System.Net.Http Library Reference

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Description

Provides basic support for parsing HTTP responses.

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Namespaces

NamespaceDescriptionSystem.Net.HttpContains classes for parsing HTTP responses.

1 Usage

1.0.1 Referencing the Http Library

Right-click a project node in IDE | Project References... | Add System Extension Library Reference... | enable System.Net.Http check box

or add following line to your project's .cmp file:

reference <ext/System.Net.Http/System.Net.Http.cml>;

2 System.Net.Http Namespace

Contains classes for parsing HTTP responses.

2.1 Classes

Class	Description
HeaderLine	Represents a HTTP response header line.
HttpResponse	Represents a HTTP response.
HttpStatus	Represents a HTTP status in a HTTP response.

2.1.1 HeaderLine Class

Represents a HTTP response header line.

Syntax

public class HeaderLine;

2.1.1.1 Member Functions

Member Function	Description
HeaderLine()	Default constructor. Initializes an empty
	header line.
HeaderLine(const HeaderLine&)	Copy constructor.
${\it HeaderLine}({\it HeaderLine}\&\&)$	Move constructor.
HeaderLine(const String&, const String&)	Constructor. Initializes a header line with the specified name and value.
operator=(const HeaderLine&)	Copy assignment.
operator = (HeaderLine&&)	Move assignment.
\sim HeaderLine()	Destructor.
Name() const	Returns the name part of the header line.
Value() const	Returns the value part of the header line.

2.1.1.1.1 HeaderLine() Member Function

Default constructor. Initializes an empty header line.

Syntax

public HeaderLine();

2.1.1.1.2 HeaderLine(const HeaderLine&) Member Function

Copy constructor.

Syntax

public nothrow HeaderLine(const HeaderLine& that);

Parameters

Name	\mathbf{Type}	Description
that	const HeaderLine&	A header line to copy.

${\bf 2.1.1.1.3}\quad {\bf Header Line} \&\&)\ {\bf Member\ Function}$

Move constructor.

Syntax

public nothrow HeaderLine(HeaderLine&& that);

Parameters

Name	\mathbf{Type}	Description
that	HeaderLine&&	A header line to move.

2.1.1.1.4 HeaderLine(const String&, const String&) Member Function

Constructor. Initializes a header line with the specified name and value.

Syntax

public HeaderLine(const String& name_, const String& value_);

Parameters

Name	\mathbf{Type}	Description
name_	const String&	A name.
value	const String&	A value.

2.1.1.1.5 operator=(const HeaderLine&) Member Function

Copy assignment.

Syntax

public nothrow void operator=(const HeaderLine& that);

Parameters

Name	\mathbf{Type}	Description
that	const HeaderLine&	A header line to assign.

2.1.1.1.6 operator=(HeaderLine&&) Member Function

Move assignment.

Syntax

public nothrow void operator=(HeaderLine&& that);

Parameters

Name	\mathbf{Type}	Description
that	HeaderLine&&	A header line to move.

2.1.1.1.7 ~HeaderLine() Member Function

Destructor.

Syntax

public nothrow \sim HeaderLine();

2.1.1.1.8 Name() const Member Function

Returns the name part of the header line.

Syntax

public const String& Name() const;

Returns

const String&

Returns the name part of the header line.

2.1.1.1.9 Value() const Member Function

Returns the value part of the header line.

Syntax

public const String& Value() const;

Returns

const String&

Returns the value part of the header line.

2.1.2 HttpResponse Class

Represents a HTTP response.

Syntax

public class HttpResponse;

2.1.2.1 Member Functions

Member Function	Description	
HttpResponse()	Default constructor. Initializes an empty HTTP response.	
$HttpResponse(const\ HttpResponse\&)$	Copy constructor.	
HttpResponse(HttpResponse&&)	Move constructor.	
HttpResponse(const HttpStatus&, const List <headerline>&, const String&)</headerline>	Constructor. Initializes a HTTP response with the specified HTTP status, list of header lines and content.	
operator=(const HttpResponse&)	Copy assignment.	
operator = (HttpResponse&&)	Move assignment.	
\sim HttpResponse()	Destructor.	
Content() const	Returns the content string of the HTTP response.	
HeaderLines() const	Returns a list of header lines.	
Status() const	Returns the HTTP status of the HTTP response.	

${\bf 2.1.2.1.1} \quad {\bf HttpResponse() \ Member \ Function}$

Default constructor. Initializes an empty HTTP response.

Syntax

public HttpResponse();

${\bf 2.1.2.1.2} \quad {\bf HttpResponse(const~HttpResponse\&)~Member~Function}$

Copy constructor.

Syntax

public HttpResponse(const HttpResponse& that);

Parameters

Name	Type	Description
that	const HttpResponse&	A HTTP response to copy.

2.1.2.1.3 HttpResponse(HttpResponse&&) Member Function

Move constructor.

Syntax

public nothrow HttpResponse(HttpResponse&& that);

Parameters

Name	\mathbf{Type}	Description
that	HttpResponse&&	A HTTP response to move.

2.1.2.1.4 HttpResponse(const HttpStatus&, const List<HeaderLine>&, const String&) Member Function

Constructor. Initializes a HTTP response with the specified HTTP status, list of header lines and content.

Syntax

public HttpResponse(const HttpStatus& status_, const List<HeaderLine>& headerLines_,
const String& content_);

Parameters

\mathbf{Name}	\mathbf{Type}	Description
status_	const HttpStatus&	A HTTP status.
$headerLines_$	${\rm const~List}{<}{\rm HeaderLine}{>}\&$	A list of header lines.
$\operatorname{content}_{_}$	const String&	Content string.

2.1.2.1.5 operator=(const HttpResponse&) Member Function

Copy assignment.

Syntax

public void operator=(const HttpResponse& that);

Parameters

Name	\mathbf{Type}	Description
that	const HttpResponse&	A HTTP response to assign.

2.1.2.1.6 operator=(HttpResponse&&) Member Function

Move assignment.

Syntax

public nothrow void operator=(HttpResponse&& that);

Parameters

Name	\mathbf{Type}	Description
that	HttpResponse&&	A HTTP response to move.

2.1.2.1.7 ~HttpResponse() Member Function

Destructor.

Syntax

public nothrow ~HttpResponse();

2.1.2.1.8 Content() const Member Function

Returns the content string of the HTTP response.

Syntax

public nothrow const String& Content() const;

Returns

const String&

Returns the content string of the HTTP response.

2.1.2.1.9 HeaderLines() const Member Function

Returns a list of header lines.

Syntax

public nothrow const List<HeaderLine>& HeaderLines() const;

Returns

 $const\ List{<} Header Line{>} \&$

Returns a list of header lines.

2.1.2.1.10 Status() const Member Function

Returns the HTTP status of the HTTP response.

Syntax

public nothrow const HttpStatus& Status() const;

Returns

const HttpStatus&

Returns the HTTP status of the HTTP response.

2.1.3 HttpStatus Class

Represents a HTTP status in a HTTP response.

Syntax

public class HttpStatus;

2.1.3.1 Member Functions

Member Function	Description
HttpStatus()	Default constructor. Initializes an empty HTTP status.
HttpStatus(const HttpStatus&)	Copy constructor.
HttpStatus(HttpStatus&&)	Move constructor.
HttpStatus(const String&, int, const String&)	Constructor. Initializes a HTTP status with the specified HTTP version, status code and status text.
operator=(const HttpStatus&)	Copy assignment.
operator = (HttpStatus&&)	Move assignment.
\sim HttpStatus()	Destructor.
HttpVersion() const	Returns the HTTP version part of the HTTP status.
StatusCode() const	Returns the HTTP status code part of the HTTP status.
StatusText() const	Returns the HTTP status text part of the HTTP status.

2.1.3.1.1 HttpStatus() Member Function

Default constructor. Initializes an empty HTTP status.

Syntax

public HttpStatus();

2.1.3.1.2 HttpStatus(const HttpStatus&) Member Function

Copy constructor.

Syntax

public nothrow HttpStatus(const HttpStatus& that);

Parameters

Name	Type	Description
that	const HttpStatus&	A HTTP status to copy.

2.1.3.1.3 HttpStatus(HttpStatus&&) Member Function

Move constructor.

Syntax

public nothrow HttpStatus(HttpStatus&& that);

Parameters

Name	\mathbf{Type}	Description
that	HttpStatus&&	A HTTP status to move.

2.1.3.1.4 HttpStatus(const String&, int, const String&) Member Function

Constructor. Initializes a HTTP status with the specified HTTP version, status code and status text.

Syntax

public HttpStatus(const String& httpVersion_, int statusCode_, const String& statusText_)

Parameters

Name	\mathbf{Type}	Description
httpVersion_	const String&	A HTTP version string.
$statusCode_$	int	A HTTP status code.
statusText	const String&	A HTTP status text.

2.1.3.1.5 operator=(const HttpStatus&) Member Function

Copy assignment.

Syntax

public nothrow void operator=(const HttpStatus& that);

Parameters

Name	\mathbf{Type}	Description
that	const HttpStatus&	A HTTP status to copy.

2.1.3.1.6 operator=(HttpStatus&&) Member Function

Move assignment.

Syntax

public nothrow void operator=(HttpStatus&& that);

Parameters

Name	\mathbf{Type}	Description
that	HttpStatus&&	A HTTP status to move.

2.1.3.1.7 ~HttpStatus() Member Function

Destructor.

Syntax

public nothrow \sim HttpStatus();

2.1.3.1.8 HttpVersion() const Member Function

Returns the HTTP version part of the HTTP status.

Syntax

public nothrow const String& HttpVersion() const;

Returns

const String&

Returns the HTTP version part of the HTTP status.

2.1.3.1.9 StatusCode() const Member Function

Returns the HTTP status code part of the HTTP status.

Syntax

public nothrow int StatusCode() const;

Returns

int

Returns the HTTP status code part of the HTTP status.

${\bf 2.1.3.1.10} \quad {\bf StatusText()} \ {\bf const} \ {\bf Member} \ {\bf Function}$

Returns the HTTP status text part of the HTTP status.

Syntax

public nothrow const String& StatusText() const;

Returns

const String&

Returns the HTTP status text part of the HTTP status.

2.2 Functions

Function	Description
ParseHttpResponse(const String&)	Parses a HTTP response from the HTTP re-
	sponse text and return it.

${\bf 2.2.4 \quad ParseHttpResponse(const~String\&)~Function}$

Parses a HTTP response from the HTTP response text and return it.

Syntax

public HttpResponse ParseHttpResponse(const String& responseText);

Parameters

Name	\mathbf{Type}	Description
responseText	const String&	A HTTP response text.

Returns

HttpResponse

Returns a HTTP response.