ABB

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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

File Index

2.1 File List

Here is a list of all files with brief descriptions:

Chapter 3

Class Documentation

3.1 ArbolABB Class Reference

`#include <ArbolABB.h>`

Public Member Functions

- ArbolABB ()
- virtual ~ArbolABB ()
- NodoArbol * obtener_raiz ()
- void insertar (int)
- bool encuentra_en_arbol_ABB (int)
- string ver_arbol (int)
- int cantidad_de_nodos_presente ()
- string ruta (int)
- string nodos_hoja ()
- string nodos_internos_arbol ()
- int un_nivel_nodos (int)
- int nivel_de_un_nodo (int)
- int altura ()
- string sucesores (int)
- int obtiene_padre (int)
- NodoArbol * obtiene_nodo (int)
- string recorrer_arbol_por_ancho ()
- bool arbol_esta_lleno ()
- bool arbol_esta_completo ()
- bool compara_cant_elem (ArbolABB *)
- bool de_altura_son_iguales (ArbolABB *)
- string arbol_auxiliar_esta_completo (NodoArbol *, int)
- bool eliminar_nodo (int)

3.1.1 Detailed Description

Definition at line 8 of file ArbolABB.h.

3.1.2 Constructor & Destructor Documentation

3.1.2.1 ArbolABB()

```
ArbolABB::ArbolABB ( )
```

Definition at line 7 of file ArbolABB.cpp.

3.1.2.2 ~ArbolABB()

```
ArbolABB::~ArbolABB ( )  [virtual]
```

Definition at line 12 of file ArbolABB.cpp.

3.1.3 Member Function Documentation

3.1.3.1 altura()

```
int ArbolABB::altura ( )
```

Definition at line 211 of file ArbolABB.cpp.

Here is the call graph for this function: Here is the caller graph for this function:

3.1.3.2 arbol_auxiliar_esta_completo()

```
string ArbolABB::arbol_auxiliar_esta_completo (
            NodoArbol * a,
            int cont )
```

Definition at line 352 of file ArbolABB.cpp.

Here is the call graph for this function: Here is the caller graph for this function:

3.1.3.3 arbol_esta_completo()

```
bool ArbolABB::arbol_esta_completo ( )
```

Definition at line 322 of file ArbolABB.cpp.

Here is the call graph for this function: Here is the caller graph for this function:

3.1.3.4 arbol_esta_lleno()

```
bool ArbolABB::arbol_esta_lleno ( )
```

Definition at line 299 of file ArbolABB.cpp.

Here is the caller graph for this function:

3.1.3.5 cantidad_de_nodos_presente()

```
int ArbolABB::cantidad_de_nodos_presente ( )
```

Definition at line 101 of file ArbolABB.cpp.

Here is the call graph for this function: Here is the caller graph for this function:

3.1.3.6 compara_cant_elem()

```
bool ArbolABB::compara_cant_elem (
            ArbolABB * otroArbol )
```

Definition at line 363 of file ArbolABB.cpp.

Here is the call graph for this function: Here is the caller graph for this function:

3.1.3.7 de_altura_son_iguales()

```
bool ArbolABB::de_altura_son_iguales (
            ArbolABB * otroArbol )
```

Definition at line 374 of file ArbolABB.cpp.

Here is the call graph for this function: Here is the caller graph for this function:

3.1.3.8 eliminar_nodo()

```
bool ArbolABB::eliminar_nodo (
            int n )
```

Definition at line 386 of file ArbolABB.cpp.

Here is the call graph for this function: Here is the caller graph for this function:

3.1.3.9 encuentra_en_arbol_ABB()

```
bool ArbolABB::encuentra_en_arbol_ABB (
            int dato )
```

Definition at line 35 of file ArbolABB.cpp.

Here is the caller graph for this function:

3.1.3.10 insertar()

```
void ArbolABB::insertar (
            int i )
```

Definition at line 52 of file ArbolABB.cpp.

Here is the call graph for this function: Here is the caller graph for this function:

3.1.3.11 nivel_de_un_nodo()

```
int ArbolABB::nivel_de_un_nodo (
            int dato )
```

Definition at line 193 of file ArbolABB.cpp.

Here is the call graph for this function: Here is the caller graph for this function:

3.1.3.12 nodos_hoja()

```
string ArbolABB::nodos_hoja ( )
```

Definition at line 138 of file ArbolABB.cpp.

3.1.3.13 nodos_internos_arbol()

```
string ArbolABB::nodos_internos_arbol ( )
```

Definition at line 157 of file ArbolABB.cpp.

3.1.3.14 obtener_raiz()

```
NodoArbol * ArbolABB::obtener_raiz ( )
```

Definition at line 18 of file ArbolABB.cpp.

Here is the caller graph for this function:

3.1.3.15 obtiene_nodo()

```
NodoArbol * ArbolABB::obtiene_nodo (
            int dato )
```

Definition at line 260 of file ArbolABB.cpp.

Here is the call graph for this function: Here is the caller graph for this function:

3.1.3.16 obtiene_padre()

```
int ArbolABB::obtiene_padre (
            int dato )
```

Definition at line 243 of file ArbolABB.cpp.

Here is the call graph for this function: Here is the caller graph for this function:

3.1.3.17 recorrer_arbol_por_ancho()

```
string ArbolABB::recorrer_arbol_por_ancho ( )
```

Definition at line 277 of file ArbolABB.cpp.

Here is the call graph for this function: Here is the caller graph for this function:

3.1.3.18 ruta()

```
string ArbolABB::ruta (
            int num )
```

Definition at line 121 of file ArbolABB.cpp.

Here is the call graph for this function:

3.1.3.19 sucesores()

```
string ArbolABB::sucesores (
            int dato )
```

Definition at line 225 of file ArbolABB.cpp.

Here is the call graph for this function:

3.1.3.20 un_nivel_nodos()

```
int ArbolABB::un_nivel_nodos (
            int n )
```

Definition at line 185 of file ArbolABB.cpp.

Here is the caller graph for this function:

3.1.3.21 ver_arbol()

```
string ArbolABB::ver_arbol (
            int tipo )
```

Definition at line 76 of file ArbolABB.cpp.

Here is the caller graph for this function:

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

- ArbolABB.h
- ArbolABB.cpp

3.2 NodoArbol Class Reference

```
#include <NodoArbol.h>
```

Public Member Functions

- NodoArbol (int)
- virtual ~NodoArbol ()
- void fija_dat (int)
- void pone_a_la_izquierda (NodoArbol *)
- void pone_a_la_derecha (NodoArbol *)
- int obtener_datos ()
- NodoArbol *& obtiene_izquierda ()
- NodoArbol *& obtiene_derecha ()

3.2.1 Detailed Description

Definition at line 5 of file NodoArbol.h.

3.2.2 Constructor & Destructor Documentation

3.2.2.1 NodoArbol()

```
NodoArbol::NodoArbol (
            int dato )
```

Definition at line 3 of file NodoArbol.cpp.

3.2.2.2 ~NodoArbol()

```
NodoArbol::~NodoArbol ( )  [virtual]
```

Definition at line 10 of file NodoArbol.cpp.

3.2.3 Member Function Documentation

3.2.3.1 fija_dat()

```
void NodoArbol::fija_dat (
            int dato )
```

Definition at line 17 of file NodoArbol.cpp.

3.2.3.2 obtener_datos()

```
int NodoArbol::obtener_datos ( )
```

Definition at line 29 of file NodoArbol.cpp.

Here is the caller graph for this function:

3.2.3.3 obtiene_derecha()

```
NodoArbol *& NodoArbol::obtiene_derecha ( )
```

Definition at line 37 of file NodoArbol.cpp.

Here is the caller graph for this function:

3.2.3.4 obtiene_izquierda()

```
NodoArbol *& NodoArbol::obtiene_izquierda ( )
```

Definition at line 33 of file NodoArbol.cpp.

Here is the caller graph for this function:

3.2.3.5 pone_a_la_derecha()

```
void NodoArbol::pone_a_la_derecha (
            NodoArbol * der )
```

Definition at line 25 of file NodoArbol.cpp.

3.2.3.6 pone_a_la_izquierda()

```
void NodoArbol::pone_a_la_izquierda (
            NodoArbol * izq )
```

Definition at line 21 of file NodoArbol.cpp.

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

- NodoArbol.h
- NodoArbol.cpp

Chapter 4

File Documentation

4.1 ArbolABB.cpp File Reference

```
#include "ArbolABB.h"
#include "NodoArbol.h"
#include <cstddef>
#include <sstream>
#include <string>
#include <cmath>
```

Include dependency graph for ArbolABB.cpp:

4.2 ArbolABB.h File Reference

```
#include <iostream>
#include "NodoArbol.h"
```

Include dependency graph for ArbolABB.h: This graph shows which files directly or indirectly include this file:

Classes

- class ArbolABB

4.3 main.cpp File Reference

```
#include <iostream>
#include "NodoArbol.h"
#include "ArbolABB.h"
```

Include dependency graph for main.cpp:

Functions

- int main ()

4.3.1 Function Documentation

4.3.1.1 main()

```
int main ( )
```

Definition at line 7 of file main.cpp.

Here is the call graph for this function:

4.4 NodoArbol.cpp File Reference

```
#include "NodoArbol.h"
#include <cstddef>
```

Include dependency graph for NodoArbol.cpp:

4.5 NodoArbol.h File Reference

This graph shows which files directly or indirectly include this file:

Classes

- class NodoArbol

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