

lr1

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# Chapter 1

## Class Index

### 1.1 Class List

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

<b>DictionaryNode</b>	.....	5
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## Chapter 2

# File Index

### 2.1 File List

Here is a list of all documented files with brief descriptions:

C:/Users/HONOR/OneDrive// /3//lr1/ <b>Dictionary.h</b> . . . . .	9
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## Chapter 3

# Class Documentation

### 3.1 DictionaryNode Class Reference

#### Public Member Functions

- **DictionaryNode** (const string &english, const string &russian)

#### Public Attributes

- string **englishWord**
- string **russianWord**
- **DictionaryNode** \* **left**
- **DictionaryNode** \* **right**

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

- C:/Users/HONOR/OneDrive// /3//lr1/Dictionary.h

### 3.2 DictionaryTree Class Reference

#### Public Member Functions

- **~DictionaryTree** ()  
*Class destructor.*
- bool **IsContains** (const string &english)  
*Helper method for checking if a dictionary contains required word (with parameter)*
- void **Add** (const string &english, const string &russian)  
*Method Adding a couple of words to dictionary (with parameters)*
- void **Remove** (const string &english)  
*Method Removing a couple of words (with parameter)*
- string **Translate** (const string &english)  
*Method for obtaining translation (with parameter)*
- void **UpdateTranslation** (const string &english, const string &russian)  
*Method Changing a couple of words in dictionary (with parameters)*
- int **GetWordsCount** ()  
*Method which calculate count of word's couples.*
- void **LoadFromFile** (const string &filename)  
*Method Loading dictionary data from file (with parameter)*
- string **operator[]** (const string &english)  
*Overloading indexer operator (with parameter)*

### 3.2.1 Member Function Documentation

#### 3.2.1.1 Add()

```
void DictionaryTree::Add (
    const string & english,
    const string & russian )
```

Method Adding a couple of words to dictionary (with parameters)

##### Parameters

<i>english, russian</i>	couple of words of the dictionary
-------------------------	-----------------------------------

#### 3.2.1.2 GetWordsCount()

```
int DictionaryTree::GetWordsCount ( )
```

Method which calculate count of word's couples.

##### Returns

node's count

#### 3.2.1.3 IsContains()

```
bool DictionaryTree::IsContains (
    const string & english )
```

Helper method for checking if a dictionary contains required word (with parameter)

##### Parameters

<i>english</i>	english word of the dictionary
----------------	--------------------------------

##### Returns

True if yes, False if no

#### 3.2.1.4 LoadFromFile()

```
void DictionaryTree::LoadFromFile (
    const string & filename )
```

Method Loading dictionary data from file (with parameter)

## Parameters

<i>filename</i>	file from which the dictionary is read
-----------------	--

**3.2.1.5 operator[]()**

```
string DictionaryTree::operator[] (
    const string & english )
```

Overloading indexer operator (with parameter)

## Parameters

<i>english</i>	english word of the dictionary
----------------	--------------------------------

## Returns

russian translation

**3.2.1.6 Remove()**

```
void DictionaryTree::Remove (
    const string & english )
```

Method Removing a couple of words (with parameter)

## Parameters

<i>english</i>	english word of the dictionary
----------------	--------------------------------

**3.2.1.7 Translate()**

```
string DictionaryTree::Translate (
    const string & english )
```

Method for obtaining translation (with parameter)

## Parameters

<i>english</i>	english word of the dictionary
----------------	--------------------------------

## Returns

russian translation

### 3.2.1.8 UpdateTranslation()

```
void DictionaryTree::UpdateTranslation (
    const string & english,
    const string & russian )
```

Method Changing a couple of words in dictionary (with parameters)

#### Parameters

<i>english,russian</i>	couple of words of the dictionary
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The documentation for this class was generated from the following files:

- C:/Users/HONOR/OneDrive// /3//lr1/Dictionary.h
- C:/Users/HONOR/OneDrive// /3//lr1/1.cpp
- C:/Users/HONOR/OneDrive// /3//lr1/main.cpp

# Chapter 4

## File Documentation

### 4.1 Dictionary.h

```
00001 #pragma once
00002 #include <string>
00003 #include <fstream>
00004 using namespace std;
00005
00006 class DictionaryNode {
00007 public:
00008     string englishWord;
00009     string russianWord;
00010     DictionaryNode* left;
00011     DictionaryNode* right;
00012
00013     DictionaryNode(const string& english, const string& russian):englishWord(english),
00014         russianWord(russian),left(NULL), right(NULL) {}
00015 };
00016
00017 class DictionaryTree {
00018 private:
00019     DictionaryNode* node;
00020
00021     DictionaryNode* DeleteNode(const string& key);
00022     int GetNodesCount(DictionaryNode* node);
00023     void DeleteDictionary(DictionaryNode* node);
00024
00025 public:
00026     DictionaryTree() : node(NULL) {}
00027     ~DictionaryTree();
00028
00029     bool IsContains(const string& english);
00030     void Add(const string& english, const string& russian);
00031     void Remove(const string& english);
00032     string Translate(const string& english);
00033     void UpdateTranslation(const string& english, const string& russian);
00034     int GetWordsCount();
00035     void LoadFromFile(const string& filename);
00036
00037     string operator [](const string& english);
00038 };
00039
```



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