

# AddressBook

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>2</b>
2.1 File List . . . . .	2
<b>3 Class Documentation</b>	<b>2</b>
3.1 AddressBook Class Reference . . . . .	2
3.1.1 Constructor & Destructor Documentation . . . . .	3
3.1.2 Member Function Documentation . . . . .	3
3.1.3 Member Data Documentation . . . . .	5
3.2 addressbook Class Reference . . . . .	5
3.2.1 Detailed Description . . . . .	5
3.3 contact Class Reference . . . . .	6
3.3.1 Detailed Description . . . . .	6
3.4 Contact Class Reference . . . . .	6
3.4.1 Constructor & Destructor Documentation . . . . .	6
3.4.2 Member Data Documentation . . . . .	7
<b>4 File Documentation</b>	<b>8</b>
4.1 addressbook.cpp File Reference . . . . .	8
4.2 addressbook.h File Reference . . . . .	8
4.3 contact.cpp File Reference . . . . .	8
4.4 contact.h File Reference . . . . .	8
4.5 main.cpp File Reference . . . . .	9
4.5.1 Function Documentation . . . . .	9
4.6 main.h File Reference . . . . .	9
4.6.1 Function Documentation . . . . .	10
4.6.2 Variable Documentation . . . . .	10
<b>Index</b>	<b>11</b>

# 1 Class Index

## 1.1 Class List

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

<b>AddressBook</b>	<b>2</b>
<b>addressbook</b>	
<b>This class describes an address book</b>	<b>5</b>
<b>contact</b>	
<b>This class describes a contact</b>	<b>6</b>

## 2 File Index

### 2.1 File List

Here is a list of all files with brief descriptions:

<b>addressbook.cpp</b>	<b>8</b>
<b>addressbook.h</b>	<b>8</b>
<b>contact.cpp</b>	<b>8</b>
<b>contact.h</b>	<b>8</b>
<b>main.cpp</b>	<b>9</b>
<b>main.h</b>	<b>9</b>

## 3 Class Documentation

### 3.1 AddressBook Class Reference

```
#include <addressbook.h>
```

#### Public Member Functions

- **AddressBook** ()
- void **addContact** ( **Contact**)  
*Adds a contact.*
- bool **deleteContact** ( **Contact**)  
*deletes a contact*
- int **findContact** (std::string firstName)  
*Finds a contact.*
- int **findContact** ( **Contact**)  
*Finds a contact.*
- bool **editContact** (std::string firstName)  
*Adds a contact.*
- void **getCurrent** ()  
*Gets the current contact.*
- void **makeEmpty** ()  
*Makes address book empty.*
- void **printContact** ()  
*Prints a contact.*
- **~AddressBook** ()

### Private Attributes

- **Contact \* head**
- **Contact \* tail**
- **Contact \* currentPosition**

### 3.1.1 Constructor & Destructor Documentation

**3.1.1.1 AddressBook()** `AddressBook::AddressBook ( )`

**3.1.1.2 ~AddressBook()** `AddressBook::~~AddressBook ( )`

### 3.1.2 Member Function Documentation

**3.1.2.1 addContact()** `void AddressBook::addContact (   
                    Contact newContact )`

Adds a contact.

#### Parameters

in	<i>newContact</i>	The new contact
----	-------------------	-----------------

**3.1.2.2 deleteContact()** `bool AddressBook::deleteContact (   
                    Contact toDelete )`

deletes a contact

#### Parameters

in	<i>toDelete</i>	contact to delete
----	-----------------	-------------------

#### Returns

returns 0 on completion

**3.1.2.3 editContact()** `bool AddressBook::editContact (`  
`std::string firstName )`

Adds a contact.

**Parameters**

<code>in</code>	<code><i>firstName</i></code>	The first name of the contact to add.
-----------------	-------------------------------	---------------------------------------

**Returns**

returns false on failure

**3.1.2.4 findContact()** `[1/2] int AddressBook::findContact (`  
`Contact compare )`

Finds a contact.

**Parameters**

<code>in</code>	<code><i>compare</i></code>	The contact to find
-----------------	-----------------------------	---------------------

**3.1.2.5 findContact()** `[2/2] int AddressBook::findContact (`  
`std::string firstName )`

Finds a contact.

**Parameters**

<code>in</code>	<code><i>firstName</i></code>	The first name to find
-----------------	-------------------------------	------------------------

**Returns**

return one on success

**3.1.2.6 getCurrent()** `void AddressBook::getCurrent ( )`

Gets the current contact.

**3.1.2.7 makeEmpty()** `void AddressBook::makeEmpty ( )`

Makes address book empty.

**3.1.2.8 printContact()** `void AddressBook::printContact ( )`

Prints a contact.

**3.1.3 Member Data Documentation****3.1.3.1 currentPosition** `Contact* AddressBook::currentPosition [private]`**3.1.3.2 head** `Contact* AddressBook::head [private]`**3.1.3.3 tail** `Contact* AddressBook::tail [private]`

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

- **addressbook.h**
- **addressbook.cpp**

**3.2 addressbook Class Reference**

This class describes an address book.

```
#include <addressbook.h>
```

**3.2.1 Detailed Description**

This class describes an address book.

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

- **addressbook.h**

### 3.3 contact Class Reference

This class describes a contact.

```
#include <contact.h>
```

#### 3.3.1 Detailed Description

This class describes a contact.

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

- **contact.h**

### 3.4 Contact Class Reference

```
#include <contact.h>
```

#### Public Member Functions

- **Contact** ()  
*Constructs a new instance.*
- **Contact** (std::string)  
*Constructs a new instance.*
- **Contact** (std::string, std::string)  
*Constructs a new instance.*
- **Contact** (std::string, std::string, int, std::string)  
*Constructs a new instance.*

#### Public Attributes

- std::string **firstName**
- std::string **lastName**
- int **phoneNumber**
- std::string **address**
- **Contact** \* **next** = nullptr

#### 3.4.1 Constructor & Destructor Documentation

##### 3.4.1.1 **Contact()** [1/4] `Contact::Contact ( )`

Constructs a new instance.

##### 3.4.1.2 **Contact()** [2/4] `Contact::Contact ( std::string mfirstName )`

Constructs a new instance.

## Parameters

in	<i>mfirstName</i>	The first name
----	-------------------	----------------

**3.4.1.3 Contact() [3/4]** `Contact::Contact (`  
    `std::string mfirstName,`  
    `std::string mlastName )`

Constructs a new instance.

## Parameters

in	<i>mfirstName</i>	The first name
in	<i>mlastName</i>	The last name

**3.4.1.4 Contact() [4/4]** `Contact::Contact (`  
    `std::string mfirstName,`  
    `std::string mlastName,`  
    `int mphoneNumber,`  
    `std::string maddress )`

Constructs a new instance.

Creates a complete contact with all the info inside an object that is created.

## Parameters

in	<i>mfirstName</i>	The mfirst name
in	<i>mlastName</i>	The mlast name
in	<i>mphoneNumber</i>	The mphone number
in	<i>maddress</i>	The maddress

## 3.4.2 Member Data Documentation

**3.4.2.1 address** `std::string Contact::address`

**3.4.2.2 firstName** `std::string Contact::firstName`



**3.4.2.3 lastName** `std::string Contact::lastName`

**3.4.2.4 next** `Contact* Contact::next = nullptr`

**3.4.2.5 phoneNumber** `int Contact::phoneNumber`

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

- **contact.h**
- **contact.cpp**

## 4 File Documentation

### 4.1 addressbook.cpp File Reference

```
#include "addressbook.h"
```

### 4.2 addressbook.h File Reference

```
#include "contact.h"
```

#### Classes

- class **AddressBook**

### 4.3 contact.cpp File Reference

```
#include "contact.h"
```

### 4.4 contact.h File Reference

```
#include <iostream>
#include <string>
```

## Classes

- class **Contact**

## 4.5 main.cpp File Reference

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

## Functions

- int **main** ()
- int **menu** ()
- void **clearScreen** ()
- void **pauseScreen** ()

### 4.5.1 Function Documentation

**4.5.1.1 clearScreen()** `void clearScreen ( )`

**4.5.1.2 main()** `int main ( )`

**4.5.1.3 menu()** `int menu ( )`

**4.5.1.4 pauseScreen()** `void pauseScreen ( )`

## 4.6 main.h File Reference

```
#include <string>
#include "addressbook.h"
#include "contact.h"
```

## Functions

- void **clearScreen** (void)
- int **main** ()
- int **menu** (void)
- void **pauseScreen** (void)

## Variables

- **AddressBook a = AddressBook()**

### 4.6.1 Function Documentation

**4.6.1.1 clearScreen()** `void clearScreen (`  
                  `void )`

**4.6.1.2 main()** `int main ( )`

**4.6.1.3 menu()** `int menu (`  
                  `void )`

**4.6.1.4 pauseScreen()** `void pauseScreen (`  
                  `void )`

### 4.6.2 Variable Documentation

**4.6.2.1 a** `AddressBook a = AddressBook()`

## Index

~AddressBook  
    AddressBook, 3

a

    main.h, 10

addContact  
    AddressBook, 3

address  
    Contact, 7

AddressBook, 2  
    ~AddressBook, 3  
    addContact, 3  
    AddressBook, 3  
    currentPosition, 5  
    deleteContact, 3  
    editContact, 3  
    findContact, 4  
    getCurrent, 4  
    head, 5  
    makeEmpty, 4  
    printContact, 5  
    tail, 5

addressbook, 5  
addressbook.cpp, 8  
addressbook.h, 8

clearScreen  
    main.cpp, 9  
    main.h, 10

Contact, 6  
    address, 7  
    Contact, 6, 7  
    firstName, 7  
    lastName, 7  
    next, 8  
    phoneNumber, 8

contact, 6  
contact.cpp, 8  
contact.h, 8  
currentPosition  
    AddressBook, 5

deleteContact  
    AddressBook, 3

editContact  
    AddressBook, 3

findContact  
    AddressBook, 4

firstName  
    Contact, 7

getCurrent  
    AddressBook, 4

head

AddressBook, 5

lastName  
    Contact, 7

main  
    main.cpp, 9  
    main.h, 10  
main.cpp, 9  
    clearScreen, 9  
    main, 9  
    menu, 9  
    pauseScreen, 9  
main.h, 9  
    a, 10  
    clearScreen, 10  
    main, 10  
    menu, 10  
    pauseScreen, 10

makeEmpty  
    AddressBook, 4

menu  
    main.cpp, 9  
    main.h, 10

next  
    Contact, 8

pauseScreen  
    main.cpp, 9  
    main.h, 10

phoneNumber  
    Contact, 8

printContact  
    AddressBook, 5

tail  
    AddressBook, 5