Dictionary

1

Generated by Doxygen 1.8.18

1 Class Index

1.1 Class List

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

2 File Index

2.1 File List

Here is a list of all files with brief descriptions:

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

word	The word to be added
def	The definition associated with word to be added.
ptr	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

word	The word to add
def	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.

Parameters

word	The word to find
ptr	The pointer to traverse the tree

Returns

returns word and definition if found

3.1.3.4 getRoot() `BST::Node * BST::getRoot ( void )`

Gets the root.

Returns

The root.

3.1.3.5 printInOrder() `void BST::printInOrder ( Node * ptr )`

Prints in order.

Parameters

ptr	The pointer to traverse for printing.

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 enviornemnt 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