

Optimal binary search tree

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1 Class Index	1
1.1 Class List	1
2 Class Documentation	3
2.1 BinaryTree< T > Class Template Reference	3
2.2 Node< T > Class Template Reference	3
Index	5

Chapter 1

Class Index

1.1 Class List

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

BinaryTree< T >	3
Node< T >	3

Chapter 2

Class Documentation

2.1 BinaryTree< T > Class Template Reference

Public Member Functions

- void **add** (T val)
Inserts the key 'val' into the tree.
- void **printPreOrder** ()
Print in preorder.
- void **printInOrder** ()
Print in inorder.
- void **printPostOrder** ()
Print in postorder.
- int **size** ()
Get tree size.
- bool **lookup** (T val)
Check if node with key 'val' exists in tree.
- **Node**< T > * **search** (T val)
Returns the pointer to the node with the key 'val'.
- **Node**< T > * **optimalSearchTree** ()
Search optimal tree and rebuild current tree.
- void **setRoot** (**Node**< T > *root)
- **Node**< T > * **getRoot** ()

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

- Optimal_BST.h

2.2 Node< T > Class Template Reference

Public Member Functions

- **Node** (T val)
- **Node** (T val, unsigned int freq)
- **Node** (**Node**< T > *n)
- void **setLeft** (**Node**< T > *l)
- void **setRight** (**Node**< T > *r)
- void **setParent** (**Node**< T > *p, bool left)

Public Attributes

- T **value**
- [Node](#) * **right**
- [Node](#) * **left**
- [Node](#) * **parent**
- unsigned int **frequency**

Friends

- bool **operator**< (const [Node](#)< T > &lhs, const [Node](#)< T > &rhs)

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Index

`BinaryTree< T >`, [3](#)

`Node< T >`, [3](#)