Java client for comics strips

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Abstract

BDovore is a website focused on comic books that allows collectors to manage their library. For several years, students in computer science have been developing a software in cooperation with that web site.

Thanks

For their help, their advises and for having provided this subject, we would like to thank our tutors : Mr BOUQUET et Mr COQBLIN.

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Introduction

Managing a library can be hard, especially for collectors who could possess hundreds of books. That is why websites like BDovore¹ have been created. BDovore is specialized in comic books and allows its users to manage their library online. But because we are not always connected to the Internet, UFR ST and BDovore started a project: create a Java software you could use offline on your computer that would provide the same functionalities as the website.

¹www.bdovore.com

Chapter 1

The Software

1.1 The features

1.1.1 Searching an album

As the user will need to find the albums he owns in the software, a research function was necessary. Really basic, it was only using a single keyword and the user had to take care of capital letters and other special characters, as accents. By example, the research "asterix" did not give any result, in contrary to "Astérix"!

The results were displayed in a list with the title, the tome number, the series, the genre and the ISBN number. A double click shows a window with details about the album. If your research had a lot of result, four buttons were available in the bottom of the list to go to the first, previous, next or last page.

1.1.2 Add or remove an album of the user library

Once the window has appear after a double click, some checkboxes are displayed. To add an album, the user has to check the box named "Owned". Then three checkboxes become available for details, which enable the user to notice if the album is dedicated, lent or if he predict to buy it later.

1.1.3 See statistics

Once the user library is filled up, he can see some statistics on that library. There is two different statistics: the first, on the top, is displaying amounts of album of each type (albums in the library, owned and to buy). The second shows percentages of genres, editors, scriptwriters or cartoonists.

1.1.4 Configure the software

Finally, a configuration tool is provided for setting a proxy server or to connect the user on its website's account (to synchronizing its library with the online one).

1.2 Unachieved functionalities

1.2.1 Update the research base

The research feature is working with a database of all the albums which are listed on the website. To keep it to date, a feature that download all the new albums on the website was planned but previous groups did not have the time to finish it.

1.2.2 Synchronizing user account

As user can suggest albums on the website or change details of the albums on the software, the synchronizing feature had to get the two libraries, search the differences and update them. For ambiguous cases, a window show the differences and asks user to decide whether the online one or the offline one is the more up to date. All the reflections on the feature were done but were not integrated in the software.

1.3 Our contribution

For the time we had to work on this project, our main goal was to finish to put in place the unachieved functionalities. In this purpose, we had to:

- Change the research tool, to make it more efficient and intuitive, so the user could write its requests like any search engine: the user would be able to make a request with several words in any orders and without caring about accents or syntax. He could also use some special characters and keywords to specify its research (like the "*" joker or the double quotes).
- Write the webservice's functions. It was a necessary step to do before taking care of the synchronization part. Indeed, the webservice is the key between the both databases and it will permit to get the informations in them, like the comic books that the user owns or the details about a volume.
- As we see, a certain reflection was done about the synchronization by the previous students group who worked on this project. Our role in this part was to make the reflection become real and so finishing a big feature of the software. So we had to make the mechanisms which would resolve the eventual conflicts between the online and offline libraries of the user and make them the same.
- Finally, all along the time we worked on the software, we have done some minor adjustments (for example for the ergonomics of the Graphic User Interface).

Chapter 2

Discovering the software

Before any modifications on the software, we had to discover how this one was built. It was necessary to see where we will add our functionalities and, eventually, where we will have to make modifications before any additions.

- 2.1 Understanding previous students work
- 2.2 Laying the foundation
- 2.3 Test and updates

Chapter 3

Web service and Synchronization

- 3.1 What is a web service?
- 3.2 Why do we need it?
- 3.3 The synchronization

Conclusion