

PommaLabs.Thrower

2.2.6

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Chapter 1

Namespace Index

1.1 Packages

Here are the packages with brief descriptions (if available):

PommaLabs	9
PommaLabs.Thrower	9

Chapter 2

Hierarchical Index

2.1 Class Hierarchy

This inheritance list is sorted roughly, but not completely, alphabetically:

Exception	
PommaLabs.Thrower.HttpException	11
PommaLabs.Thrower.ThrowerException	18
PommaLabs.Thrower.HttpExceptionInfo	15
PommaLabs.Thrower.Raise	16
PommaLabs.Thrower.RaiseBase	17
PommaLabs.Thrower.Raise< TEx >	16

Chapter 3

Class Index

3.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

PommaLabs.Thrower.HttpException	
Represents an exception which contains an error message that should be delivered through the HTTP response, using given status code.	11
PommaLabs.Thrower.HttpExceptionInfo	
Additional info which will be included into HttpException .	15
PommaLabs.Thrower.Raise< TEx >	
Contains methods that throw specified exception <i>TEx</i> if given conditions will be verified.	16
PommaLabs.Thrower.Raise	
New exception handling mechanism, which is more fluent than the old ones.	16
PommaLabs.Thrower.RaiseBase	
Stores items shared by various Raise<TEx> instances.	17
PommaLabs.Thrower.ThrowerException	
Exception thrown by Raise<TEx> when the type parameter passed to that class has something invalid (missing constructors, etc).	18

Chapter 4

File Index

4.1 File List

Here is a list of all files with brief descriptions:

HttpException.cs	21
Raise.cs	23
RaiseGeneric.cs	24
ThrowerException.cs	26

Chapter 5

Namespace Documentation

5.1 PommaLabs Namespace Reference

Namespaces

- namespace [Thrower](#)

5.2 PommaLabs.Thrower Namespace Reference

Classes

- class [HttpException](#)
Represents an exception which contains an error message that should be delivered through the HTTP response, using given status code.
- struct [HttpExceptionInfo](#)
Additional info which will be included into [HttpException](#).
- class [Raise](#)
New exception handling mechanism, which is more fluent than the old ones.
- class [RaiseBase](#)
*Stores items shared by various [Raise](#)<*TEx*> instances.*
- class [ThrowerException](#)
*Exception thrown by [Raise](#)<*TEx*> when the type parameter passed to that class has something invalid (missing constructors, etc).*

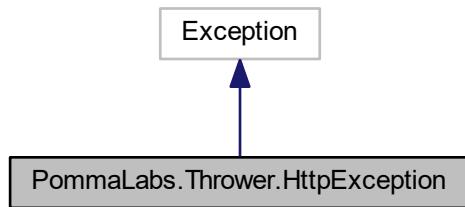
Chapter 6

Class Documentation

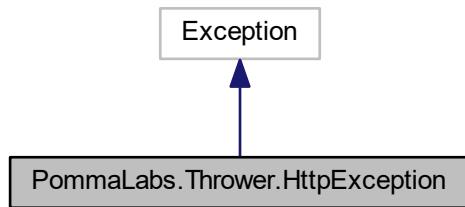
6.1 PommaLabs.Thrower.HttpException Class Reference

Represents an exception which contains an error message that should be delivered through the HTTP response, using given status code.

Inheritance diagram for PommaLabs.Thrower.HttpException:



Collaboration diagram for PommaLabs.Thrower.HttpException:



Public Member Functions

- [HttpException \(HttpStatusCode HttpStatusCode\)](#)
Builds the exception using given status code.
- [HttpException \(HttpStatusCode HttpStatusCode, HttpExceptionInfo additionalInfo\)](#)
Builds the exception using given status code.
- [HttpException \(HttpStatusCode HttpStatusCode, string message\)](#)
Builds the exception using given status code and message.
- [HttpException \(HttpStatusCode HttpStatusCode, string message, HttpExceptionInfo additionalInfo\)](#)
Builds the exception using given status code, message and error code.
- [HttpException \(HttpStatusCode HttpStatusCode, string message, Exception innerException\)](#)
Builds the exception using given status code, message and inner exception.
- [HttpException \(HttpStatusCode HttpStatusCode, string message, Exception innerException, HttpExceptionInfo additionalInfo\)](#)
Builds the exception using given status code, message, error code and inner exception.

Properties

- [HttpStatusCode HttpStatusCode \[get\]](#)
The HTTP status code assigned to this exception.
- [object ErrorCode \[get\]](#)
The application defined error code.
- [static object DefaultErrorCode \[get, set\]](#)
The default application defined error code, used when none has been specified.
- [string UserMessage = "unspecified" \[get\]](#)
An error message which can be shown to the user.
- [static string DefaultUserMessage \[get, set\]](#)
The default user message.

6.1.1 Detailed Description

Represents an exception which contains an error message that should be delivered through the HTTP response, using given status code.

Definition at line 70 of file [HttpException.cs](#).

6.1.2 Constructor & Destructor Documentation

6.1.2.1 PommaLabs.Thrower.HttpException.HttpException (HttpStatusCode HttpStatusCode)

Builds the exception using given status code.

Parameters

<code>httpStatusCode</code>	The HTTP status code.
-----------------------------	-----------------------

Definition at line 76 of file [HttpException.cs](#).

6.1.2.2 PommaLabs.Thrower.HttpException.HttpException (`HttpStatusCode httpStatusCode, HttpExceptionInfo additionalInfo`)

Builds the exception using given status code.

Parameters

<code>httpStatusCode</code>	The HTTP status code.
<code>additionalInfo</code>	Additional exception info.

Definition at line 86 of file [HttpException.cs](#).

6.1.2.3 PommaLabs.Thrower.HttpException.HttpException (`HttpStatusCode httpStatusCode, string message`)

Builds the exception using given status code and message.

Parameters

<code>httpStatusCode</code>	The HTTP status code.
<code>message</code>	The exception message.

Definition at line 100 of file [HttpException.cs](#).

6.1.2.4 PommaLabs.Thrower.HttpException.HttpException (`HttpStatusCode httpStatusCode, string message, HttpExceptionInfo additionalInfo`)

Builds the exception using given status code, message and error code.

Parameters

<code>httpStatusCode</code>	The HTTP status code.
<code>message</code>	The exception message.
<code>additionalInfo</code>	Additional exception info.

Definition at line 111 of file [HttpException.cs](#).

6.1.2.5 PommaLabs.Thrower.HttpException.HttpException (`HttpStatusCode httpStatusCode, string message, Exception innerException`)

Builds the exception using given status code, message and inner exception.

Parameters

<code>httpStatusCode</code>	The HTTP status code.
<code>message</code>	The exception message.
<code>innerException</code>	The inner exception.

Definition at line 127 of file [HttpException.cs](#).

6.1.2.6 PommaLabs.Thrower.HttpException.HttpException (`HttpStatusCode httpStatusCode, string message, Exception innerException, HttpExceptionInfo additionalInfo`)

Builds the exception using given status code, message, error code and inner exception.

Parameters

<code>httpStatusCode</code>	The HTTP status code.
<code>message</code>	The exception message.
<code>innerException</code>	The inner exception.
<code>additionalInfo</code>	Additional exception info.

Definition at line 139 of file [HttpException.cs](#).

6.1.3 Property Documentation

6.1.3.1 object PommaLabs.Thrower.HttpException.DefaultErrorCode [static], [get], [set]

The default application defined error code, used when none has been specified.

Definition at line 162 of file [HttpException.cs](#).

6.1.3.2 string PommaLabs.Thrower.HttpException.DefaultUserMessage [static], [get], [set]

The default user message.

Definition at line 172 of file [HttpException.cs](#).

6.1.3.3 object PommaLabs.Thrower.HttpException.ErrorCode [get]

The application defined error code.

Definition at line 157 of file [HttpException.cs](#).

6.1.3.4 HttpStatusCode PommaLabs.Thrower.HttpException.HttpStatusCode [get]

The HTTP status code assigned to this exception.

Definition at line 152 of file [HttpException.cs](#).

6.1.3.5 string PommaLabs.Thrower.HttpException.UserMessage = "unspecified" [get]

An error message which can be shown to the user.

Definition at line 167 of file [HttpException.cs](#).

The documentation for this class was generated from the following file:

- [HttpException.cs](#)

6.2 PommaLabs.Thrower.HttpExceptionInfo Struct Reference

Additional info which will be included into [HttpException](#).

Public Member Functions

- [HttpExceptionInfo](#) (object errorCode=null, string userMessage=null)
Builds the additional exception info.

Properties

- object [ErrorCode](#) [get, set]
The application defined error code.
- string [UserMessage](#) [get, set]
An error message which can be shown to user.

6.2.1 Detailed Description

Additional info which will be included into [HttpException](#).

Definition at line 38 of file [HttpException.cs](#).

6.2.2 Constructor & Destructor Documentation

6.2.2.1 PommaLabs.Thrower.HttpExceptionInfo.HttpExceptionInfo (object errorCode = null, string userMessage = null)

Builds the additional exception info.

Parameters

<code>errorCode</code>	The application defined error code.
<code>userMessage</code>	The user message.

Definition at line 45 of file [HttpException.cs](#).

6.2.3 Property Documentation

6.2.3.1 `object PommaLabs.Thrower.HttpExceptionInfo.ErrorCode` [get], [set]

The application defined error code.

Definition at line 55 of file [HttpException.cs](#).

6.2.3.2 `string PommaLabs.Thrower.HttpExceptionInfo.UserMessage` [get], [set]

An error message which can be shown to user.

Definition at line 61 of file [HttpException.cs](#).

The documentation for this struct was generated from the following file:

- [HttpException.cs](#)

6.3 PommaLabs.Thrower.Raise Class Reference

New exception handling mechanism, which is more fluent than the old ones.

6.3.1 Detailed Description

New exception handling mechanism, which is more fluent than the old ones.

Definition at line 32 of file [Raise.cs](#).

The documentation for this class was generated from the following file:

- [Raise.cs](#)

6.4 PommaLabs.Thrower.Raise Class Reference

New exception handling mechanism, which is more fluent than the old ones.

6.4.1 Detailed Description

New exception handling mechanism, which is more fluent than the old ones.

Definition at line 32 of file [Raise.cs](#).

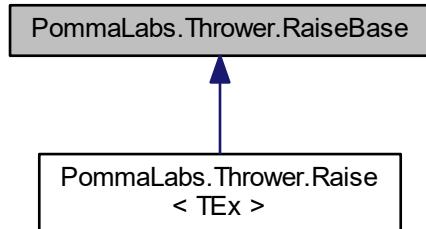
The documentation for this class was generated from the following file:

- [Raise.cs](#)

6.5 PommaLabs.Thrower.RaiseBase Class Reference

Stores items shared by various Raise<TEx> instances.

Inheritance diagram for PommaLabs.Thrower.RaiseBase:



Static Protected Attributes

- static readonly Type[] **NoCtorTypes** = new Type[0]
Stores an empty array of System.Type used to seek constructors without parameters.
- static readonly Type[] **StrExCtorTypes** = { typeof(string), typeof(Exception) }
Stores the types needed to seek the constructor which takes a string and an exception as parameters to instance the exception.
- static readonly Type[] **StrCtorType** = { typeof(string) }
Stores the type needed to seek the constructor which takes a string as parameter to instance the exception.

6.5.1 Detailed Description

Stores items shared by various Raise<TEx> instances.

Definition at line 36 of file [RaiseGeneric.cs](#).

6.5.2 Member Data Documentation

6.5.2.1 readonly Type [] PommaLabs.Thrower.RaiseBase.NoCtorTypes = new Type[0] [static], [protected]

Stores an empty array of System.Type used to seek constructors without parameters.

Definition at line 43 of file [RaiseGeneric.cs](#).

6.5.2.2 readonly Type [] PommaLabs.Thrower.RaiseBase.StrCtorType = { typeof(string) } [static], [protected]

Stores the type needed to seek the constructor which takes a string as parameter to instance the exception.

Definition at line 59 of file [RaiseGeneric.cs](#).

6.5.2.3 `readonly Type [] PommaLabs.Thrower.RaiseBase.StrExCtorTypes = { typeof(string), typeof(Exception) } [static], [protected]`

Stores the types needed to seek the constructor which takes a string and an exception as parameters to instance the exception.

Definition at line 51 of file [RaiseGeneric.cs](#).

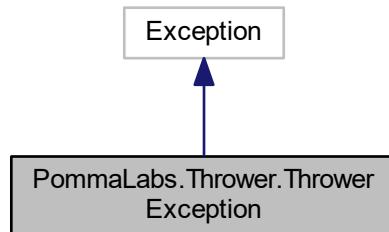
The documentation for this class was generated from the following file:

- [RaiseGeneric.cs](#)

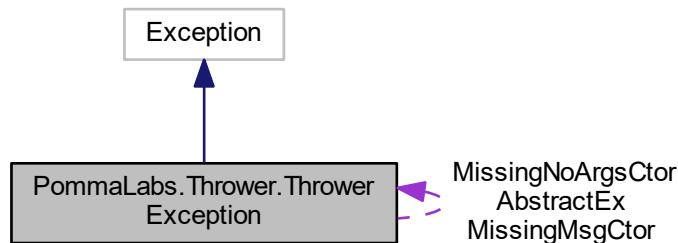
6.6 PommaLabs.Thrower.ThrowerException Class Reference

Exception thrown by `Raise<TEx>` when the type parameter passed to that class has something invalid (missing constructors, etc).

Inheritance diagram for PommaLabs.Thrower.ThrowerException:



Collaboration diagram for PommaLabs.Thrower.ThrowerException:



6.6.1 Detailed Description

Exception thrown by `Raise<TEx>` when the type parameter passed to that class has something invalid (missing constructors, etc).

Definition at line [35](#) of file [ThrowerException.cs](#).

The documentation for this class was generated from the following file:

- [ThrowerException.cs](#)

Chapter 7

File Documentation

7.1 HttpException.cs File Reference

Classes

- struct [PommaLabs.Thrower.HttpExceptionInfo](#)
Additional info which will be included into [HttpException](#).
- class [PommaLabs.Thrower.HttpException](#)
Represents an exception which contains an error message that should be delivered through the HTTP response, using given status code.

Namespaces

- namespace [PommaLabs.Thrower](#)

7.2 HttpException.cs

```
00001 // File name: HttpException.cs
00002 //
00003 // Author(s): Alessio Parma <alessio.parma@gmail.com>
00004 //
00005 // The MIT License (MIT)
00006 //
00007 // Copyright (c) 2013-2016 Alessio Parma <alessio.parma@gmail.com>
00008 //
00009 // Permission is hereby granted, free of charge, to any person obtaining a copy of this software and
00010 // associated documentation files (the "Software"), to deal in the Software without restriction,
00011 // including without limitation the rights to use, copy, modify, merge, publish, distribute,
00012 // sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is
00013 // furnished to do so, subject to the following conditions:
00014 //
00015 // The above copyright notice and this permission notice shall be included in all copies or
00016 // substantial portions of the Software.
00017 //
00018 // THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT
00019 // NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND
00020 // NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM,
00021 // DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT
00022 // OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.
00023
00024 using PommaLabs.Thrower.Validation;
00025 using System;
00026 using System.Collections;
00027 using System.Collections.Generic;
00028 using System.Diagnostics.CodeAnalysis;
```

```

00029 using System;
00030 using System.Runtime.Serialization;
00031
00032 namespace PommaLabs.Thrower
00033 {
00037     [Serializable]
00038     public struct HttpExceptionInfo
00039     {
00045         public HttpExceptionInfo(object errorCode = null, string userMessage = null)
00046         {
00047             ErrorCode = errorCode ?? HttpException.DefaultErrorCode;
00048             UserMessage = userMessage ?? HttpException.
00049             DefaultUserMessage;
00050         }
00054         [Validate(Required = false)]
00055         public object ErrorCode { get; set; }
00056
00060         [Validate(Required = false)]
00061         public string UserMessage { get; set; }
00062     }
00063
00068     [Serializable]
00069     [SuppressMessage("Microsoft.Design", "CA1032:ImplementStandardExceptionConstructors")]
00070     public sealed class HttpException : Exception
00071     {
00076         public HttpException(HttpStatusCode httpStatusCode)
00077             : this(httpStatusCode, new HttpExceptionInfo())
00078         {
00079         }
00080
00086         public HttpException(HttpStatusCode httpStatusCode,
00087             HttpExceptionInfo additionalInfo)
00088         {
00089             HttpStatusCode = httpStatusCode;
00090             ErrorCode = additionalInfo.ErrorCode ?? DefaultErrorCode;
00091             UserMessage = additionalInfo.UserMessage ?? DefaultUserMessage;
00092
00093             CustomizeException();
00094         }
00100         public HttpException(HttpStatusCode httpStatusCode, string message)
00101             : this(httpStatusCode, message, new HttpExceptionInfo())
00102         {
00103         }
00104
00111         public HttpException(HttpStatusCode httpStatusCode, string message,
00112             HttpExceptionInfo additionalInfo)
00113             : base(message)
00114         {
00115             HttpStatusCode = httpStatusCode;
00116             ErrorCode = additionalInfo.ErrorCode ?? DefaultErrorCode;
00117             UserMessage = additionalInfo.UserMessage ?? DefaultUserMessage;
00118
00119             CustomizeException();
00120         }
00127         public HttpException(HttpStatusCode httpStatusCode, string message, Exception
00128             innerException)
00129             : this(httpStatusCode, message, innerException, new
00130             HttpExceptionInfo())
00131         {
00139         public HttpException(HttpStatusCode httpStatusCode, string message, Exception
00140             innerException, HttpExceptionInfo additionalInfo)
00141             :
00142                 HttpStatusCode = httpStatusCode;
00143                 ErrorCode = additionalInfo.ErrorCode ?? DefaultErrorCode;
00144                 UserMessage = additionalInfo.UserMessage ?? DefaultUserMessage;
00145
00146                 CustomizeException();
00147         }
00152         public HttpStatusCode HttpStatusCode { get; }
00153
00157         public object ErrorCode { get; }
00158
00162         public static object DefaultErrorCode { get; set; } = "unspecified";
00163
00167         public string UserMessage { get; }
00168
00172         public static string DefaultUserMessage { get; set; } = "unspecified";
00173
00174         private void CustomizeException()
00175     {

```

```

00176     HResult = (int) HttpStatusCode;
00177
00178     Data.Add(nameof(HttpStatusCode), HttpStatusCode.ToString());
00179     Data.Add(nameof(ErrorCode), ErrorCode?.ToString());
00180     Data.Add(nameof(UserMessage), UserMessage);
00181 }
00182 }
00183 }
```

7.3 Raise.cs File Reference

Classes

- class PommaLabs.Thrower.Raise

New exception handling mechanism, which is more fluent than the old ones.

Namespaces

- namespace PommaLabs.Thrower

7.4 Raise.cs

```

00001 // File name: Raise.cs
00002 //
00003 // Author(s): Alessio Parma <alessio.parma@gmail.com>
00004 //
00005 // The MIT License (MIT)
00006 //
00007 // Copyright (c) 2013-2016 Alessio Parma <alessio.parma@gmail.com>
00008 //
00009 // Permission is hereby granted, free of charge, to any person obtaining a copy of this software and
00010 // associated documentation files (the "Software"), to deal in the Software without restriction,
00011 // including without limitation the rights to use, copy, modify, merge, publish, distribute,
00012 // sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is
00013 // furnished to do so, subject to the following conditions:
00014 //
00015 // The above copyright notice and this permission notice shall be included in all copies or
00016 // substantial portions of the Software.
00017 //
00018 // THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT
00019 // NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND
00020 // NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM,
00021 // DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT
00022 // OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.
00023
00024 using PommaLabs.Thrower.ExceptionHandlers;
00025 using System.Diagnostics.CodeAnalysis;
00026
00027 namespace PommaLabs.Thrower
00028 {
00032     public static class Raise
00033     {
00037         public static ArgumentExceptionHandler ArgumentException { get; } = new ArgumentExceptionHandler();
00038
00042         public static ArgumentNullException ArgumentOutOfRangeException { get; } = new
00043             ArgumentNullException();
00047
00048         public static ArgumentOutOfRangeException ArgumentOutOfRangeException { get; } = new
00049             ArgumentOutOfRangeException();
00052
00053         public static HttpExceptionHandler HttpException { get; } = new HttpExceptionHandler();
00057
00058         public static IndexOutOfRangeException IndexError { get; } = new
00059             IndexOutOfRangeException();
00062
00063         public static InvalidOperationException InvalidOperationException { get; } = new
00064             InvalidOperationException();
00067
00068         public static NotSupportedException NotSupportedException { get; } = new
00069             NotSupportedException();
00072
00073         public static ObjectDisposedExceptionHandler ObjectDisposedException { get; } = new
00074             ObjectDisposedExceptionHandler();
00075     }
00076 }
```

7.5 RaiseGeneric.cs File Reference

Classes

- class [PommaLabs.Thrower.RaiseBase](#)
Stores items shared by various Raise<TEx> instances.
- class [PommaLabs.Thrower.Raise< TEx >](#)
Contains methods that throw specified exception TEx if given conditions will be verified.

Namespaces

- namespace [PommaLabs.Thrower](#)

7.6 RaiseGeneric.cs

```

00001 // File name: RaiseGeneric.cs
00002 //
00003 // Author(s): Alessio Parma <alessio.parma@gmail.com>
00004 //
00005 // The MIT License (MIT)
00006 //
00007 // Copyright (c) 2013-2016 Alessio Parma <alessio.parma@gmail.com>
00008 //
00009 // Permission is hereby granted, free of charge, to any person obtaining a copy of this software and
00010 // associated documentation files (the "Software"), to deal in the Software without restriction,
00011 // including without limitation the rights to use, copy, modify, merge, publish, distribute,
00012 // sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is
00013 // furnished to do so, subject to the following conditions:
00014 //
00015 // The above copyright notice and this permission notice shall be included in all copies or
00016 // substantial portions of the Software.
00017 //
00018 // THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT
00019 // NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND
00020 // NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM,
00021 // DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT
00022 // OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.
00023
00024 using PommaLabs.Thrower.Reflection;
00025 using System;
00026 using System.Collections.Generic;
00027 using System.Diagnostics.CodeAnalysis;
00028 using System.Linq;
00029 using System.Reflection;
00030
00031 namespace PommaLabs.Thrower
00032 {
00033     public abstract class RaiseBase
00034     {
00035         [SuppressMessage("Microsoft.Naming", "CA1704:IdentifiersShouldBeSpelledCorrectly")]
00036         [SuppressMessage("Microsoft.Security", "CA2105:ArrayFieldsShouldNotBeReadOnly")]
00037         protected static readonly Type[] NoCtorTypes = new Type[0];
00038
00039         [SuppressMessage("Microsoft.Naming", "CA1704:IdentifiersShouldBeSpelledCorrectly")]
00040         [SuppressMessage("Microsoft.Security", "CA2105:ArrayFieldsShouldNotBeReadOnly")]
00041         protected static readonly Type[] StrExCtorTypes = { typeof(string), typeof(Exception) };
00042
00043         [SuppressMessage("Microsoft.Naming", "CA1704:IdentifiersShouldBeSpelledCorrectly")]
00044         [SuppressMessage("Microsoft.Security", "CA2105:ArrayFieldsShouldNotBeReadOnly")]
00045         protected static readonly Type[] StrCtorType = { typeof(string) };
00046     }
00047
00048     public sealed partial class Raise<TEx> : RaiseBase where TEx : Exception
00049     {
00050         #pragma warning disable RECS0108 // Warns about static fields in generic types
00051
00052         private static readonly bool ExTypeIsAbstract = PortableTypeInfo.IsAbstract(typeof(TEx));
00053
00054         private static readonly ConstructorInfo NoArgsCtor = GetCtor(NoCtorTypes);
00055
00056         private static readonly ConstructorInfo MsgCtor = GetCtor(StrExCtorTypes) ?? GetCtor(StrCtorType);
00057
00058     }
00059 }
```

```
00105     private static readonly int MsgArgCount = (MsgCtor == null) ? 0 : MsgCtor.GetParameters().Length;
00106
00107 #pragma warning restore RECS0108 // Warns about static fields in generic types
00108
00109     private Raise()
00110     {
00111         throw new InvalidOperationException("This class should not be instantiated");
00112     }
00113
00114     [SuppressMessage("Microsoft.Design", "CA1000:DoNotDeclareStaticMembersOnGenericType")]
00115     public static void If(bool cond)
00116     {
00117         if (cond)
00118         {
00119             DoThrow();
00120         }
00121     }
00122
00123     [SuppressMessage("Microsoft.Design", "CA1000:DoNotDeclareStaticMembersOnGenericType")]
00124     public static void If(bool cond, string message)
00125     {
00126         if (cond)
00127         {
00128             DoThrow(message);
00129         }
00130     }
00131
00132     [SuppressMessage("Microsoft.Design", "CA1000:DoNotDeclareStaticMembersOnGenericType")]
00133     public static void IfNot(bool cond)
00134     {
00135         if (!cond)
00136         {
00137             DoThrow();
00138         }
00139     }
00140
00141     [SuppressMessage("Microsoft.Design", "CA1000:DoNotDeclareStaticMembersOnGenericType")]
00142     public static void IfNot(bool cond, string message)
00143     {
00144         if (!cond)
00145         {
00146             DoThrow(message);
00147         }
00148     }
00149
00150     [SuppressMessage("Microsoft.Design", "CA1000:DoNotDeclareStaticMembersOnGenericType")]
00151     public static ConstructorInfo GetCtor(System.Collections.Generic.IList<Type> ctorTypes)
00152     {
00153         return (from c in PortableTypeInfo.GetConstructors(typeof(TEx))
00154                 let args = c.GetParameters()
00155                 let zipArgs = MyZip(args, ctorTypes, (argType, ctorType) => new { argType, ctorType })
00156                 where args.Length == ctorTypes.Count &&
00157                     (c.IsPublic || c.IsAssembly) &&
00158                     zipArgs.All(t => ReferenceEquals(t.argType.ParameterType, t.ctorType))
00159                 select c).FirstOrDefault();
00160     }
00161
00162     private static IEnumerable<TResult> MyZip<TFirst, TSecond, TResult>(IEnumerable<TFirst> first,
00163     IEnumerable<TSecond> second, Func<TFirst, TSecond, TResult> resultSelector)
00164     {
00165         Raise.ArgumentNullException.IfIsNull(first, nameof(first));
00166         Raise.ArgumentNullException.IfIsNull(second, nameof(second));
00167         Raise.ArgumentNullException.IfIsNull(resultSelector, nameof(resultSelector));
00168
00169         using (IEnumerator<TFirst> e1 = first.GetEnumerator())
00170         using (IEnumerator<TSecond> e2 = second.GetEnumerator())
00171         {
00172             while (e1.MoveNext() && e2.MoveNext())
00173             {
00174 #pragma warning disable CC0031 // Check for null before calling a delegate
00175                 yield return resultSelector(e1.Current, e2.Current);
00176 #pragma warning restore CC0031 // Check for null before calling a delegate
00177             }
00178         }
00179     }
00180
00181     private static void DoThrow()
00182     {
00183         // Checks whether the proper constructor exists. If not, then we produce an internal exception.
00184         if (ExTypeIsAbstract)
00185         {
00186             throw ThrowerException.AbstractEx;
00187         }
00188         if (NoArgsCtor == null)
00189         {
00190             throw ThrowerException.MissingNoArgsCtor;
00191         }
00192         // A proper constructor exists: therefore, we can throw the exception.
00193     }

```

```

00264         throw (TEx) NoArgsCtor.Invoke(new object[0]);
00265     }
00266
00267     private static void DoThrow(string message)
00268     {
00269         // Checks whether the proper constructor exists. If not, then we produce an internal exception.
00270         if (ExTypeIsAbstract)
00271         {
00272             throw ThrowerException.AbstractEx;
00273         }
00274         if (MsgCtor == null)
00275         {
00276             throw ExTypeIsAbstract ? ThrowerException.AbstractEx :
00277                 ThrowerException.MissingMsgCtor;
00278         }
00279         // A proper constructor exists: therefore, we can throw the exception.
00280         var messageArgs = new object[MsgArgCount];
00281         messageArgs[0] = message;
00282         throw (TEx) MsgCtor.Invoke(messageArgs);
00283     }
00284 }

```

7.7 ThrowerException.cs File Reference

Classes

- class [PommaLabs.Thrower.ThrowerException](#)

Exception thrown by `Raise<TEx>` when the type parameter passed to that class has something invalid (missing constructors, etc).

Namespaces

- namespace [PommaLabs.Thrower](#)

7.8 ThrowerException.cs

```

00001 // File name: ThrowerException.cs
00002 //
00003 // Author(s): Alessio Parma <alessio.parma@gmail.com>
00004 //
00005 // The MIT License (MIT)
00006 //
00007 // Copyright (c) 2013-2016 Alessio Parma <alessio.parma@gmail.com>
00008 //
00009 // Permission is hereby granted, free of charge, to any person obtaining a copy of this software and
00010 // associated documentation files (the "Software"), to deal in the Software without restriction,
00011 // including without limitation the rights to use, copy, modify, merge, publish, distribute,
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00017 //
00018 // THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT
00019 // NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND
00020 // NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM,
00021 // DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT
00022 // OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.
00023
00024 using System;
00025 using System.Diagnostics.CodeAnalysis;
00026
00027 namespace PommaLabs.Thrower
00028 {
00029     [Serializable]
00030     [SuppressMessage("Microsoft.Design", "CA1032:ImplementStandardExceptionConstructors")]
00031     public sealed class ThrowerException : Exception
00032     {

```

```
00037      [SuppressMessage("Microsoft.Design", "CA1032:ImplementStandardExceptionConstructors")]
00038      private ThrowerException(string message)
00039          : base(message)
00040      {
00041      }
00042
00043      internal static ThrowerException AbstractEx => new ThrowerException("Given exception type is
00044      abstract");
00045      internal static ThrowerException MissingNoArgsCtor => new ThrowerException("Given exception type
00046      has no parameterless constructor");
00047      internal static ThrowerException MissingMsgCtor => new ThrowerException("Given exception type has
00048      not a valid message constructor");
00049 }
```


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