SafeStack

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Chapter 1

Class Index

1.1 Class List

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

Chapter 2

Class Documentation

2.1 SafeStack< Type > Class Template Reference

`#include <SafeStack.h>`

Public Types

- enum ErrorCodes {
  OK, ErrorCountSize, ErrorPoison, ErrorCheckSum,
  ErrorPop, ErrorPush, ErroKanareika }

Public Member Functions

- SafeStack (Type poison_)
- ErrorCodes isUnchanged () const
- ErrorCodes pop ()
- ErrorCodes push (Type element)
- Type getFrontUnsafe ()
- std::pair< Type, ErrorCodes > getFrontSafe ()

Public Attributes

- size_t KANAREIKA_ENDING = 0xBEDABEDA
  Kaanreika after variables.

2.1.1 Detailed Description

template<typename Type>
class SafeStack< Type >

SafeStack not look for own memory carefully

Template Parameters

Type	- type of elements in stack must have hash() function

2.1.2 Member Enumeration Documentation

2.1.2.1 ErrorCodes

```
template<typename Type >
enum SafeStack::ErrorCodes
```

Enumerator

OK	Everything is OK // 0.
ErrorCountSize	Size of Count is too big or small // 1.
ErrorPoison	Posion value not in array // 2.
ErrorCheckSum	Current Checksum is unequal with saved Checksum // 3.
ErrorPop	Nothin to Pop // 4.
ErrorPush	Container is full // 5.
ErroKanareika	Kanareika is not equal to 0xBEDABEDA // 6.

2.1.3 Constructor & Destructor Documentation

2.1.3.1 SafeStack()

```
template<typename Type >
SafeStack< Type >::SafeStack (
            Type poison_ )
```

Fill container with poison_ value, count checksum

Parameters

*poison_*	- element that will not be in stack

2.1.4 Member Function Documentation

2.1.4.1 getFrontSafe()

```
template<typename Type >
std::pair< Type, typename SafeStack< Type >::ErrorCodes > SafeStack< Type >::getFrontSafe (
)
```

Returns

pair where first element - is Front element if exists, else Poison value. second - ErrorCode

2.1.4.2 getFrontUnsafe()

```
template<typename Type >
Type SafeStack< Type >::getFrontUnsafe ( )
```

CAUTION!!! - Not use it if you are not sure!!!

Returns

front element without checking

2.1.4.3 isUnchanged()

```
template<typename Type >
SafeStack< Type >::ErrorCodes SafeStack< Type >::isUnchanged ( ) const
```

Check if checksum not changed

Returns

ErrorCode

2.1.4.4 pop()

```
template<typename Type >
SafeStack< Type >::ErrorCodes SafeStack< Type >::pop ( )
```

Remove Last element If it has no last element error returned

Returns

ErrorCode

2.1.4.5 push()

```
template<typename Type >
SafeStack< Type >::ErrorCodes SafeStack< Type >::push (
            Type element )
```

Add element to front If stack is full returns Error

Parameters

element	- element to push

Returns

ErrorCode

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

- SafeStack/SafeStack.h
- SafeStack/SafeStack.cpp