



Departamento de Engenharia Electrotécnica e de Computadores  
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## **Projecto de Engenharia de Software**

### **Manual de Referência**

### **Versão 2 do Software**

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## Introdução

A aplicação desenvolvida tem como função principal gerir uma grande quantidade de publicações científicas. É permitido ao utilizador inserir diversos tipos de publicações (Livro, Capítulo de livro, Tese, Conferência e Revista científica) numa base de dados. Enquanto o utilizador interagir com a aplicação, esta base de dados vai sofrendo alterações.

A aplicação foi desenvolvida através do programa Microsoft Visual Studio 2013, onde o código foi implementado na linguagem C++. O ambiente gráfico da aplicação foi realizado através do programa mencionado anteriormente, nomeadamente com o recurso a *Windows forms*.

Aconselha-se a leitura deste manual pois irá ser útil para compreender todas as classes, atributos e métodos do *software*.

Para entender melhor o que está descrito neste manual, aconselha-se a abrir os ficheiros .h e .cpp relativos ao código fonte do programa.

## Ficheiros Existentes

De seguida iremos apresentar todos os ficheiros existentes no projecto:

*add\_book.h*

*add\_book\_chapter.h*

*add\_conference.h*

*add\_journal.h*

*add\_thesis.h*

*DataBase.h*

*main.h*

*add\_book.cpp*

*add\_book\_chapter.cpp*

*add\_journal.cpp*

*add\_thesis.cpp*

*DataBase.cpp*

*main.cpp*

## Classes Utilizadas

De seguida iremos apresentar todas as classes implementadas. Estas permitem a implementação de métodos e objectos.

*Class add\_book*

*Class add\_book\_chapter*

*Class add\_conference*

*Class add\_journal*

*Class add\_thesis*

*Class DataBase*

## Métodos mais importantes

Aqui vamos mencionar os métodos mais importantes para o funcionamento do programa.

```
void Open_DataBase(); // abre a conexão á base de dados
void Close_DataBase(); // fecha a conexão á base de dados
void Create_DataBase(); // cria a base de dados
void Insert_DataBase(String^ Command); // executa o query para inserir
void Delete_DataBase(String^ Command); // executa o query para apagar
void Read_DataBase(String^ Command, TreeView^ a, int i, int n); // treeview_publication --> nos pais e filhos
void Read_DataBase(String^ Command, TreeView^ a); // treeview_select --> nos pais
void Read_DataBase(String^ Command, TreeView^ a, int i); // treeview_select --> nos filhos
bool Verifica_ID_DataBase(String^ table, String^ ID);
```

## Assistência e Suporte

Para obter ajuda e apoio técnico contactar através de correio electrónico:

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## **Gestor de Publicações**

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Diogo Filipe Pereira Remígio  
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Version 2

20 de Maio de 2014



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# Hierarchical Index

## Class Hierarchy

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

DataBase .....	17
Form	
Projecto::add_book .....	7
Projecto::add_book_chapter.....	9
Projecto::add_conference .....	11
Projecto::add_journal .....	13
Projecto::add_thesis .....	15
Projecto::main .....	19
Projecto::MyForm.....	21

# Class Index

## Class List

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

<b>Projecto::add_book (Summary for add_book ) .....</b>	<b>7</b>
<b>Projecto::add_book_chapter (Summary for add_book_chapter ) .....</b>	<b>9</b>
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<b>Projecto::add_journal (Summary for add_journal ) .....</b>	<b>13</b>
<b>Projecto::add_thesis (Summary for add_thesis ) .....</b>	<b>15</b>
<b>DataBase .....</b>	<b>17</b>
<b>Projecto::main (Summary for main ) .....</b>	<b>19</b>
<b>Projecto::MyForm (Summary for MyForm ) .....</b>	<b>21</b>

# File Index

## File List

Here is a list of all files with brief descriptions:

<b>add_book.cpp</b>	23
<b>add_book.h</b>	24
<b>add_book_chapter.cpp</b>	25
<b>add_book_chapter.h</b>	26
<b>add_conference.cpp</b>	27
<b>add_conference.h</b>	28
<b>add_journal.cpp</b>	29
<b>add_journal.h</b>	30
<b>add_thesis.cpp</b>	31
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<b>main.h</b>	36
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# Namespace Documentation

## Projecto Namespace Reference

### Classes

- class **add\_book**
  - *Summary for **add\_book** class **add\_book\_chapter***
  - *Summary for **add\_book\_chapter** class **add\_conference***
  - *Summary for **add\_conference** class **add\_journal***
  - *Summary for **add\_journal** class **add\_thesis***
  - *Summary for **add\_thesis** class **main***
  - *Summary for **main** class **MyForm***
- Summary for **MyForm***

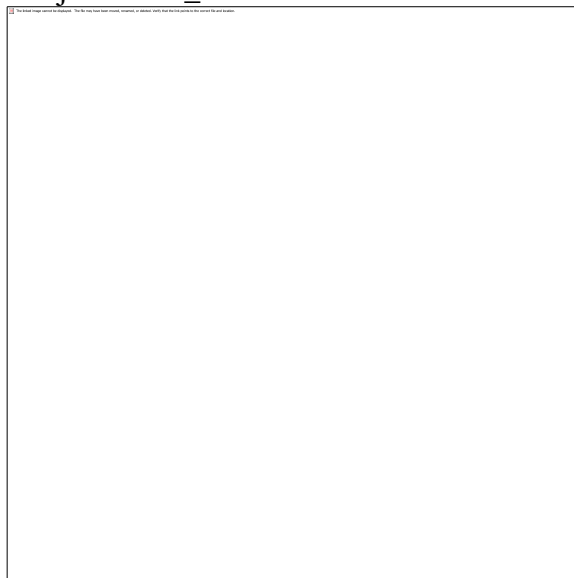
# Class Documentation

## Projecto::add\_book Class Reference

Summary for **add\_book**

```
#include <add_book.h>
```

Inheritance diagram for Projecto::add\_book:



### Public Member Functions

- **add\_book** (void)

### Protected Member Functions

- **~add\_book** ()  
*Clean up any resources being used.*

---

### Detailed Description

Summary for **add\_book**

Definition at line 24 of file `add_book.h`.

---

### Constructor & Destructor Documentation

**Projecto::add\_book::add\_book** (void ) [inline]

Definition at line 33 of file `add_book.h`.

**Projecto::add\_book::~~add\_book () [inline], [protected]**

Clean up any resources being used.

Definition at line 45 of file add\_book.h.

---

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

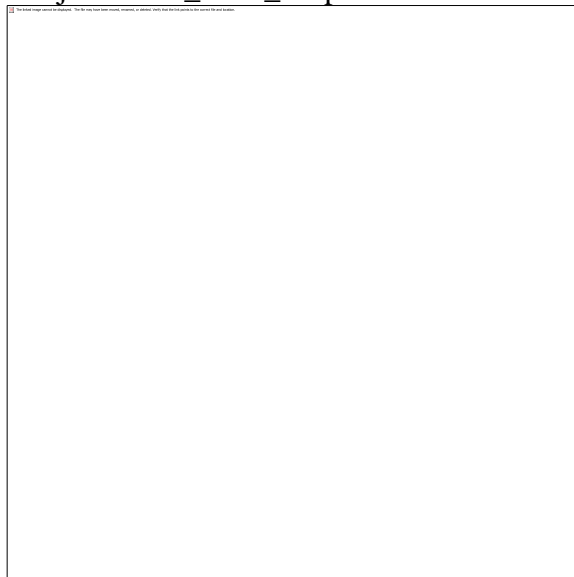
- **add\_book.h**

## Projecto::add\_book\_chapter Class Reference

Summary for **add\_book\_chapter**

#include <add\_book\_chapter.h>

Inheritance diagram for Projecto::add\_book\_chapter:



### Public Member Functions

- **add\_book\_chapter** (void)

### Protected Member Functions

- **~add\_book\_chapter** ()  
*Clean up any resources being used.*

---

### Detailed Description

Summary for **add\_book\_chapter**

Definition at line 17 of file add\_book\_chapter.h.

---

### Constructor & Destructor Documentation

**Projecto::add\_book\_chapter::add\_book\_chapter** (void) [inline]

Definition at line 20 of file add\_book\_chapter.h.

**Projecto::add\_book\_chapter::~~add\_book\_chapter** () [inline], [protected]

Clean up any resources being used.



Definition at line 32 of file add\_book\_chapter.h.

---

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

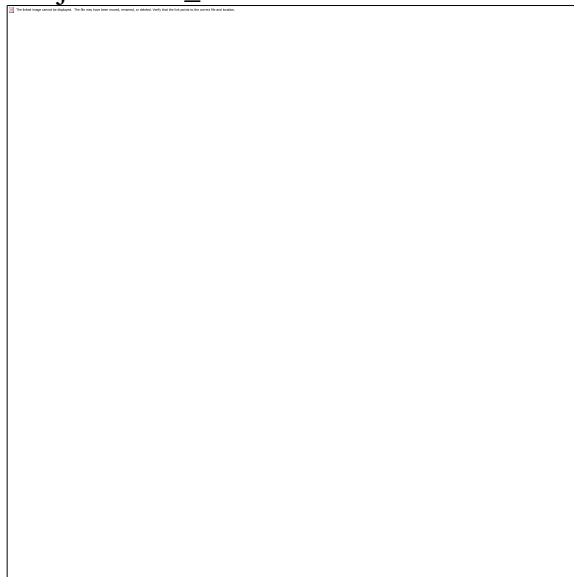
- `add_book_chapter.h`

## Projecto::add\_conference Class Reference

Summary for **add\_conference**

```
#include <add_conference.h>
```

Inheritance diagram for Projecto::add\_conference:



### Public Member Functions

- **add\_conference** (void)

### Protected Member Functions

- **~add\_conference** ()  
*Clean up any resources being used.*

---

### Detailed Description

Summary for **add\_conference**

Definition at line 17 of file add\_conference.h.

---

### Constructor & Destructor Documentation

**Projecto::add\_conference::add\_conference (void) [inline]**

Definition at line 20 of file add\_conference.h.

**Projecto::add\_conference::~~add\_conference () [inline], [protected]**

Clean up any resources being used.

Definition at line 32 of file add\_conference.h.

---

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

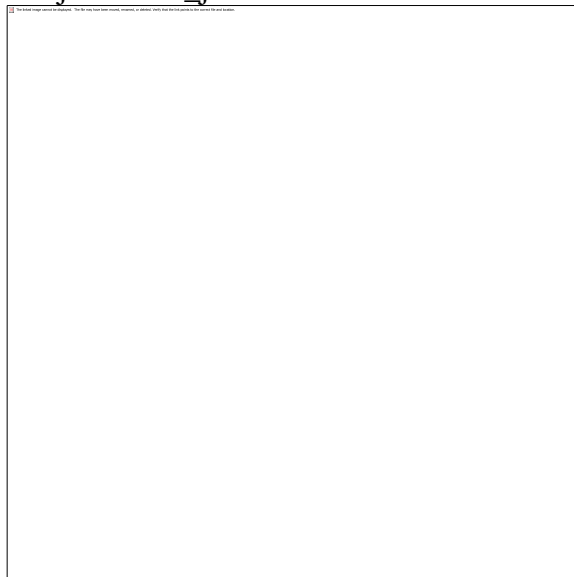
- `add_conference.h`

## Projecto::add\_journal Class Reference

Summary for **add\_journal**

#include <add\_journal.h>

Inheritance diagram for Projecto::add\_journal:



### Public Member Functions

- **add\_journal** (void)

### Protected Member Functions

- **~add\_journal** ()  
*Clean up any resources being used.*

---

### Detailed Description

Summary for **add\_journal**

Definition at line 17 of file add\_journal.h.

---

### Constructor & Destructor Documentation

**Projecto::add\_journal::add\_journal** (void) [inline]

Definition at line 20 of file add\_journal.h.

**Projecto::add\_journal::~~add\_journal** () [inline], [protected]

Clean up any resources being used.

Definition at line 32 of file add\_journal.h.

---

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

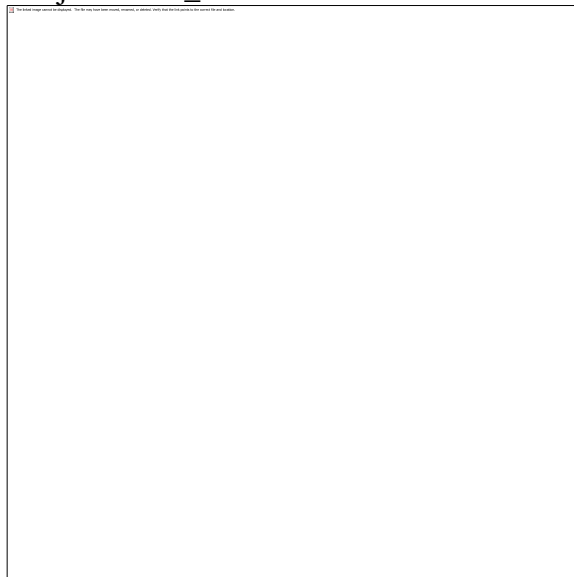
- `add_journal.h`

## Projecto::add\_thesis Class Reference

Summary for **add\_thesis**

#include <add\_thesis.h>

Inheritance diagram for Projecto::add\_thesis:



### Public Member Functions

- **add\_thesis** (void)

### Protected Member Functions

- **~add\_thesis** ()  
*Clean up any resources being used.*

---

### Detailed Description

Summary for **add\_thesis**

Definition at line 17 of file add\_thesis.h.

---

### Constructor & Destructor Documentation

**Projecto::add\_thesis::add\_thesis (void ) [inline]**

Definition at line 20 of file add\_thesis.h.

**Projecto::add\_thesis::~~add\_thesis () [inline], [protected]**

Clean up any resources being used.

Definition at line 32 of file add\_thesis.h.

---

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

- `add_thesis.h`

## DataBase Class Reference

```
#include <DataBase.h>
```

### Public Member Functions

- **DataBase ()**
  - void **Open\_DataBase ()**
  - void **Close\_DataBase ()**
  - void **Create\_DataBase ()**
  - void **Insert\_DataBase** (String^ Command)
  - void **Delete\_DataBase** (String^ Command)
  - void **Read\_DataBase** (String^ Command, TreeView^ a, int i, int n)
  - void **Read\_DataBase** (String^ Command, TreeView^ a)
  - void **Read\_DataBase** (String^ Command, TreeView^ a, int i)
  - bool **Verifica\_ID\_DataBase** (String^ table, String^ ID)
- 

### Detailed Description

Definition at line 7 of file DataBase.h.

---

### Constructor & Destructor Documentation

#### **DataBase::DataBase ()**

Definition at line 4 of file DataBase.cpp.

---

### Member Function Documentation

#### **void DataBase::Close\_DataBase ()**

Definition at line 271 of file DataBase.cpp.

#### **void DataBase::Create\_DataBase ()**

Definition at line 23 of file DataBase.cpp.

#### **void DataBase::Delete\_DataBase (String^ *Command*)**

Definition at line 147 of file DataBase.cpp.

#### **void DataBase::Insert\_DataBase (String^ *Command*)**

Definition at line 138 of file DataBase.cpp.



**void DataBase::Open\_DataBase ()**

Definition at line 9 of file DataBase.cpp.

**void DataBase::Read\_DataBase (String^ *Command*, TreeView^ *a*, int *i*, int *n*)**

Definition at line 156 of file DataBase.cpp.

**void DataBase::Read\_DataBase (String^ *Command*, TreeView^ *a*)**

Definition at line 234 of file DataBase.cpp.

**void DataBase::Read\_DataBase (String^ *Command*, TreeView^ *a*, int *i*)**

Definition at line 196 of file DataBase.cpp.

**bool DataBase::Verifica\_ID\_DataBase (String^ *table*, String^ *ID*)**

Definition at line 279 of file DataBase.cpp.

---

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

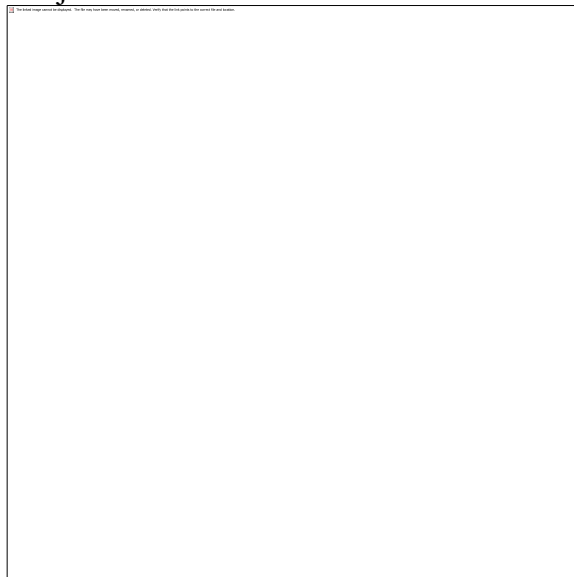
- **DataBase.h**
- **DataBase.cpp**

## Projecto::main Class Reference

Summary for main

```
#include <main.h>
```

Inheritance diagram for Projecto::main:



### Public Member Functions

- **main** (void)

### Protected Member Functions

- **~main** ()  
*Clean up any resources being used.*

---

### Detailed Description

Summary for main

Definition at line 27 of file main.h.

---

### Constructor & Destructor Documentation

**Projecto::main::main (void )**`[inline]`

Definition at line 30 of file main.h.

**Projecto::main::~~main ()**`[inline]`, `[protected]`

Clean up any resources being used.

Definition at line 42 of file main.h.

---

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

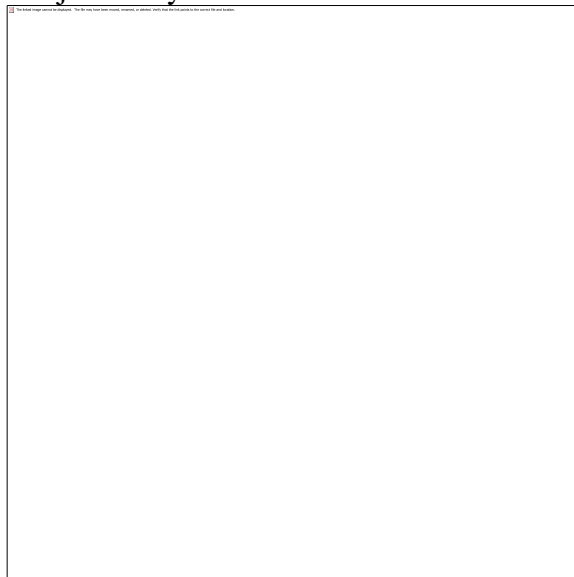
- **main.h**

## Projecto::MyForm Class Reference

Summary for **MyForm**

```
#include <MyForm.h>
```

Inheritance diagram for Projecto::MyForm:



### Public Member Functions

- **MyForm** (void)

### Protected Member Functions

- **~MyForm** ()  
*Clean up any resources being used.*

---

### Detailed Description

Summary for **MyForm**

Definition at line 15 of file MyForm.h.

---

### Constructor & Destructor Documentation

**Projecto::MyForm::MyForm** (void ) [inline]

Definition at line 18 of file MyForm.h.

**Projecto::MyForm::~~MyForm** () [inline], [protected]

Clean up any resources being used.

Definition at line 30 of file MyForm.h.

---

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

- **MyForm.h**

# File Documentation

## **add\_book.cpp File Reference**

```
#include "add_book.h"
```

## **add\_book.h File Reference**

```
#include "DataBase.h"
```

### **Classes**

- class **Projecto::add\_book**

### ***Summary for add\_book* Namespaces**

- **Projecto**

## **add\_book\_chapter.cpp File Reference**

```
#include "add_book_chapter.h"
```



## **add\_book\_chapter.h File Reference**

```
#include "DataBase.h"
```

### **Classes**

- class **Projecto::add\_book\_chapter**

### ***Summary for add\_book\_chapter* Namespaces**

- **Projecto**

## **add\_conference.cpp File Reference**

```
#include "add_conference.h"
```

## **add\_conference.h File Reference**

```
#include "DataBase.h"
```

### **Classes**

- class **Projecto::add\_conference**

### ***Summary for add\_conference* Namespaces**

- **Projecto**

## **add\_journal.cpp File Reference**

```
#include "add_journal.h"
```

## **add\_journal.h File Reference**

```
#include "DataBase.h"
```

### **Classes**

- class **Projecto::add\_journal**

### ***Summary for add\_journal* Namespaces**

- **Projecto**

## **add\_thesis.cpp File Reference**

```
#include "add_thesis.h"
```

## **add\_thesis.h File Reference**

```
#include "DataBase.h"
```

### **Classes**

- class **Projecto::add\_thesis**

### ***Summary for add\_thesis* Namespaces**

- **Projecto**

## **DataBase.cpp File Reference**

```
#include "DataBase.h"
```



## **DataBase.h File Reference**

### **Classes**

- class **DataBase**

## main.cpp File Reference

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

### Functions

- void **main** ()
- 

### Function Documentation

#### void **main** ()

Definition at line 7 of file main.cpp.

## main.h File Reference

```
#include "add_book.h"  
#include "add_book_chapter.h"  
#include "add_thesis.h"  
#include "add_conference.h"  
#include "add_journal.h"
```

## Classes

- class **Projecto::main**

## *Summary for main* Namespaces

- **Projecto**

## **MyForm.cpp File Reference**

```
#include "MyForm.h"
```

## MyForm.h File Reference

### Classes

- class **Projecto::MyForm**

### ***Summary for MyForm*** Namespaces

- **Projecto**

