

## 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>	
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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

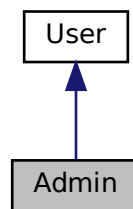


## Chapter 4

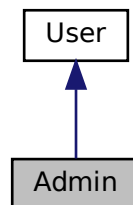
# Class Documentation

### 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

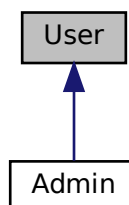
<i>employeeNumber</i>	
<i>NIF</i>	
<i>name</i>	

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
- 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**

$N \leftrightarrow$	
$IF$	

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

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

## Chapter 5

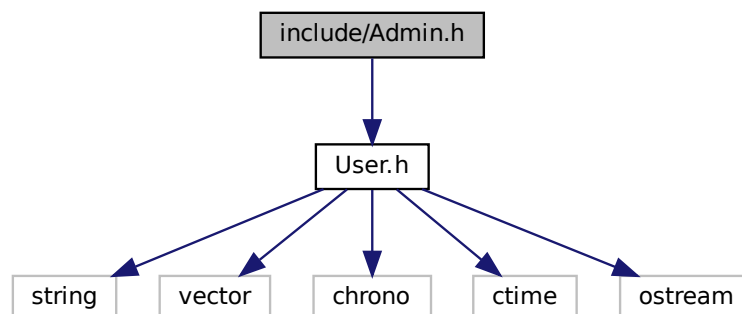
# File Documentation

### 5.1 include/Admin.h File Reference

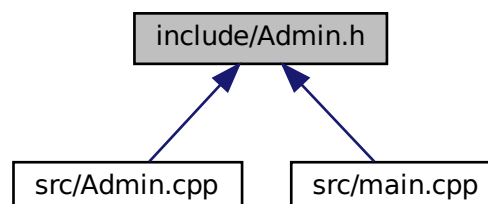
Header file of [Admin.cpp](#).

```
#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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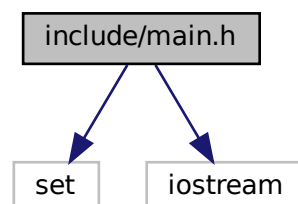
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## 5.2 include/main.h File Reference

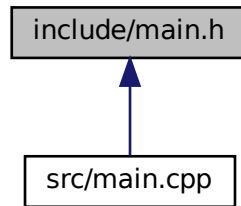
```
#include <set>
```

```
#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

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#### Date

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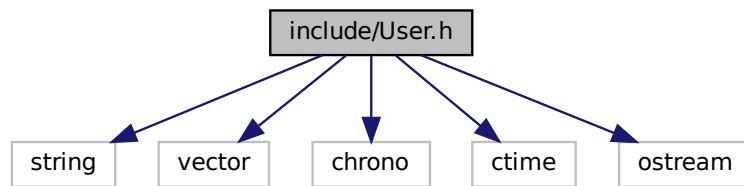
## 5.3 include/User.h File Reference

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

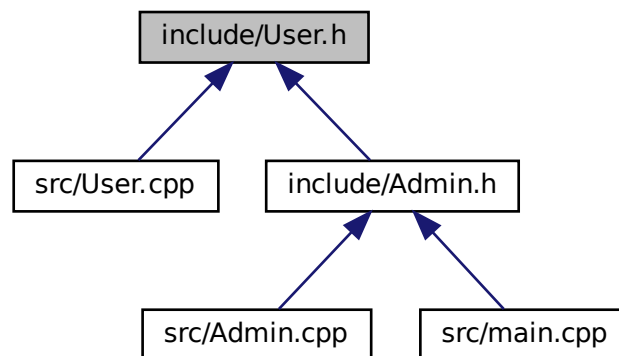
```
#include <string>
#include <vector>
#include <chrono>
#include <ctime>
```

```
#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

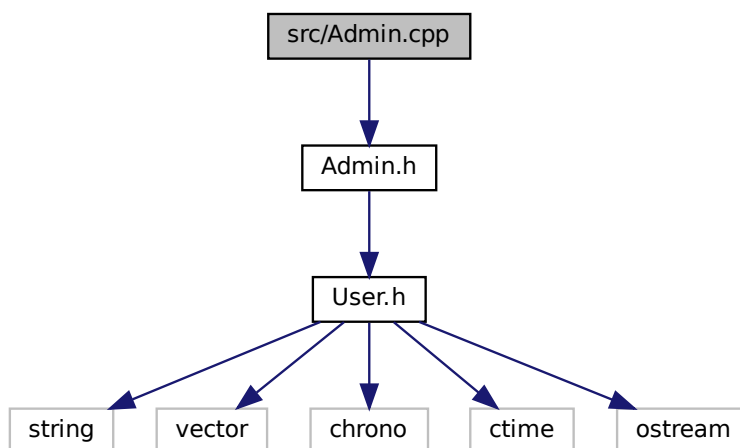
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## 5.4 src/Admin.cpp File Reference

```
#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

1.0

## Date

2022-11-23

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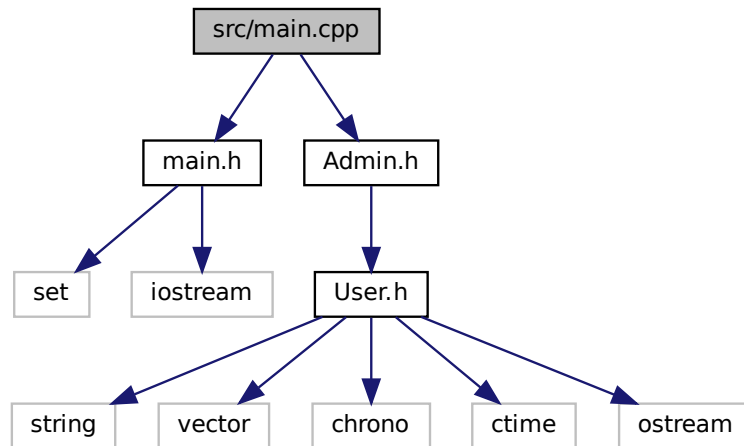
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## 5.5 src/main.cpp File Reference

```
#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

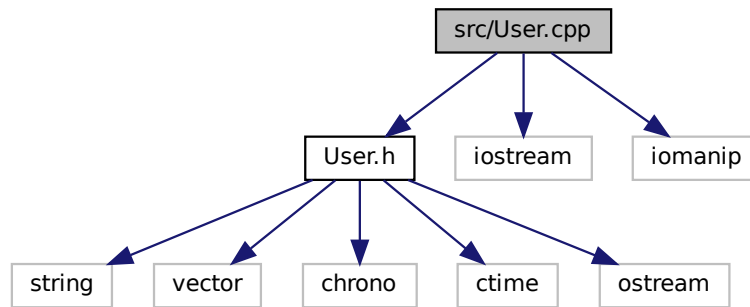
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## 5.6 src/User.cpp File Reference

```
#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

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

##### Version

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##### Date

2022-11-23

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