Inheritance

<u>object</u> ← TemporaryFile

Implements

<u>IDisposable</u> ☑

Inherited Members

<u>object.Equals(object)</u> , <u>object.Equals(object, object)</u> , <u>object.GetHashCode()</u> , <u>object.GetType()</u> , <u>object.ReferenceEquals(object, object)</u> , <u>object.ToString()</u>

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 <u>string</u> ☑

The directory.

Properties

FilePath

Gets the file path.

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

Property Value

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 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 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: <u>Patterns</u>
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 Pipleine.

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

Property Value

<u>string</u> ♂

The name.

Steps

Gets the steps.

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

Property Value

<u>IReadOnlyCollection</u> ♂ < <u>IStep</u> < T > >

The steps.

Methods

StartAsync(T)

Starts the asynchronous.

Task<T> StartAsync(T data)

Parameters

data T

The data.

Returns

<u>Task</u> d < T >

Task<T>.

WithStep(IStep<T>)

Adds the step.

void WithStep(IStep<T> step)

Parameters

step <u>IStep</u><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 Т 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 >

The name.

```
Namespace: Patterns
Assembly: Patterns.dll
Class Pipeline. Used to define the pipeline. More on <a href="https://medium.com/@martinstm/pipeline-pattern-">https://medium.com/@martinstm/pipeline-pattern-</a>
c-e01e2dd7238c ☑
 public class Pipeline<T> : IPipeline<T> where T : class
Type Parameters
Т
  Given Type
Inheritance
Implements
IPipeline<T>
Inherited Members
object.Equals(object) ♂, object.Equals(object, object) ♂, object.GetHashCode() ♂, object.GetType() ♂,
Constructors
Pipeline(string, ILogger < Pipeline < T > >)
Initializes a new instance of the <a>Pipeline</a> <a>T></a> class.
 public Pipeline(string name, ILogger<Pipeline<T>> logger)
Parameters
name <u>string</u> □
```

```
logger <u>ILogger</u> < <u>Pipeline</u> < T>>
```

Instance logger

Properties

Name

Gets or sets the name of the Pipleine.

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

Property Value

The name.

Steps

Gets the steps.

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

Property Value

<u>IReadOnlyCollection</u> ♂ < <u>IStep</u> < T > >

The steps.

Methods

StartAsync(T)

Start as an asynchronous operation.

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

Parameters

data T

The data.

Returns

<u>Task</u>♂<T>

A Task<T> representing the asynchronous operation.

WithStep(IStep<T>)

Adds the step.

public void WithStep(IStep<T> step)

Parameters

step <u>IStep</u><T>

The step.

Class Result

Namespace: <u>Patterns</u>
Assembly: Patterns.dll

Base class for Result pattern.

```
public class Result
```

Inheritance

<u>object</u>

✓ Result

Derived

Result<T>

Inherited Members

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 d

The error message.

Properties

ErrorMessage

Gets the error message.

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

Property Value

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 <u>string</u>♂

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

Properties

Value

Gets the value.

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

Property Value

Τ

The value.

Methods

Failure(string)

Failures the specified error message.

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

Parameters

errorMessage <u>string</u>♂

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 2

Namespace Services

Classes

CsvService

Service for Writing a CSV.

EmailService

Service for sending emails.

WebDavService

Service for using WebDav.

Interfaces

ICsvService

Interface ICsvService

<u>IEmailService</u>

Interface IEmailService

IWebDavService

Interface IWebDavService

Class CsvService

```
Namespace: <u>Services</u>
Assembly: Services.dll
```

Service for Writing a CSV.

public class CsvService : ICsvService

Inheritance

<u>object</u> □ ← CsvService

Implements

ICsvService

Inherited Members

 $\underline{object.Equals(object)} \ \ \ \ \ \underline{object.Equals(object, object)} \ \ \ \ \ \underline{object.GetHashCode()} \ \ \ \ \ \underline{object.GetType()} \ \ \ \ \ \ \underline{object.MemberwiseClone()} \ \ \ \ \underline{object.ReferenceEquals(object, object)} \ \ \ \ \underline{object.ToString()} \ \ \ \underline{object.ToString()} \ \ \ \underline{object.ToString()} \$

Constructors

CsvService(ILogger < CsvService >)

Constructor

public CsvService(ILogger<CsvService> logger)

Parameters

logger <u>ILogger</u> < <u>CsvService</u> >

Class logger

Methods

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

Reads the specified target name.

Writes the CSV asynchronous.

```
public IList<T> Read<T>(string targetName, string delimiter, ClassMap<T> map,
  string culture)
Parameters
targetName <u>string</u> ☐
  Name of the target.
delimiter <u>string</u>♂
  The delimiter, like: ";"
map ClassMap < T >
  The map.
culture <u>string</u>♂
  A culture string like 'en-US'.
Returns
<u>IList</u>♂<T>
  List<T>.
Type Parameters
Т
Exceptions
<u>ArgumentNullException</u> 

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

```
public Task WriteAsync<T>(IList<T> list, string targetName, string delimiter,
  string culture)
Parameters
Listen
targetName <u>string</u>♂
  Path to CSV file.
delimiter <u>string</u>♂
  Delimiter, zB. ";"
culture <u>string</u>♂
  A culture string like 'en-US'.
Returns
<u>Task</u> ☑
  Asynchroner Task.
Type Parameters
Т
  Modeltype
Exceptions
<u>ArgumentException</u> □
  If the given list is empty.
<u>ArgumentNullException</u> 

☑
  If the list or targetName is empty
```

<u>UnauthorizedAccessException</u>

☑

Access is denied for list or targetName.

<u>SecurityException</u> □

The caller does not have the required permission.

<u>DirectoryNotFoundException</u> ☑

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

<u>IOException</u> □

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

Class EmailService

Namespace: <u>Services</u>
Assembly: Services.dll

Service for sending emails.

public class EmailService : IEmailService

Inheritance

<u>object</u>

← EmailService

Implements

IEmailService

Inherited Members

Constructors

EmailService(ILogger < EmailService > , IConfiguration)

Constructor for EmailService

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

Parameters

Class logger.

 $\textbf{configuration} \ \underline{\textbf{IConfiguration}} \, \underline{\textbf{Configuration}} \,$

The Configuration object.

Methods

SendMessageAsync(MimeMessage)

Method for sending an email..

public Task SendMessageAsync(MimeMessage message)

Parameters

message <u>MimeMessage</u>♂

MimeMessage.

Returns

<u>Task</u> ♂

Exceptions

<u>ArgumentNullException</u>

☑

message ist null.

Interface ICsvService

List<T>.

```
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 <u>string</u> ☑
  Name of the target.
delimiter <u>string</u>♂
  The delimiter.
map ClassMap<T>
  Class Map
culture <u>string</u>♂
  Taeget culture like en-US
Returns
<u>IList</u> ♂ < T >
```

Type Parameters

Τ

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

Writes the asynchronous.

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

Parameters

The list.

targetName <u>string</u>♂

Name of the target.

delimiter <u>string</u>♂

The delimiter.

culture <u>string</u>♂

Target culture like en-US

Returns

<u>Task</u> ☑

Task.

Type Parameters

Т

Interface IEmailService

Namespace: <u>Services</u>
Assembly: Services.dll

Interface IEmailService

public interface IEmailService

Methods

SendMessageAsync(MimeMessage)

Sends the message asynchronous.

Task SendMessageAsync(MimeMessage message)

Parameters

message <u>MimeMessage</u> ☑

The message.

Returns

<u>Task</u> ☑

Task.

Interface IWebDavService

Namespace: <u>Services</u>
Assembly: Services.dll

Interface IWebDavService

public interface IWebDavService

Methods

DeleteFileAsync(string)

Deletes the file asynchronous.

Task<bool> DeleteFileAsync(string remoteFilepath)

Parameters

 $\texttt{remoteFilepath} \ \underline{\texttt{string}} \square$

The remote filepath.

Returns

<u>Task</u>♂<<u>bool</u>♂>

Task < System. Boolean >.

DownloadFileAsync(string, string)

Downloads the file asynchronous.

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

Parameters

remoteFilepath <u>string</u>♂ The remote filepath. localFilepath <u>string</u> ✓ The local filepath. Returns Task♂ < bool♂ > Task < System. Boolean > . GetParams() Gets the wd parameters. WebDavClientParams GetParams() Returns <u>WebDavClientParams</u>

☑ WebDavClientParams. UploadFileAsync(string, string) Uploads the file asynchronous. Task<bool> UploadFileAsync(string localFilepath, string remoteFilepath) **Parameters** localFilepath <u>string</u> ♂ The local filepath.

remoteFilepath <u>string</u>♂

The remote filepath.

Returns

<u>Task</u>♂<<u>bool</u>♂>

Task < System. Boolean > .

Class WebDavService

Namespace: <u>Services</u>
Assembly: Services.dll

Service for using WebDav.

public class WebDavService : IWebDavService

Inheritance

<u>object</u>

✓ WebDavService

Implements

IWebDavService

Inherited Members

Constructors

WebDavService(IConfiguration, ILogger<WebDavService>)

Constructor for WebDavServiceOptions.

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

Parameters

IConfiguration

logger <u>ILogger</u> < <u>WebDavService</u> >

logger

Methods

DeleteFileAsync(string)

Deletes a file from server.

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

Parameters

remoteFilepath <u>string</u>♂

Path to file.

Returns

<u>Task</u>♂<<u>bool</u>♂>

True oder False.

DownloadFileAsync(string, string)

Downloads a file.

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

Parameters

remoteFilepath <u>string</u>♂

Path where the file should be placed..

localFilepath <u>string</u> ✓

Local File Path.

Returns

Task < cool < c

True oder False, jenachdem ob erfolgreich.

Exceptions

Exception □

Condition.

<u>ArgumentException</u> □

Wenn remoteFilepath oder localFilepath null ist.

UploadFileAsync(string, string)

Uploads a file

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

Parameters

localFilepath <u>string</u> ✓

Local Filepath.

remoteFilepath <u>string</u>♂

Remote Path where the file should be placed.

Returns

Task < cool < c

Exceptions

<u>DirectoryNotFoundException</u> ☑

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

An I/O error occurred while opening the file.

$\underline{UnauthorizedAccessException} \boxdot$

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

The file specified in localFilepath or remoteFilepath was not found.

<u>ArgumentException</u> □

$\underline{\mathsf{NotSupportedException}} \, \square$

localFilepath or remoteFilepath is in an invalid format.

<u>ArgumentNullException</u> ☑

localFilepath Or remoteFilepath is <u>null</u> ♂.

<u>PathTooLongException</u> ☑

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