

## Practice 4

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# 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>          |    |
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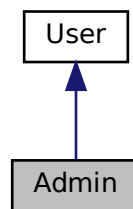


## Chapter 4

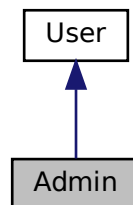
# Class Documentation

### 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

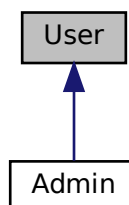
|                       |  |
|-----------------------|--|
| <i>employeeNumber</i> |  |
| <i>NIF</i>            |  |
| <i>name</i>           |  |

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`
- `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 = "00000000",  
    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

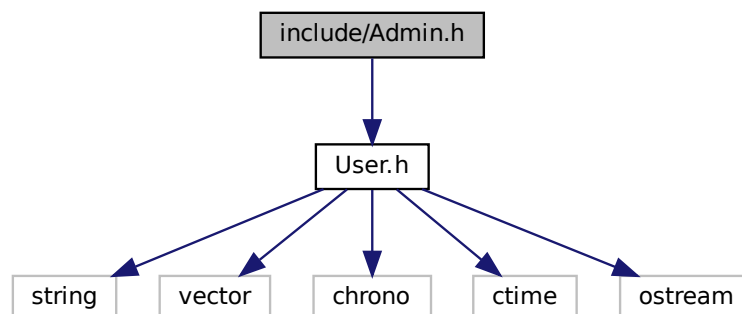
# File Documentation

### 5.1 include/Admin.h File Reference

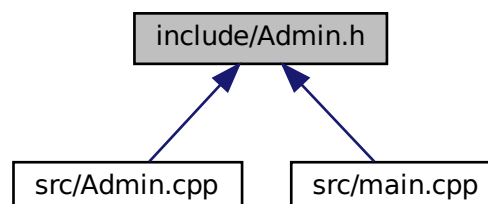
Header file of [Admin.cpp](#).

```
#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

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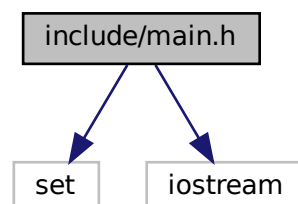
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## 5.2 include/main.h File Reference

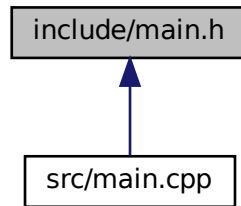
```
#include <set>
```

```
#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

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

#### Version

0.1

#### Date

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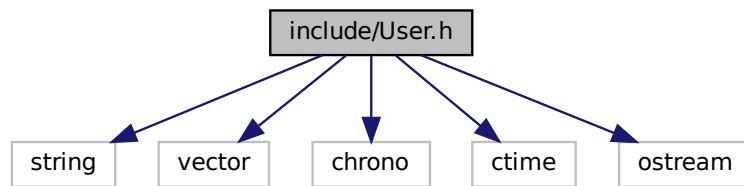
## 5.3 include/User.h File Reference

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

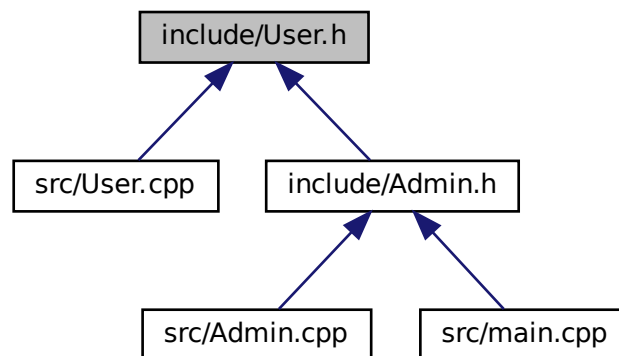
```
#include <string>
#include <vector>
#include <chrono>
#include <ctime>
```

```
#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

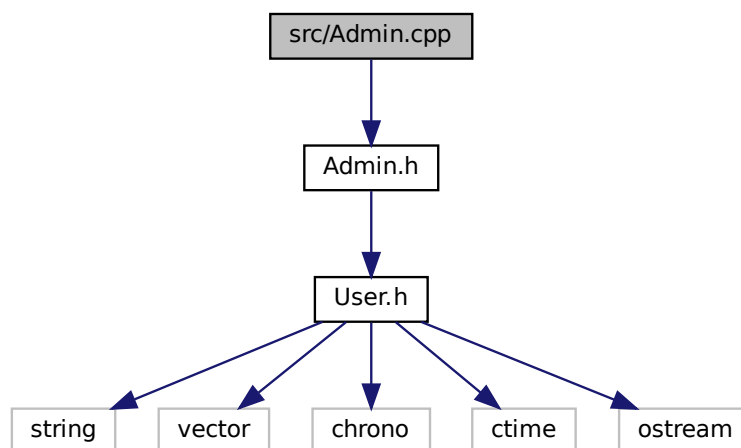
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## 5.4 src/Admin.cpp File Reference

```
#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

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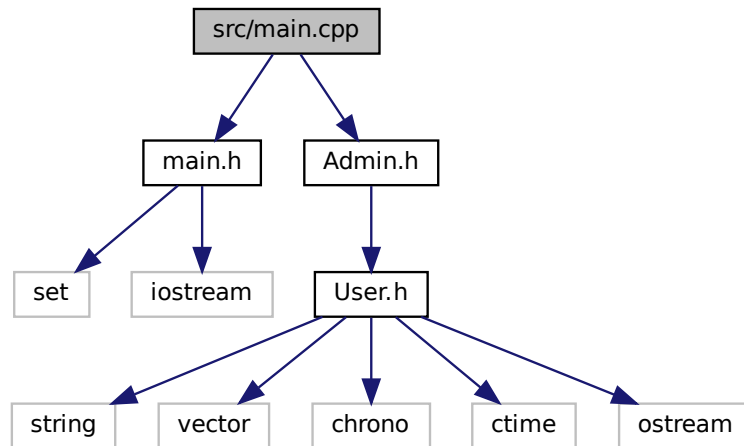
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## 5.5 src/main.cpp File Reference

```
#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

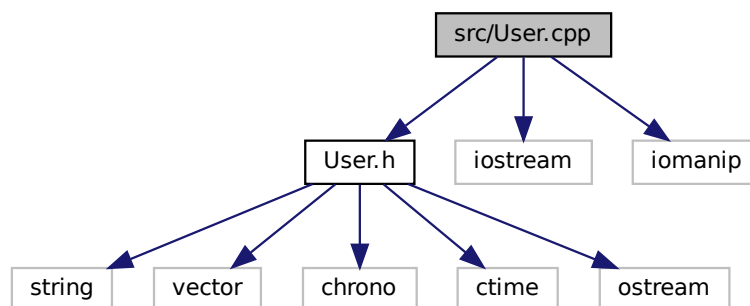
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## 5.6 src/User.cpp File Reference

```
#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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