

Exception

1.0.6

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Chapter 1

Hierarchical Index

1.1 Class Hierarchy

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

std::exception	
std::runtime_error	
Exception	5

Chapter 2

Class Index

2.1 Class List

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

Exception	5
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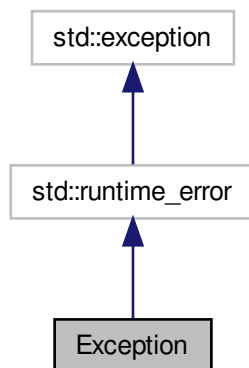
Chapter 3

Class Documentation

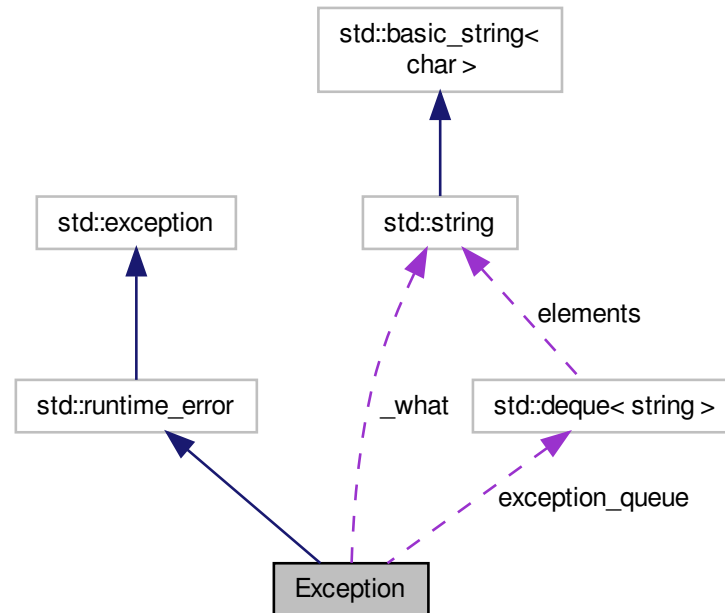
3.1 Exception Class Reference

```
#include <Exception.h>
```

Inheritance diagram for Exception:



Collaboration diagram for Exception:



Public Member Functions

- `Exception ()`
- `Exception (const Exception &e)`
- `Exception (const string &arg)`
- `Exception &operator= (const Exception &rhs)`
- `deque< string >::const_iterator begin () const`
- `deque< string >::const_iterator end () const`
- `string get_message (void) const`
- `void set_message (const string &msg)`
- `void set_rethrow_message (const string &file, const int linenum)`
- `const char * what () const throw ()`
- `void update_what ()`

Protected Member Functions

- `virtual void print (ostream &os=cerr) const`

Protected Attributes

- `deque< string > exception_queue`
- `string _what`

Friends

- ostream & [operator<<](#) (ostream &os, [Exception](#) &a)
- ostream & [operator<<](#) (ostream &os, [Exception](#) *a)

3.1.1 Detailed Description

The class [Exception](#), all the subclasses as defined by the user, are a form of conditions that a reasonable application might want to catch.

3.1.2 Constructor & Destructor Documentation

3.1.2.1 [Exception\(\)](#) [1/2]

```
Exception::Exception ( ) [inline]
```

Constructs an [Exception](#) with no specified detail message.

3.1.2.2 [Exception\(\)](#) [2/2]

```
Exception::Exception (
    const string & arg ) [inline]
```

Constructs an [Exception](#) with a specified detail message.

3.1.3 Member Function Documentation

3.1.3.1 [begin\(\)](#)

```
deque<string>::const_iterator Exception::begin ( ) const [inline]
```

Get the iterator pointing to the beginning of the dequeue.

Referenced by [print\(\)](#), and [set_message\(\)](#).

3.1.3.2 end()

```
deque<string>::const_iterator Exception::end ( ) const [inline]
```

Get the iterator pointing to the end of the dequeue.

Referenced by `print()`, and `set_message()`.

3.1.3.3 get_message()

```
string Exception::get_message (
    void ) const [inline]
```

Get the most current message

3.1.3.4 print()

```
void Exception::print (
    ostream & os = cerr ) const [protected], [virtual]
```

Prints this and its backtrace to the specified output stream.

References `begin()`, and `end()`.

3.1.3.5 set_message()

```
void Exception::set_message (
    const string & msg )
```

Add a message.

References `begin()`, and `end()`.

3.1.4 Friends And Related Function Documentation

3.1.4.1 operator<< [1/2]

```
ostream& operator<< (
    ostream & os,
    Exception & a ) [friend]
```

Prints this and its backtrace to the specified output stream.

3.1.4.2 `operator<<` [2/2]

```
ostream& operator<< (  
    ostream & os,  
    Exception * a ) [friend]
```

Prints this and its backtrace to the specified output stream.

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

- Exception.h
- Exception.cc

Chapter 4

Example Documentation

4.1 test.cc

This is an example of how to use the Test class. More details about this example.

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