

# Dictionary

1

Generated by Doxygen 1.8.18

<b>1 Class Index</b>	<b>1</b>
<b>1 Class Index</b>	<b>1</b>
1.1 Class List . . . . .	1
<b>2 File Index</b>	<b>1</b>
2.1 File List . . . . .	1
<b>3 Class Documentation</b>	<b>2</b>
3.1 BST Class Reference . . . . .	2
3.1.1 Detailed Description . . . . .	2
3.1.2 Constructor & Destructor Documentation . . . . .	2
3.1.3 Member Function Documentation . . . . .	3
3.1.4 Member Data Documentation . . . . .	4
3.2 BST::Node Struct Reference . . . . .	4
3.2.1 Member Data Documentation . . . . .	5
<b>4 File Documentation</b>	<b>5</b>
4.1 BST.cpp File Reference . . . . .	5
4.2 BST.h File Reference . . . . .	5
4.3 main.cpp File Reference . . . . .	5
4.3.1 Function Documentation . . . . .	6
4.4 main.h File Reference . . . . .	6
4.4.1 Function Documentation . . . . .	7
4.4.2 Variable Documentation . . . . .	7
<b>Index</b>	<b>9</b>

## 1 Class Index

### 1.1 Class List

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

<b>BST</b>	<b>2</b>
<b>BST::Node</b>	<b>4</b>

## 2 File Index

### 2.1 File List

Here is a list of all files with brief descriptions:

<b>BST.cpp</b>	<b>5</b>
<b>BST.h</b>	<b>5</b>

<b>main.cpp</b>	<b>5</b>
<b>main.h</b>	<b>6</b>

## 3 Class Documentation

### 3.1 BST Class Reference

```
#include <BST.h>
```

#### Classes

- struct **Node**

#### Public Member Functions

- **BST** ()
- int **addLeaf** (char \*, char \*, **Node** \*)  
*Adds a leaf.*
- char \*\* **findLeaf** (char \*, **Node** \*)  
*Finds a leaf.*
- **Node** \* **getRoot** (void)  
*Gets the root.*
- void **printInOrder** ( **Node** \*)  
*Prints in order.*

#### Private Member Functions

- **Node** \* **createLeaf** (char \*, char \*)  
*Creates a leaf to add.*

#### Private Attributes

- **Node** \* **root**

#### 3.1.1 Detailed Description

class to create and manage the leafs of the tree

#### 3.1.2 Constructor & Destructor Documentation

### 3.1.2.1 BST() `BST::BST ( )`

## 3.1.3 Member Function Documentation

### 3.1.3.1 `addLeaf()` `int BST::addLeaf (` `char * word,` `char * def,` `Node * ptr )`

Adds a leaf.

#### Parameters

<i>word</i>	The word to be added
<i>def</i>	The definition associated with word to be added.
<i>ptr</i>	The pointer to traverse the tree.

#### Returns

returns 0 on success -1 on failure

### 3.1.3.2 `createLeaf()` `BST::Node * BST::createLeaf (` `char * word,` `char * def ) [private]`

Creates a leaf to add.

#### Parameters

<i>word</i>	The word to add
<i>def</i>	The definition attached to that word

#### Returns

returns pointer for adding later

### 3.1.3.3 `findLeaf()` `char ** BST::findLeaf (` `char * word,` `Node * ptr )`

Finds a leaf.

## Returns

Gets the root.

## Returns

Prints in order.

### Parameters

### 3.1.4 Member Data Documentation

### 3.1.4.1 root Node\* BST::root [private]

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

- **BST.h**
- **BST.cpp**

### 3.2 BST::Node Struct Reference

## Public Attributes

- char \* **word**
- char \* **def**
- **Node** \* **left**
- **Node** \* **right**

### 3.2.1 Member Data Documentation

**3.2.1.1** **def** `char* BST::Node::def`

**3.2.1.2** **left** `Node* BST::Node::left`

**3.2.1.3** **right** `Node* BST::Node::right`

**3.2.1.4** **word** `char* BST::Node::word`

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

- **BST.h**

## 4 File Documentation

### 4.1 BST.cpp File Reference

```
#include <iostream>
#include <cstdlib>
#include <cstring>
#include "BST.h"
```

### 4.2 BST.h File Reference

#### Classes

- class **BST**
- struct **BST::Node**

### 4.3 main.cpp File Reference

```
#include "main.h"
```

## Functions

- int **main** ()  
*Binary Search Tree.*
- int **menu** ()  
*Creates user selectable menu.*
- void **clearScreen** ()  
*clears user screen*
- void **pauseScreen** ()  
*stop screen so user can read text*

### 4.3.1 Function Documentation

#### 4.3.1.1 **clearScreen()** `void clearScreen ( )`

clears user screen

#### 4.3.1.2 **main()** `int main (` `void )`

Binary Search Tree.

Creates an enviornemnt for the main code to run in

#### 4.3.1.3 **menu()** `int menu (` `void )`

Creates user selectable menu.

#### Returns

choice for program to operate off of

#### 4.3.1.4 **pauseScreen()** `void pauseScreen ( )`

stop screen so user can read text

## 4.4 main.h File Reference

```
#include <cstdlib>
#include <iostream>
#include "BST.h"
```

## Functions

- void **clearScreen** (void)  
*clears user screen*
- int **main** (void)  
*Binary Search Tree.*
- void **pauseScreen** (void)  
*stop screen so user can read text*
- int **menu** (void)  
*Creates user selectable menu.*

## Variables

- **BST myTree = BST()**  
*statically created object my tree for use with menu*

### 4.4.1 Function Documentation

**4.4.1.1 clearScreen()** `void clearScreen (`  
`void )`

clears user screen

**4.4.1.2 main()** `int main (`  
`void )`

Binary Search Tree.

Creates an environment for the main code to run in

**4.4.1.3 menu()** `int menu (`  
`void )`

Creates user selectable menu.

#### Returns

choice for program to operate off of

**4.4.1.4 pauseScreen()** `void pauseScreen (`  
`void )`

stop screen so user can read text

### 4.4.2 Variable Documentation

**4.4.2.1 myTree** `BST myTree = BST()`

statically created object my tree for use with menu





## Index

- addLeaf
  - BST, 3
- BST, 2
  - addLeaf, 3
  - BST, 2
  - createLeaf, 3
  - findLeaf, 3
  - getRoot, 4
  - printlnOrder, 4
  - root, 4
- BST.cpp, 5
- BST.h, 5
- BST::Node, 4
  - def, 5
  - left, 5
  - right, 5
  - word, 5
- clearScreen
  - main.cpp, 6
  - main.h, 7
- createLeaf
  - BST, 3
- def
  - BST::Node, 5
- findLeaf
  - BST, 3
- getRoot
  - BST, 4
- left
  - BST::Node, 5
- main
  - main.cpp, 6
  - main.h, 7
- main.cpp, 5
  - clearScreen, 6
  - main, 6
  - menu, 6
  - pauseScreen, 6
- main.h, 6
  - clearScreen, 7
  - main, 7
  - menu, 7
  - myTree, 7
  - pauseScreen, 7
- menu
  - main.cpp, 6
  - main.h, 7
- myTree
  - main.h, 7
- pauseScreen
  - main.cpp, 6
  - main.h, 7
- printlnOrder
  - BST, 4
- right
  - BST::Node, 5
- root
  - BST, 4
- word
  - BST::Node, 5