P7

Generated by Doxygen 1.9.1

Chapter 1

P7-Excep-GDB-Doxygen

Chapter 2

Hierarchical Index

2.1 Class Hierarchy

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

Chapter 3

Class Index

3.1 Class List

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

Chapter 4

File Index

4.1 File List

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

Chapter 5

Class Documentation

5.1 CalidadAire Class Reference

Public Member Functions

- float **get_data** ()
- float **medir** ()

Public Attributes

- float **aire**

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

- CalidadAire.h
- CalidadAire.cpp

5.2 Dashboard Class Reference

Public Member Functions

- void **main_screen** (bool admin)

Public Attributes

- bool **admin**
- int opcion

5.2.1 Member Data Documentation

5.2.1.1 opcion

```
int Dashboard::opcion
```

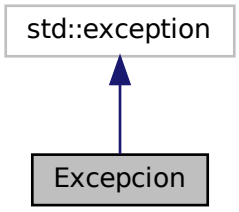
La funcion muestra la pantalla principal y se trae el valor de admin para acceder a funciones reservadas para los administradores

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

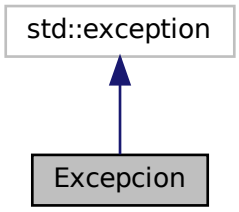
- Dashboard.h
- Dashboard.cpp

5.3 Excepcion Class Reference

Inheritance diagram for Excepcion:



Collaboration diagram for Excepcion:



Public Member Functions

- **Excepcion** (const char ∗mensaje)
- const char ∗ **what** () const throw ()

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

- Excepcion.h

5.4 Higrometro Class Reference

Public Member Functions

- float **get_data** ()
- float **medir** ()

Public Attributes

- float **hum**

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

- Higrometro.h
- Higrometro.cpp

5.5 Luxometro Class Reference

Public Member Functions

- float **get_data** ()
- float **medir** ()

Public Attributes

- float **luz**

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

- Luxometro.h
- Luxometro.cpp

5.6 RGBcam Class Reference

Public Member Functions

- void **get_imagen** ()

Public Attributes

- int **ex_rec_rgb**
- int **opcion**

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

- RGBcam.h
- RGBcam.cpp

5.7 SCam Class Reference

Public Member Functions

- void **get_imagen** ()

Public Attributes

- int **ex_rec_t**
- int **opcion**

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

- SCam.h
- SCam.cpp

5.8 Seguridad Class Reference

Public Member Functions

- void **security** ()

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

- Seguridad.h
- Seguridad.cpp

5.9 Sensor Class Reference

Public Member Functions

- void **get_sens** (int)
- void rethrow ()

Public Attributes

- int **opcion**

5.9.1 Member Function Documentation

5.9.1.1 rethrow()

```
void Sensor::rethrow ( )
```

Funcion que tienen tienen todos los sensores y que dependiendo de la eleccion enciara al usuario a uno u otro

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

- Sensor.h
- Sensor.cpp

5.10 Server Class Reference

Public Member Functions

- bool **login** (int, int)
- void registro ()
- float **temp_data** ()
- float **luz_data** ()
- float **air_data** ()
- float **hum_data** ()

Public Attributes

- int **numTrabajador**
- int **nif**
- bool **admin**
- set< User > **datos**
- vector< float > **Temperaturas**
- float **min_temp**
- float **max_temp**
- float **med_temp**
- int **i**
- float **tp**
- vector< float > **l**
- float **min_l**
- float **max_l**
- float **med_l**
- float **tl**
- vector< float > **Aire**
- float **min_air**
- float **max_air**
- float **med_air**
- float **ta**
- vector< float > **Humedad**
- float **min_hum**
- float **max_hum**
- float **med_hum**
- float **th**

5.10.1 Member Function Documentation

5.10.1.1 registro()

```
void Server::registro ( )
```

bool Server::login(int numTrabajador, int nif){ //Comprueba si los datos introducidos son correctos if(datos.↩ find({numTrabajador,nif}) != datos.end()){ return true; }

return false; };

Esta parte compara los valores introducidos por el usuario y comprueba si estan en su base de datos, en caso afirmativo, devuelve un true.

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

- Server.h
- Server.cpp

5.11 SP Class Reference

Public Member Functions

- bool **open** ()

Public Attributes

- bool **pstatus**

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

- SP.h
- SP.cpp

5.12 SV Class Reference

Public Member Functions

- bool **open** ()

Public Attributes

- bool **vstatus**

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

- SV.h
- SV.cpp

5.13 Tcam Class Reference

Public Member Functions

- void **get_imagen** ()

Public Attributes

- int **ex_rec_t**
- int **opcion**

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

- Tcam.h
- Tcam.cpp

5.14 Termometro Class Reference

Public Member Functions

- float **get_data** ()
- float **medir** ()

Public Attributes

- float **temp**

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

- Termometro.h
- Termometro.cpp

5.15 User Class Reference

Public Member Functions

- **User** (int, int)
- void **get_access** ()
- bool operator< (const User &) const

5.15.1 Member Function Documentation

5.15.1.1 operator<()

```
bool User::operator< (
            const User & other ) const
```

Funcon principal del user que pide los datos y da acceso o nop

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

- User.h
- User.cpp

Chapter 6

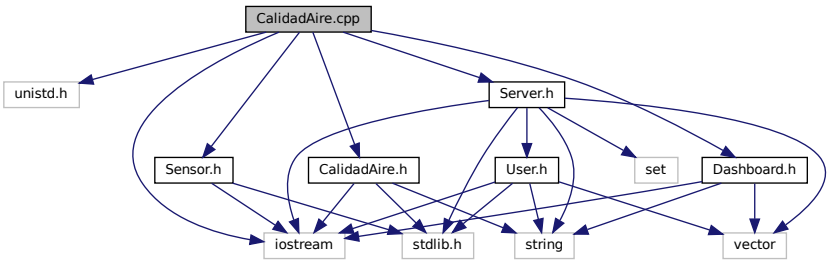
File Documentation

6.1 CalidadAire.cpp File Reference

Clase del sensor que mide la calidad del aire.

```
#include <unistd.h>
#include <iostream>
#include "CalidadAire.h"
#include "Sensor.h"
#include "Server.h"
#include "Dashboard.h"
```

Include dependency graph for CalidadAire.cpp:



Variables

- float **aire**

6.1.1 Detailed Description

Clase del sensor que mide la calidad del aire.

Author

Jorge Martín

Date

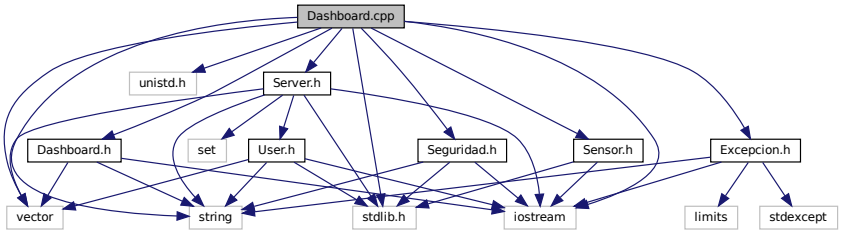
2022-12-21

6.2 Dashboard.cpp File Reference

Clase que mostrara al usuario una interfaz grafica y que redigira a otras clases.

```
#include <iostream>
#include <vector>
#include <unistd.h>
#include <string>
#include <stdlib.h>
#include "Dashboard.h"
#include "Server.h"
#include "Sensor.h"
#include "Seguridad.h"
#include "Excepcion.h"
```

Include dependency graph for Dashboard.cpp:



Variables

- int **opcion**

6.2.1 Detailed Description

Clase que mostrara al usuario una interfaz grafica y que redigira a otras clases.

Author

Jorge Martín

Date

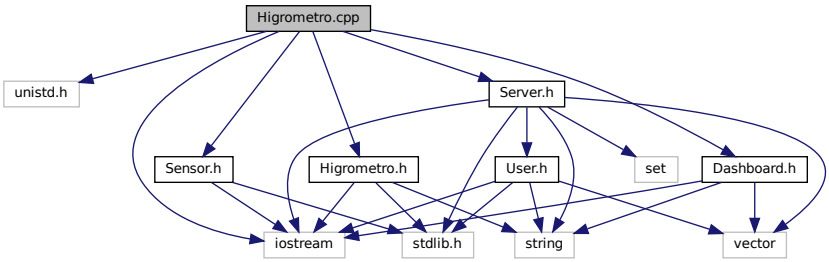
2022-12-21

6.3 Higrometro.cpp File Reference

Clase del sensor que mide la humedad.

```
#include <unistd.h>
#include <iostream>
#include "Higrometro.h"
#include "Sensor.h"
#include "Server.h"
#include "Dashboard.h"
```

Include dependency graph for Higrometro.cpp:



Variables

- float **hum**

6.3.1 Detailed Description

Clase del sensor que mide la humedad.

Author

Jorge Martín

Date

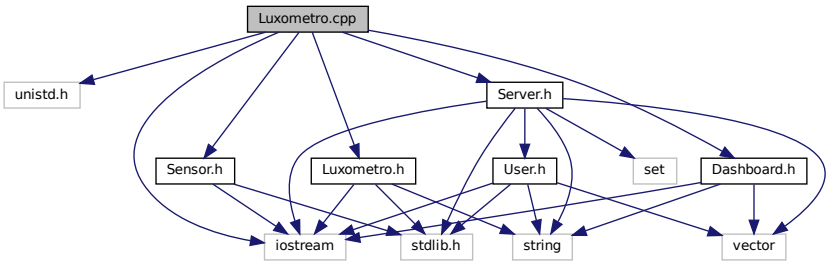
2022-12-21

6.4 Luxometro.cpp File Reference

Clase del sensor que mide la intensidad de luz.

```
#include <unistd.h>
#include <iostream>
#include "Luxometro.h"
#include "Sensor.h"
#include "Server.h"
```

```
#include "Dashboard.h"
```
Include dependency graph for Luxometro.cpp:



Variables

- float **luz**

6.4.1 Detailed Description

Clase del sensor que mide la intensidad de luz.

Author

Jorge Martín

Date

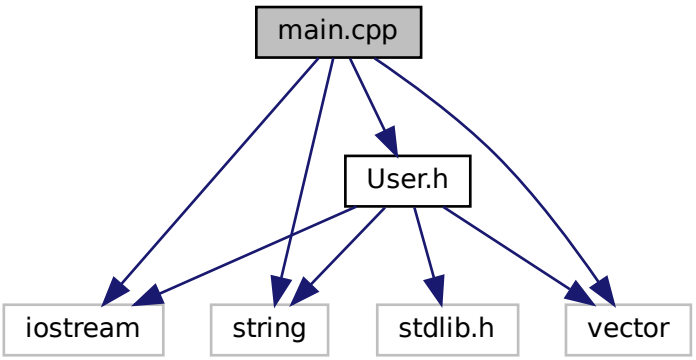
2022-12-21

6.5 main.cpp File Reference

Main del programa.

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

```
#include "User.h"
```
Include dependency graph for main.cpp:



Functions

- int **main** ()

6.5.1 Detailed Description

Main del programa.

Author

Jorge Martín

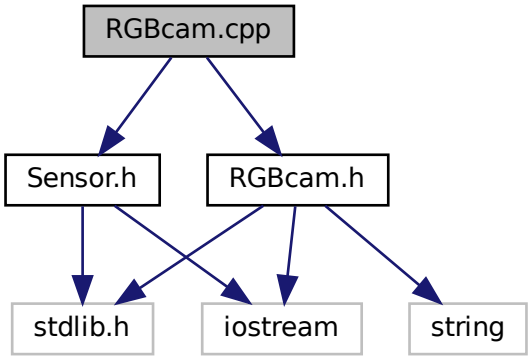
Date

2022-12-21

6.6 RGBcam.cpp File Reference

Clase de la camara RGB.

```
#include "RGBcam.h"
#include "Sensor.h"
```
Include dependency graph for RGBcam.cpp:



Variables

- int **ex_rec_rgb**

6.6.1 Detailed Description

Clase de la camara RGB.

Author

Jorge Martín

Date

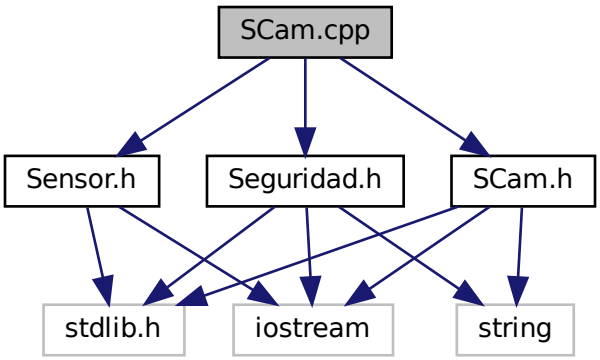
2022-12-21

6.7 SCam.cpp File Reference

Clase de la camara de seguridad.

```
#include "SCam.h"
#include "Sensor.h"
```

```
#include "Seguridad.h"
```
Include dependency graph for SCam.cpp:



Variables

- int **ex_rec_t**

6.7.1 Detailed Description

Clase de la camara de seguridad.

Author

Jorge Martín

Date

2022-12-21

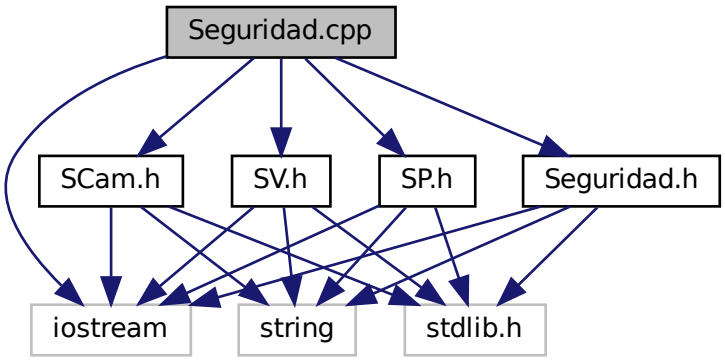
6.8 Seguridad.cpp File Reference

Clase que alberga los sensores y camaras utilizados para la seguridad.

```
#include "Seguridad.h"
#include "SCam.h"
#include "SV.h"
#include "SP.h"
```

```
#include <iostream>
```

Include dependency graph for Seguridad.cpp:



Variables

- int **eleccion**

6.8.1 Detailed Description

Clase que alberga los sensores y camaras utilizados para la seguridad.

Author

Jorge Martín

Date

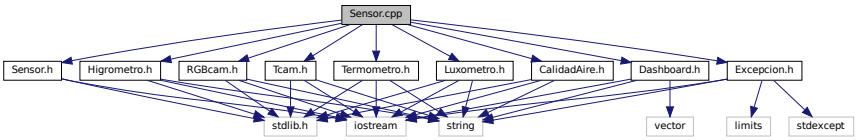
2022-12-21

6.9 Sensor.cpp File Reference

Clase que alberga todos los sensores.

```
#include "Sensor.h"
#include "Dashboard.h"
#include "Termometro.h"
#include "Luxometro.h"
#include "CalidadAire.h"
#include "Higrometro.h"
#include "RGBcam.h"
#include "Tcam.h"
```

```
#include "Excepcion.h"
```
Include dependency graph for Sensor.cpp:



Variables

- int **opcion2**

6.9.1 Detailed Description

Clase que alberga todos los sensores.

Author

Jorge Martín

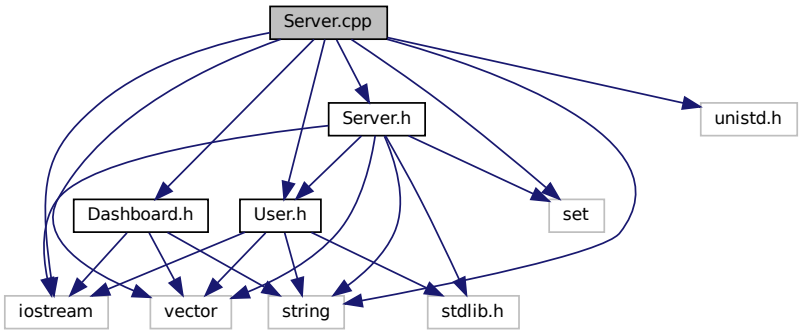
Date

2022-12-21

6.10 Server.cpp File Reference

Clase que contiene los datos de los usuarios y mediciones de los sensores.

```
#include <iostream>
#include <set>
#include <vector>
#include <string>
#include <unistd.h>
#include "Dashboard.h"
#include "User.h"
#include "Server.h"
```
Include dependency graph for Server.cpp:



Variables

- int **nuevoT**
- string **nuevoNif**

6.10.1 Detailed Description

Clase que contiene los datos de los usuarios y mediciones de los sensores.

Author

Jorge Martín

Date

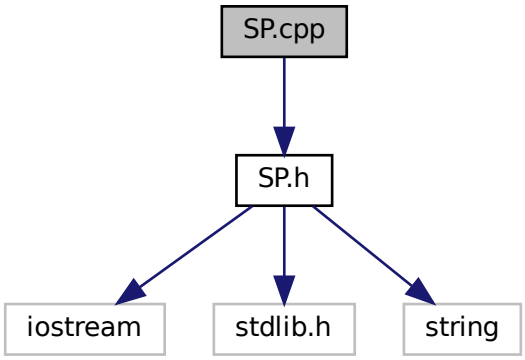
2022-12-21

6.11 SP.cpp File Reference

Clase del sensor que indica el estado de la puerta.

```
#include "SP.h"
```

Include dependency graph for SP.cpp:



Variables

- bool **pstatus**

6.11.1 Detailed Description

Clase del sensor que indica el estado de la puerta.

Author

Jorge Martín

Date

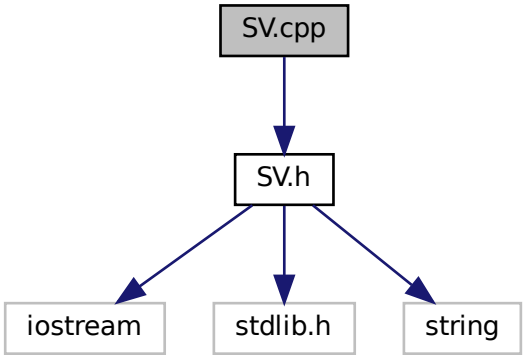
2022-12-21

6.12 SV.cpp File Reference

Clase del sensor que muestra el estado de las ventanas.

```
#include "SV.h"
```

Include dependency graph for SV.cpp:



Variables

- bool **vstatus**

6.12.1 Detailed Description

Clase del sensor que muestra el estado de las ventanas.

Author

Jorge Martín

Date

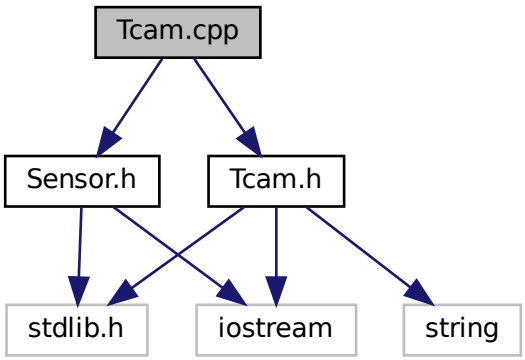
2022-12-21

6.13 Tcam.cpp File Reference

Clase de la camara termica.

```
#include "Tcam.h"
#include "Sensor.h"
```

Include dependency graph for Tcam.cpp:



6.13.1 Detailed Description

Clase de la camara termica.

Author

Jorge Martín

Date

2022-12-21

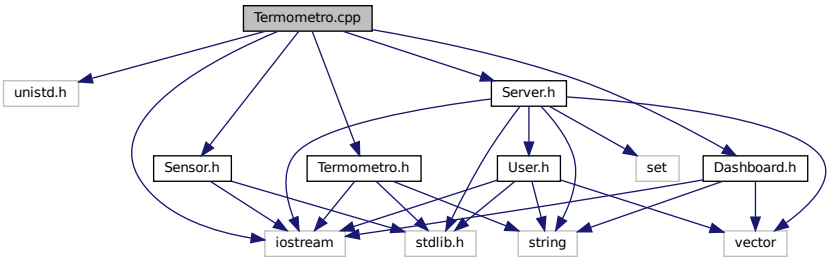
6.14 Termometro.cpp File Reference

Clase del sensor que mide la temperatura.

```
#include <unistd.h>
#include <iostream>
#include "Termometro.h"
#include "Sensor.h"
#include "Server.h"
```

```
#include "Dashboard.h"
```

Include dependency graph for Termometro.cpp:



Variables

- float **temp**

6.14.1 Detailed Description

Clase del sensor que mide la temperatura.

Author

Jorge Martín

Date

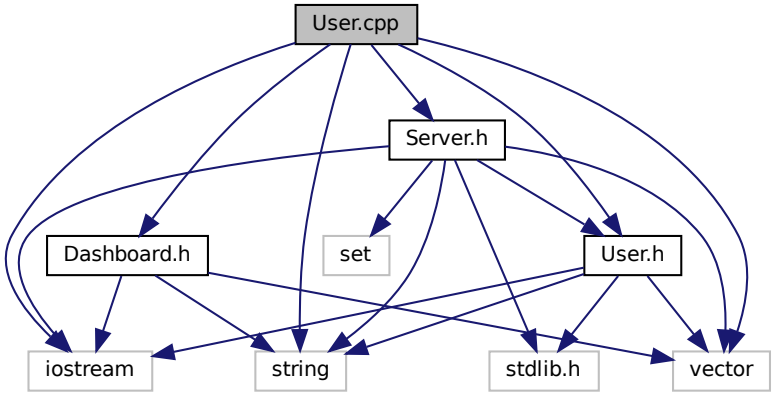
2022-12-21

6.15 User.cpp File Reference

Clase que contiene el login y pide los datos de inicio de sesion.

```
#include <iostream>
#include <string>
#include <vector>
#include "User.h"
#include "Server.h"
```

```
#include "Dashboard.h"
```
Include dependency graph for User.cpp:



Variables

- int **numTrabajador**
- int **nif**

6.15.1 Detailed Description

Clase que contiene el login y pide los datos de inicio de sesion.

Author

Jorge Martín

Date

2022-12-21

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