

## Practice 4

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|  |           |
|--|-----------|
| <b>1 Hierarchical Index</b>                  | <b>1</b>  |
| 1.1 Class Hierarchy                          | 1         |
| <b>2 Class Index</b>                         | <b>3</b>  |
| 2.1 Class List                               | 3         |
| <b>3 File Index</b>                          | <b>5</b>  |
| 3.1 File List                                | 5         |
| <b>4 Class Documentation</b>                 | <b>7</b>  |
| 4.1 Admin Class Reference                    | 7         |
| 4.1.1 Constructor & Destructor Documentation | 8         |
| 4.1.1.1 Admin()                              | 8         |
| 4.2 User Class Reference                     | 8         |
| 4.2.1 Constructor & Destructor Documentation | 9         |
| 4.2.1.1 User()                               | 9         |
| 4.2.2 Member Function Documentation          | 10        |
| 4.2.2.1 addTimestamp()                       | 10        |
| 4.2.2.2 getName()                            | 10        |
| 4.2.2.3 getTimestamp()                       | 10        |
| 4.2.2.4 hasAdminPermission()                 | 11        |
| 4.2.2.5 isSameEmployeeNumber()               | 11        |
| 4.2.2.6 isSameNIF()                          | 12        |
| 4.2.2.7 setEmployeeNumber()                  | 12        |
| 4.2.2.8 setNIF()                             | 12        |
| <b>5 File Documentation</b>                  | <b>15</b> |
| 5.1 include/Admin.h File Reference           | 15        |
| 5.1.1 Detailed Description                   | 16        |
| 5.2 include/main.h File Reference            | 16        |
| 5.2.1 Detailed Description                   | 17        |
| 5.3 include/User.h File Reference            | 17        |
| 5.3.1 Detailed Description                   | 18        |
| 5.4 src/Admin.cpp File Reference             | 19        |
| 5.4.1 Detailed Description                   | 19        |
| 5.5 src/main.cpp File Reference              | 20        |
| 5.5.1 Detailed Description                   | 20        |
| 5.6 src/User.cpp File Reference              | 21        |
| 5.6.1 Detailed Description                   | 21        |
| <b>Index</b>                                 | <b>23</b> |



# Chapter 1

## Hierarchical Index

### 1.1 Class Hierarchy

This inheritance list is sorted roughly, but not completely, alphabetically:

|                 |   |
|-----------------|---|
| User . . . . .  | 8 |
| Admin . . . . . | 7 |



## Chapter 2

# Class Index

### 2.1 Class List

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

|                                 |                   |
|---------------------------------|-------------------|
| <a href="#">Admin</a> . . . . . | <a href="#">7</a> |
| <a href="#">User</a> . . . . .  | <a href="#">8</a> |





## Chapter 3

# File Index

### 3.1 File List

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

|  |    |
|--|----|
| include/ <a href="#">Admin.h</a>         |    |
| Header file of <a href="#">Admin.cpp</a> | 15 |
| include/ <a href="#">main.h</a>          | 16 |
| include/ <a href="#">User.h</a>          |    |
| Header file of <a href="#">User.cpp</a>  | 17 |
| src/ <a href="#">Admin.cpp</a>           | 19 |
| src/ <a href="#">main.cpp</a>            | 20 |
| src/ <a href="#">User.cpp</a>            | 21 |

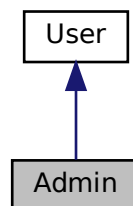


## Chapter 4

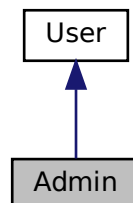
# Class Documentation

### 4.1 Admin Class Reference

Inheritance diagram for Admin:



Collaboration diagram for Admin:



### Public Member Functions

- [Admin](#) (std::string number="00000", std::string nif="000000000", std::string name="default")  
*Creates a new [Admin](#) object.*

## Additional Inherited Members

### 4.1.1 Constructor & Destructor Documentation

#### 4.1.1.1 Admin()

```
Admin::Admin (
    std::string employeeNumber = "00000",
    std::string NIF = "000000000",
    std::string name = "default" )
```

Creates a new [Admin](#) object.

#### Parameters

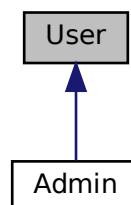
|                       |  |
|-----------------------|--|
| <i>employeeNumber</i> |  |
| <i>NIF</i>            |  |
| <i>name</i>           |  |

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

- include/[Admin.h](#)
- src/[Admin.cpp](#)

## 4.2 User Class Reference

Inheritance diagram for User:



### Public Member Functions

- [User](#) (std::string number="00000", std::string nif="000000000", std::string name="default")

- Create a new [User](#).
- bool [isSameNIF](#) (std::string)  
*Check if the user has the input NIF.*
- bool [isSameEmployeeNumber](#) (std::string)  
*Check if the user has the input employee number.*
- std::string [getName](#) ()  
*Returns the user name.*
- void [addTimestamp](#) ()  
*Set the timestamp.*
- std::string [getTimestamp](#) ()  
*Returns the timestamp.*
- bool [hasAdminPermission](#) ()  
*Returns the user permissions.*
- bool [operator](#)< (const [User](#) &) const

## Protected Member Functions

- void [setNIF](#) (std::string)  
*Set the user NIF.*
- void [setEmployeeNumber](#) (std::string)  
*Set the user employee number.*

## Protected Attributes

- std::string **name**
- std::string **NIF**
- std::string **employeeNumber**
- std::string **lastLogTime**
- bool **adminPermission**

## Friends

- std::ostream & [operator](#)<< (std::ostream &, const [User](#) &)

### 4.2.1 Constructor & Destructor Documentation

#### 4.2.1.1 User()

```
User::User (  
    std::string employeeNumber = "00000",  
    std::string NIF = "000000000",  
    std::string name = "default" )
```

Create a new [User](#).

**Parameters**

|                       |  |
|-----------------------|--|
| <i>employeeNumber</i> |  |
| <i>NIF</i>            |  |
| <i>name</i>           |  |

## 4.2.2 Member Function Documentation

### 4.2.2.1 addTimestamp()

```
void User::addTimestamp ( )
```

Set the timestamp.

### 4.2.2.2 getName()

```
std::string User::getName ( )
```

Returns the user name.

**Returns**

std::string [User](#) name

### 4.2.2.3 getTimestamp()

```
std::string User::getTimestamp ( )
```

Returns the timestamp.

**Returns**

std::string Timestamp

#### 4.2.2.4 hasAdminPermission()

```
bool User::hasAdminPermission ( )
```

Returns the user permissions.

##### Returns

true = has admin permissions

false = does not have admin permissions

#### 4.2.2.5 isSameEmployeeNumber()

```
bool User::isSameEmployeeNumber (
    std::string employeeNumber )
```

Check if the user has the input employee number.

**Parameters**

|                       |  |
|-----------------------|--|
| <i>employeeNumber</i> |  |
|-----------------------|--|

**Returns**

true = is the same employee number

false = is not the same employee number

**4.2.2.6 isSameNIF()**

```
bool User::isSameNIF (
    std::string NIF )
```

Check if the user has the input NIF.

**Parameters**

|                        |  |
|------------------------|--|
| $N \leftrightarrow IF$ |  |
|------------------------|--|

**Returns**

true = is the same NIF

false = is not the same NIF

**4.2.2.7 setEmployeeNumber()**

```
void User::setEmployeeNumber (
    std::string employeeNumber ) [protected]
```

Set the user employee number.

**Parameters**

|                       |  |
|-----------------------|--|
| <i>employeeNumber</i> |  |
|-----------------------|--|

**4.2.2.8 setNIF()**

```
void User::setNIF (
    std::string NIF ) [protected]
```



Set the user NIF.

**Parameters**

|                  |  |
|------------------|--|
| $N_{\leftarrow}$ |  |
| $IF$             |  |

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

- [include/User.h](#)
- [src/User.cpp](#)

## Chapter 5

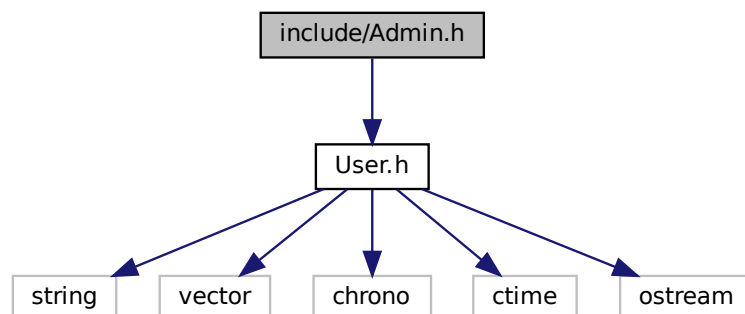
# File Documentation

### 5.1 include/Admin.h File Reference

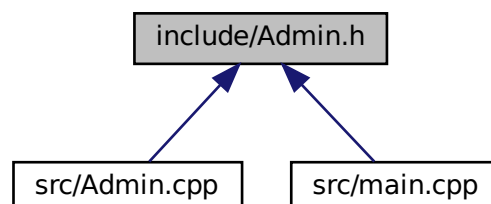
Header file of [Admin.cpp](#).

```
#include "User.h"
```

Include dependency graph for Admin.h:



This graph shows which files directly or indirectly include this file:



## Classes

- class [Admin](#)

### 5.1.1 Detailed Description

Header file of [Admin.cpp](#).

#### Author

Javier Izquierdo ( [j.izquierdoh.2021@alumnos.urjc.es](mailto:j.izquierdoh.2021@alumnos.urjc.es) )

#### Version

1.0

#### Date

2022-11-23

#### Copyright

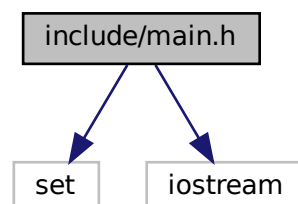
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## 5.2 include/main.h File Reference

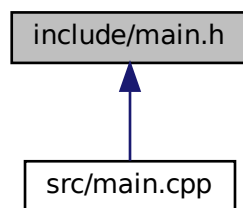
```
#include <set>
```

```
#include <iostream>
```

Include dependency graph for main.h:



This graph shows which files directly or indirectly include this file:



## Functions

- `template<typename T >`  
`void printSet (std::set< T > &set)`
- `int main ()`

### 5.2.1 Detailed Description

#### Author

Javier Izquierdo Hernandez ( [j.izquierdoh.2021@alumnos.urjc.es](mailto:j.izquierdoh.2021@alumnos.urjc.es))

#### Version

0.1

#### Date

2022-11-29

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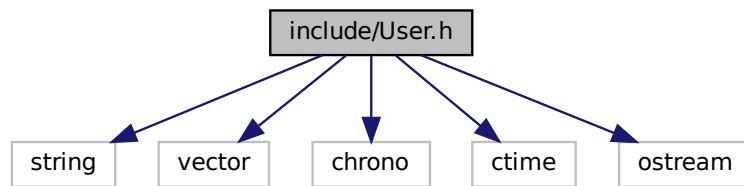
## 5.3 include/User.h File Reference

Header file of [User.cpp](#).

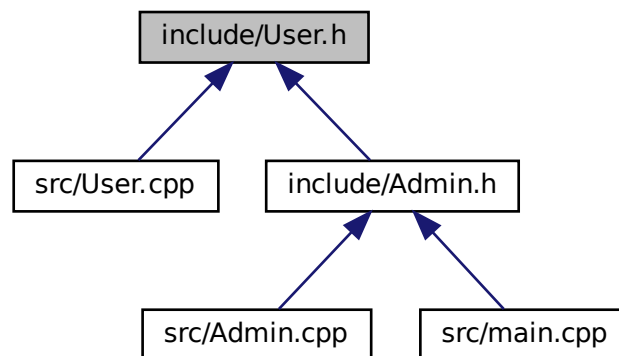
```
#include <string>
#include <vector>
#include <chrono>
#include <ctime>
```

```
#include <ostream>
```

Include dependency graph for User.h:



This graph shows which files directly or indirectly include this file:



## Classes

- class [User](#)

### 5.3.1 Detailed Description

Header file of [User.cpp](#).

#### Author

Javier Izquierdo ( [j.izquierdoh.2021@alumnos.urjc.es](mailto:j.izquierdoh.2021@alumnos.urjc.es) )

#### Version

1.0

## Date

2022-11-23

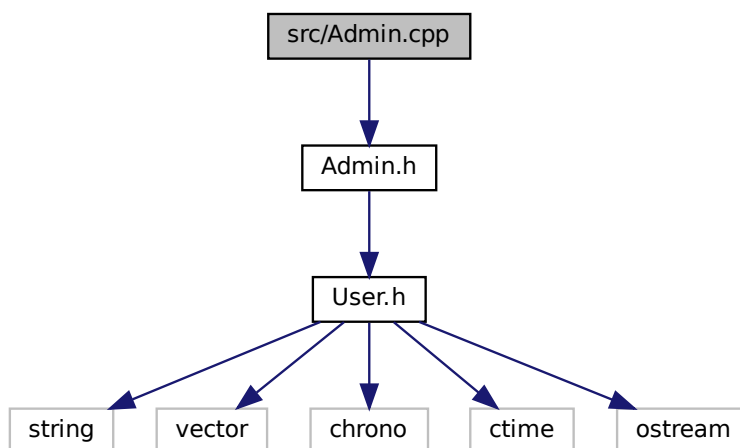
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## 5.4 src/Admin.cpp File Reference

```
#include "Admin.h"
```

Include dependency graph for Admin.cpp:



### 5.4.1 Detailed Description

## Author

Javier Izquierdo ( [j.izquierdoh.2021@alumnos.urjc.es](mailto:j.izquierdoh.2021@alumnos.urjc.es) )

## Version

1.0

## Date

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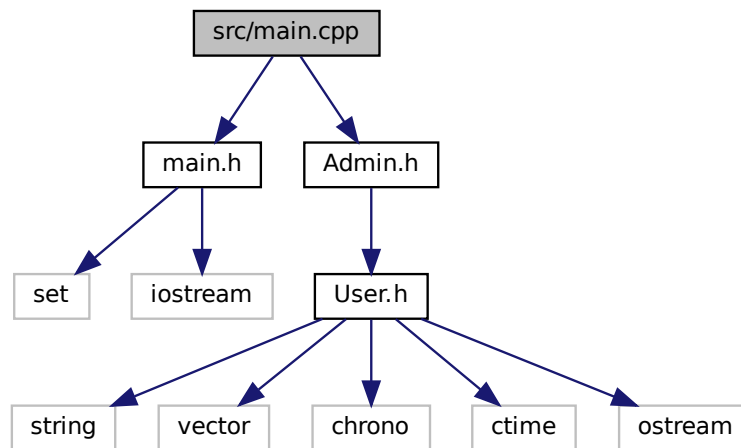
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## 5.5 src/main.cpp File Reference

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

```
#include "Admin.h"
```

Include dependency graph for main.cpp:



### Functions

- `int main ()`

#### 5.5.1 Detailed Description

##### Author

Javier Izquierdo Hernandez ( [j.izquierdoh.2021@alumnos.urjc.es](mailto:j.izquierdoh.2021@alumnos.urjc.es) )

##### Version

0.1

##### Date

2022-11-29

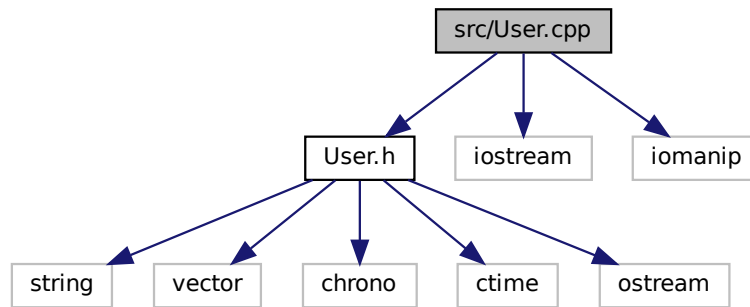
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## 5.6 src/User.cpp File Reference

```
#include "User.h"
#include <iostream>
#include <iomanip>
Include dependency graph for User.cpp:
```



### Functions

- `std::ostream & operator<< (std::ostream &output, const User &user)`

#### 5.6.1 Detailed Description

##### Author

Javier Izquierdo ( [j.izquierdoh.2021@alumnos.urjc.es](mailto:j.izquierdoh.2021@alumnos.urjc.es) )

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# Index

addTimestamp

    User, [10](#)

Admin, [7](#)

    Admin, [8](#)

getName

    User, [10](#)

getTimestamp

    User, [10](#)

hasAdminPermission

    User, [10](#)

include/Admin.h, [15](#)

include/main.h, [16](#)

include/User.h, [17](#)

isSameEmployeeNumber

    User, [11](#)

isSameNIF

    User, [12](#)

setEmployeeNumber

    User, [12](#)

setNIF

    User, [12](#)

src/Admin.cpp, [19](#)

src/main.cpp, [20](#)

src/User.cpp, [21](#)

User, [8](#)

    addTimestamp, [10](#)

    getName, [10](#)

    getTimestamp, [10](#)

    hasAdminPermission, [10](#)

    isSameEmployeeNumber, [11](#)

    isSameNIF, [12](#)

    setEmployeeNumber, [12](#)

    setNIF, [12](#)

    User, [9](#)