

TUTORED & PRACTICAL WORK N°06

GUI & STREAMS AND FILES

In this series of TW/PW we will develop the front-end part of the project "**Management of a library**" carried out as a homework assignment (Exercise 6 of TW n°01).

In the MVC (Model-View-Controller) architecture, the 'Model' part you have done in your homework. In this series of TD we will focus on the 'View' part which is responsible for the presentation of the model data to the user.

1. Create a Reader registration window. Its title is "**Registering a Reader**". Choose an appropriate architecture.

The north part contains the name of the library "Library of the Higher National School of Renewable Energies, Environment & Sustainable Development" and "Registration of a reader".

The south part contains the following two buttons:

- A button to save the data of the library '**Save**'.
- A button to cancel the operation '**Cancel**'.

The main part contains the following elements:

- A Label and an Entry to enter the number "nin".
- A Label and an Entry to enter the last name.
- A Label and an Entry to enter the first name.
- A Label and an Entry to enter the birth date.
- A Label and an Entry to enter the address.
- A Label and an Entry to enter the phone number.
- A Label and an Entry to enter the subscription date.

2. Create a window to define **authors (Author)**. Its title will be « **Author definition** ». The north part contains the name of the library "Library of the Higher National School of Renewable Energies, Environment & Sustainable Development" and "Registration of an author".

The south part contains the following two buttons:

- A button to save the data of the library '**Save**'.
- A button to cancel the operation '**Cancel**'.

The main part contains the following elements:

- A Label and an Entry to enter the author's number.
- A Label and an Entry to enter the author's last name.
- A Label and an Entry to enter the author's first name.
- A Label and an Entry to enter the author's birth date.

- A Label and an Entry to enter the author's address.
- A Label and an Entry to enter the author's phone number.
- A Label and an Entry to enter the author's number of publications.
- A Label and an Entry to enter the author's website.
- A Label and an Entry to enter the author's area of interest.

3. Create a window to define **editors (EditorInChief)**. Its title will be « **EditorInChief definition** ».

The north part contains the name of the library "Library of the Higher National School of Renewable Energies, Environment & Sustainable Development" and "Registration of an editor".

The south part contains the following two buttons:

- A button to save the data of the library '**Save**'.
- A button to cancel the operation '**Cancel**'.

The main part contains the following elements:

- A Label and an Entry to enter the editor's number.
- A Label and an Entry to enter the editor's last name.
- A Label and an Entry to enter the editor's first name.
- A Label and an Entry to enter the editor's birth date.
- A Label and an Entry to enter the editor's address.
- A Label and an Entry to enter the editor's phone number.
- A Label and an Entry to enter the editor's website.

4. Create a window to define **books (Book)**. Its title will be « **Book definition** ».

The north part contains the name of the library "Library of the Higher National School of Renewable Energies, Environment & Sustainable Development" and "Registration of a book".

The south part contains the following two buttons:

- A button to save the data of the library '**Save**'.
- A button to cancel the operation '**Cancel**'.

The main part contains the following elements:

- A Label and an Entry to enter the book's number "num".
- A Label and an Entry to enter the book's title.
- A Label and an Entry to enter the book's author.
- A Label and an Entry to enter the book's editor.
- A Label and an Entry to enter the book's ISSN.
- A Label and an Entry to enter the book's edition year.
- A Label and an Entry to enter the book's pages number.

5. Create a window to define **borrowings (Borrowing)**. Its title will be "**Borrow a book**".

The north part contains the name of the library "Library of the Higher National School of Renewable Energies, Environment & Sustainable Development" and "Borrowing a book".

The south part contains the following two buttons:

- A button to save the data of the library '**Save**'.
- A button to cancel the operation '**Cancel**'.

The main part contains the following elements:

- A Label and a ComboBox to choose the number of the book to borrow.
- A Label and a ComboBox to choose the reader's number.
- A Label and a DateEntry to enter the borrowing date.
- A Label and a DateEntry to enter the return date.

6. Create the main window with the title “**Library**”.

The north part contains the name of the library “Library of the Higher National School of Renewable Energies, Environment & Sustainable Development”.

The south part contains the following two buttons:

- A Button to load the saved data of the library.
- A button to cancel the operation ‘**Cancel**’.

The main part contains **5 buttons**. Each button leads to one window among the windows created in the previous questions.