

# HashTable

0.1

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# Chapter 1

## glossygloss

Glossygloss est un petit programme écrit en C++ permettant de stocker dans un dictionnaire un mot associé à une valeur.

Usefull : [http://fr.wikibooks.org/wiki/Programmation\\_C%2B%2B](http://fr.wikibooks.org/wiki/Programmation_C%2B%2B)



## Chapter 2

# Hierarchical Index

### 2.1 Class Hierarchy

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

Alveole . . . . .	9
exception	
HashException . . . . .	10
Knot . . . . .	11





## Chapter 3

# Class Index

### 3.1 Class List

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

<a href="#">Alveole</a> . . . . .	9
<a href="#">HashException</a> . . . . .	10
<a href="#">Knot</a> . . . . .	11



## Chapter 4

# File Index

### 4.1 File List

Here is a list of all files with brief descriptions:

<a href="#">HashException.hpp</a>	13
<a href="#">HashTable.hpp</a>	13
<a href="#">tree.hpp</a>	14



## Chapter 5

# Class Documentation

### 5.1 Alveole Class Reference

```
#include <HashTable.hpp>
```

#### Public Member Functions

- [Alveole](#) (const [Alveole](#)< K, V > &other)
- [Alveole](#) (K key, V value) `_key(key)`
- `_value` (value)
- `_next` (`END`)

#### 5.1.1 Detailed Description

[Alveole](#) class embodies a hashtable's alveole. An alveole store a pair <k,v>. Alveoles are simply-linked elements.

#### 5.1.2 Constructor & Destructor Documentation

5.1.2.1 `Alveole::Alveole ( const Alveole< K, V > &other ) [inline]`

Copy constructor

Parameters

<code>in</code>	<code>other</code>	the alveole to copy
-----------------	--------------------	---------------------

5.1.2.2 `Alveole::Alveole ( K key, V value )`

pair constructor

Parameters

<code>in</code>	<code>key</code>	key of the pair
<code>in</code>	<code>value</code>	value of the pair

#### 5.1.3 Member Function Documentation

5.1.3.1 `Alveole::_next ( END ) [inline]`

### 5.1.3.2 Alveole::\_value ( value )

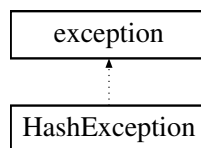
The documentation for this class was generated from the following file:

- [HashTable.hpp](#)

## 5.2 HashException Class Reference

```
#include <HashException.hpp>
```

Inheritance diagram for HashException:



### Public Member Functions

- [HashException](#) (char \*cause) \_cause(cause)
- virtual [~BagException](#) () throw ()
- virtual const char \* [what](#) () const throw ()

### 5.2.1 Detailed Description

Exception class to manage hashtable errors

### 5.2.2 Constructor & Destructor Documentation

#### 5.2.2.1 HashException::HashException ( char \* *cause* ) [inline]

constructor called then HashExceptions are threw

Parameters

<i>in</i>	<i>cause</i>	description of exception origin
-----------	--------------	---------------------------------

#### 5.2.2.2 virtual HashException::~~BagException ( ) throw ) [inline],[virtual]

destructor currently, do anything special

### 5.2.3 Member Function Documentation

#### 5.2.3.1 virtual const char\* HashException::what ( ) const throw ) [inline],[virtual]

virtual fonction from superclass, usefull to get the exception description

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

- [HashException.hpp](#)

## 5.3 Knot Class Reference

```
#include <tree.hpp>
```

### Public Member Functions

- [Knot](#) (const [Knot](#)< T > &)
- [Knot](#) (T)
- [~Knot](#) ()
- [Knot](#)< T > & [operator=](#) ([Knot](#)< T > )
- bool [operator==](#) (const [Knot](#)< T > &, const [Knot](#)< T > &)
- bool [operator!=](#) (const [Knot](#)< T > &, const [Knot](#)< T > &)
- bool [isLeaf](#) ()
- int [height](#) ()
- void [append](#) (< T > )
- void [remove](#) (< T > )
- string [toString](#) ()

### 5.3.1 Constructor & Destructor Documentation

5.3.1.1 [Knot::Knot](#) ( const [Knot](#)< T > & )

5.3.1.2 [Knot::Knot](#) ( T )

5.3.1.3 [Knot::~~Knot](#) ( )

### 5.3.2 Member Function Documentation

5.3.2.1 void [Knot::append](#) ( < T > )

5.3.2.2 int [Knot::height](#) ( )

5.3.2.3 bool [Knot::isLeaf](#) ( )

5.3.2.4 bool [Knot::operator!=](#) ( const [Knot](#)< T > &, const [Knot](#)< T > & )

5.3.2.5 [Knot](#)<T>& [Knot::operator=](#) ( [Knot](#)< T > )

5.3.2.6 bool [Knot::operator==](#) ( const [Knot](#)< T > &, const [Knot](#)< T > & )

5.3.2.7 void [Knot::remove](#) ( < T > )

5.3.2.8 string [Knot::toString](#) ( )

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

- [tree.hpp](#)





## Chapter 6

# File Documentation

### 6.1 HashException.hpp File Reference

```
#include <string>
```

#### Classes

- class [HashException](#)

#### 6.1.1 Detailed Description

#### 6.1.2 File description

Exception class for hash classes.

#### 6.1.3 Copyright

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#### 6.1.4 File informations

\$Date\$ 2014/03/27 \$Rev\$ 0.1 \$Author\$ Benjamin Sientzoff \$URL\$ <http://www.github.com/blasterbug>

### 6.2 HashTable.hpp File Reference

```
#include <string>
#include "HashException.hpp"
```

## Classes

- class [Alveole](#)

## Macros

- `#define` [END](#) 0

### 6.2.1 Detailed Description

### 6.2.2 File description

data structure to store pair in a table a hashCode is compute with k to evaluate the suitable place to store the pair

!! WARNING: int hashCode(K key) must be implemented !!

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### 6.2.4 File informations

\$Date\$ 2014/03/27 \$Rev\$ 0.1 \$Author\$ Benjamin Sientzoff \$URL\$ <http://www.github.com/blasterbug>

### 6.2.5 Macro Definition Documentation

#### 6.2.5.1 `#define` END 0

## 6.3 README.md File Reference

## 6.4 tree.hpp File Reference

```
#include <string>
#include <list>
#include "Alist.hpp"
#include "HashWord.tpp"
```

## Classes

- class [Knot](#)

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- ~BagException
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- ~Knot
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- \_next
  - Alveole, [9](#)
- \_value
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