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## **Chapter 1**

# **Namespace Documentation**

### **1.1 Ui Namespace Reference**



## Chapter 2

# Class Documentation

### 2.1 Person::comp Struct Reference

The comp struct is used to sort the info.

#### Public Member Functions

- bool `operator()` (`info` a, `info` b)  
*Needed to sort info.*
- `comp` ()  
*Default constructor.*
- void `select` (int s)  
*To selec the desired option.*

#### Public Attributes

- int `sel`  
*Stores the selected ordering type.*

#### 2.1.1 Detailed Description

The comp struct is used to sort the info.

Definition at line 99 of file person.h.

#### 2.1.2 Constructor & Destructor Documentation

##### 2.1.2.1 Person::comp::comp ( )

Default constructor.

Definition at line 126 of file person.h.

```
127         {  
128             sel = 0;  
129         }
```

### 2.1.3 Member Function Documentation

#### 2.1.3.1 bool Person::comp::operator() ( info a, info b )

Needed to sort info.

Definition at line 108 of file person.h.

```
109     {
110         if(sel == 0) return a.ID < b.ID;
111         else if (sel == 1) return a.name < b.name;
112         else if (sel == 2) return a.surname < b.surname;
113         else if (sel == 3) return a.NIF < b.NIF;
114         else if (sel == 4) return a.birthDate < b.birthDate;
115         else if (sel == 5) return a.cNIF < b.cNIF;
116         else if (sel == 6) return a.adress < b.adress;
117         else if (sel == 7) return a.phone < b.phone;
118         else if (sel == 8) return a.beginHelp < b.beginHelp;
119         else if (sel == 9) return a.endHelp < b.endHelp;
120         else if (sel == 10) return a.numberHelp < b.numberHelp;
121         return a.famMembers < b.famMembers;
122     }
```

#### 2.1.3.2 void Person::comp::select ( int s )

To selec the desired option.

Definition at line 133 of file person.h.

```
133 { sel = s; }
```

### 2.1.4 Member Data Documentation

#### 2.1.4.1 int Person::comp::sel

Stores the selected ordering type.

Definition at line 103 of file person.h.

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

- [person.h](#)

## 2.2 Person::info Struct Reference

Struct to store basic people information.

### Public Attributes

- QString [name](#)  
*Name.*
- QString [surname](#)  
*Surname.*
- QString [NIF](#)  
*Personal NIF (Número de Identificación Fiscal)*
- QString [cNIF](#)  
*Couple NIF (Número de Identificación Fiscal)*
- QString [adress](#)



*Personal home adress.*

- QString [phone](#)

*Personal phone.*

- QDate [birthDate](#)

*Date of birth.*

- QDate [beginHelp](#)

*First day recieved help.*

- QDate [endHelp](#)

*Finishing help date.*

- int [numberHelp](#)

*Number of times that somebody has been helped.*

- int [famMembers](#)

*Amount of members in the home family.*

- unsigned int [ID](#)

*Identification number for internal use.*

## Friends

- QDataStream & [operator>>](#) (QDataStream &in, [info](#) &i)

*Definition of the operator '>>' to the struct.*

- QDataStream & [operator<<](#) (QDataStream &out, [info](#) &i)

*Definition of the operator '<<' to the struct.*

### 2.2.1 Detailed Description

Struct to store basic people information.

Stored info is:

- Name
- Surname
- NIF
- Birth Date
- Couple NIF
- Adress
- Phone number
- Beginning help date
- End help date
- Times helped
- Family members
- Identification Number

Definition at line 37 of file person.h.

## 2.2.2 Friends And Related Function Documentation

### 2.2.2.1 QDataStream& operator>> ( QDataStream & *in*, info & *i* ) [friend]

Definition of the operator '>>' to the struct.

Definition at line 78 of file person.h.

```

78                                     {
79         in >> i.adress >> i.beginHelp >> i.birthDate >> i.cNIF
80         >> i.endHelp >> i.famMembers >> i.ID >> i.name >> i.NIF
81         >> i.numberHelp >> i.phone >> i.surname;
82         return in;
83     }
```

### 2.2.2.2 QDataStream& operator<< ( QDataStream & *out*, info & *i* ) [friend]

Definition of the operator '<<' to the struct.

Definition at line 88 of file person.h.

```

88                                     {
89         out << i.adress << i.beginHelp << i.birthDate << i.cNIF
90         << i.endHelp << i.famMembers << i.ID << i.name << i.NIF
91         << i.numberHelp << i.phone << i.surname;
92         return out;
93     }
```

## 2.2.3 Member Data Documentation

### 2.2.3.1 Person::info::name

Name.

Definition at line 52 of file person.h.

### 2.2.3.2 Person::info::surname

Surname.

Definition at line 52 of file person.h.

### 2.2.3.3 Person::info::NIF

Personal NIF (Número de Identificación Fiscal)

Definition at line 52 of file person.h.

### 2.2.3.4 Person::info::cNIF

Couple NIF (Número de Identificación Fiscal)

Definition at line 52 of file person.h.

### 2.2.3.5 Person::info::adress

Personal home adress.

Definition at line 52 of file person.h.

#### 2.2.3.6 Person::info::phone

Personal phone.

Definition at line 52 of file person.h.

#### 2.2.3.7 Person::info::birthDate

Date of birth.

Definition at line 61 of file person.h.

#### 2.2.3.8 Person::info::beginHelp

First day recieved help.

Definition at line 61 of file person.h.

#### 2.2.3.9 Person::info::endHelp

Finishing help date.

Definition at line 61 of file person.h.

#### 2.2.3.10 Person::info::numberHelp

Number of times that somebody has been helped.

Definition at line 68 of file person.h.

#### 2.2.3.11 Person::info::famMembers

Amount of members in the home family.

Definition at line 68 of file person.h.

#### 2.2.3.12 Person::info::ID

Identification number for internal use.

Definition at line 73 of file person.h.

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

- [person.h](#)

## 2.3 MainWindow Class Reference

Class to show basic information to user.

### Public Member Functions

- [MainWindow](#) (QWidget \*parent=0)  
*Default constructor.*
- [~MainWindow](#) ()

- void [loadData](#) ()  
*Function that loads data when exists de Data folder.*
- void [addPath](#) (const QDir &[data](#))  
*Function to add the Data folder path.*

## Private Attributes

- QDir [data](#)
- Ui::MainWindow \* [ui](#)
- [Person](#) [info](#)

### 2.3.1 Detailed Description

Class to show basic information to user.

Definition at line 15 of file mainwindow.h.

### 2.3.2 Constructor & Destructor Documentation

#### 2.3.2.1 MainWindow::MainWindow ( QWidget \* *parent* = 0 ) [explicit]

Default constructor.

Parameters

<i>parent</i>	Default parameter
---------------	-------------------

Definition at line 9 of file mainwindow.cpp.

```

9                                     : QMainWindow(parent),
10     ui(new Ui::MainWindow)
11 {
12     ui->setupUi(this);
13 }
```

#### 2.3.2.2 MainWindow::~~MainWindow ( )

Definition at line 15 of file mainwindow.cpp.

```

16 {
17     delete ui;
18 }
```

### 2.3.3 Member Function Documentation

#### 2.3.3.1 void MainWindow::loadData ( )

Function that loads data when exists de *Data* folder.

Definition at line 24 of file mainwindow.cpp.

```

25 {
26     info.read(data);
27     info.addTable(ui->tableView);
28     info.show();
29 }
```

### 2.3.3.2 void MainWindow::addPath ( const QDir & *data* )

Function to add the *Data* folder path.

**Parameters**

<i>data</i>	Contains de PATH to de <i>Data</i> folder.
-------------	--

Definition at line 31 of file mainwindow.cpp.

```

32 {
33     this->data = data;
34 }
```

**2.3.4 Member Data Documentation****2.3.4.1 QDir MainWindow::data [private]**

Definition at line 49 of file mainwindow.h.

**2.3.4.2 Ui::MainWindow\* MainWindow::ui [private]**

Definition at line 50 of file mainwindow.h.

**2.3.4.3 Person MainWindow::info [private]**

Definition at line 51 of file mainwindow.h.

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

- [mainwindow.h](#)
- [mainwindow.cpp](#)

**2.4 Person Class Reference**

The [Person](#) Class contains all people basic data.

**Classes**

- struct [comp](#)  
*The comp struct is used to sort the info.*
- struct [info](#)  
*Struct to store basic people information.*

**Public Member Functions**

- [Person](#) ()  
*Default constructor.*
- [Person](#) (const [Person](#) &p)  
*Copy constructor.*
- void [read](#) (QDir data)  
*Function to read all stored data.*
- void [write](#) (QDir data)  
*Function to store all data to a file.*
- void [sort](#) (int type)  
*Function to sort the data with the specified metod.*

- void `addTable` (QTableView \*t)  
*Adds the pointer to a QTableView.*
- void `show` ()  
*Function to show all stored data.*

### Private Attributes

- list< `info` > `all`  
*List to store all data.*
- unsigned int `maxID`  
*Contains de maximum ID that has ever been assigned.*
- QTableView \* `table`

#### 2.4.1 Detailed Description

The `Person` Class contains all people basic data.

Definition at line 16 of file `person.h`.

#### 2.4.2 Constructor & Destructor Documentation

##### 2.4.2.1 `Person::Person ( )`

Default constructor.

Definition at line 7 of file `person.cpp`.

```
8 {
9     maxID = 0;
10 }
```

##### 2.4.2.2 `Person::Person ( const Person & p )`

Copy constructor.

Definition at line 12 of file `person.cpp`.

```
13 {
14     maxID = p.maxID;
15     all = p.all;
16 }
```

#### 2.4.3 Member Function Documentation

##### 2.4.3.1 `void Person::read ( QDir data )`

Function to read all stored data.

Parameters

<code>data</code>	Path to <i>Data</i> folder
-------------------	----------------------------

Precondition

True

**Postcondition**

All data stored in *datafile.db* has been read and stored to implicit parameter.

Definition at line 22 of file person.cpp.

```

23 {
24     QFile file(data.filePath("datafile.db"));
25     if(not file.open(QIODevice::ReadWrite)) {
26         qWarning() << "Cannot create the file" << file.fileName();
27     }
28     QDataStream in(&file);
29     in.setByteOrder(QDataStream::LittleEndian);
30     in >> maxID;
31     while(not in.atEnd()) {
32         info aux;
33         in >> aux;
34         all.push_back(aux);
35     }
36     file.close();
37 }
```

**2.4.3.2 void Person::write ( QDir data )**

Function to store all data to a file.

**Parameters**

<i>data</i>	Path to <i>Data</i> folder
-------------	----------------------------

**Precondition**

True

**Postcondition**

All existing data has been stored in *datafile.db* overwriting existing data

Definition at line 39 of file person.cpp.

```

40 {
41     QFile file(data.filePath("datafile.db"));
42     if(not file.open(QIODevice::ReadWrite)) {
43         qWarning() << "Cannot create the file" << file.fileName();
44     }
45     sort(0);
46     QDataStream out(&file);
47     out.setByteOrder(QDataStream::LittleEndian);
48     out << maxID;
49     list<info>::iterator it = all.begin();
50     while(it != all.end()) {
51         out << *it;
52         ++it;
53     }
54 }
55 }
```

**2.4.3.3 void Person::sort ( int type )**

Function to sort the data with the specified metod.

**Order**

- **0** -> Identification Number (ID)
- **1** -> Name (name)



- **2** -> Surname (surname)
- **3** -> NIF (NIF)
- **4** -> Birth Date (birthDate)
- **5** -> Couple NIF (cNIF)
- **6** -> Address (address)
- **7** -> Phone number (phone)
- **8** -> Beginning help date (beginHelp)
- **9** -> End help date (endHelp)
- **10** -> Times helped (numberHelp)
- **11** -> Family members (famMembers)

**Parameters**

<i>type</i>	Variable to specify the desired method to sort the data
-------------	---

**Precondition**

True

**Postcondition**

All data has been stored as type specifies

Definition at line 57 of file person.cpp.

```

58 {
59     if (not all.empty() and type >= 0) {
60         comp a;
61         a.select(type);
62         all.sort(a);
63     }
64     else qWarning() << "Error while trying to sort";
65 }
```

**2.4.3.4 void Person::addTable ( QTableView \* t )**

Adds the pointer to a QTableView.

**Parameters**

<i>t</i>	Pointer to a QTableView
----------	-------------------------

**Precondition**

t is not NULL

**Postcondition**

The pointer has been added

Definition at line 67 of file person.cpp.

```

67 { table = t; }
```

#### 2.4.3.5 void Person::show ( )

Function to show all stored data.

Definition at line 73 of file person.cpp.

```
74 {  
75     QStandardItemModel *model = new QStandardItemModel();  
76     QStringList titols;  
77     titols << "DNI" << "Nom" << "Cognoms" << "Data Fi ajuda" << "Nº Ajudat"  
78         << "Membres";  
79     model->setHorizontalHeaderLabels(titols);  
80  
81     table->setModel(model);  
82 }
```

### 2.4.4 Member Data Documentation

#### 2.4.4.1 list<info> Person::all [private]

List to store all data.

Definition at line 139 of file person.h.

#### 2.4.4.2 unsigned int Person::maxID [private]

Contains de maximum ID that has ever been assigned.

Definition at line 143 of file person.h.

#### 2.4.4.3 QTableView\* Person::table [private]

Definition at line 144 of file person.h.

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

- [person.h](#)
- [person.cpp](#)

## Chapter 3

# File Documentation

### 3.1 main.cpp File Reference

Include dependency graph for main.cpp:

#### Functions

- int `main` (int argc, char \*argv[])

#### 3.1.1 Function Documentation

##### 3.1.1.1 int main ( int argc, char \* argv[] )

Definition at line 8 of file main.cpp.

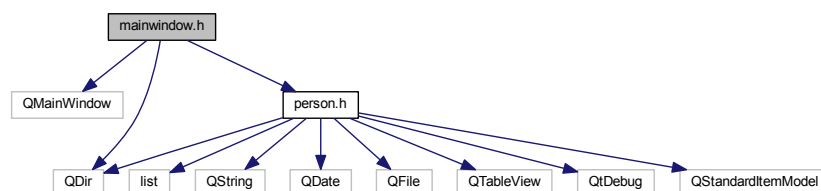
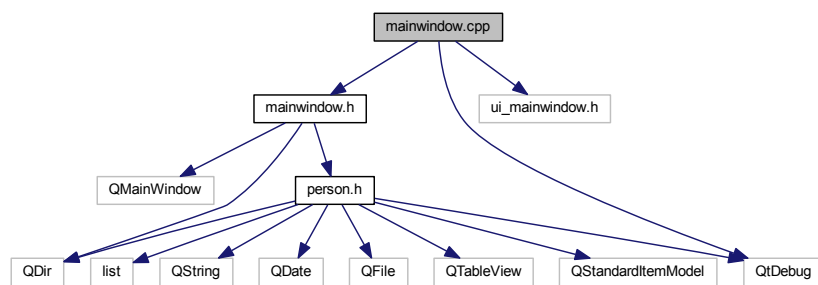
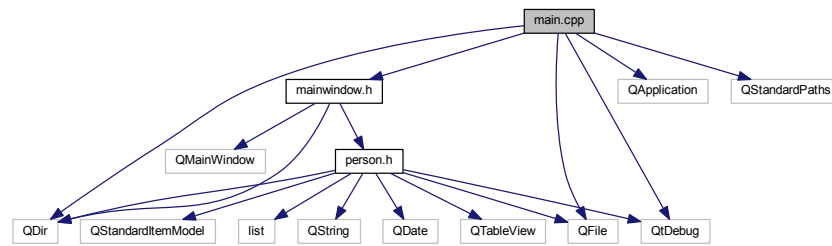
```
9 {
10     QApplication a(argc, argv);
11     MainWindow w;
12
13     QString path(QStandardPaths::writableLocation(QStandardPaths::DataLocation));
14     qDebug() << path;
15     QDir data(path);
16     w.addPath(data);
17     if (data.exists()) {
18         qDebug() << "Trobat";
19         w.loadData();
20     }
21     else {
22         qDebug() << "No s'ha trobat, creant directori";
23         data.mkpath(path);
24     }
25
26     w.showMaximized();
27
28     return a.exec();
29 }
```

### 3.2 mainwindow.cpp File Reference

Include dependency graph for mainwindow.cpp:

### 3.3 mainwindow.h File Reference

Include dependency graph for mainwindow.h:



## Classes

- class [MainWindow](#)  
*Class to show basic information to user.*

## Namespaces

- [Ui](#)

## 3.4 person.cpp File Reference

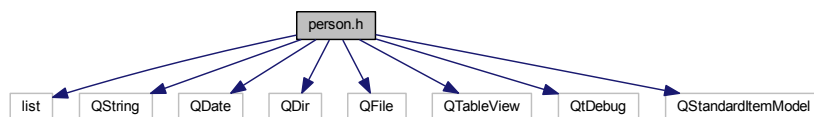
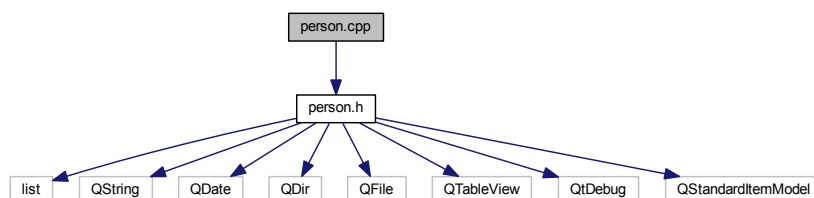
Include dependency graph for person.cpp:

## 3.5 person.h File Reference

Include dependency graph for person.h:

## Classes

- class [Person](#)  
*The [Person](#) Class contains all people basic data.*
- struct [Person::info](#)  
*Struct to store basic people information.*
- struct [Person::comp](#)  
*The comp struct is used to sort the info.*



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