

PROJECT 1

- It is intended to develop an application to management a library.
- The information associated with a book is as follows: ISBN (key), Title, Language, First Author, Second Author, Publishing Company, Year of Publication, Scientific Area (Programming, Mathematics, Physics, Quantum Physics, Chemistry, Database, ...), and Price (in euros).
- The application must be controlled from a Menu with the following group of options:
 - ➔ **File:** New (create a empty list), Open (create a list from the data in a given file), Save (save the list in the your file), Exit, ...
 - ➔ **Book:** Insert (insert a new book in the list), Remove (remove a book in the list), Search (by key), Update (update a book), ...
 - ➔ **Operations:** this group must have at least the following 10 operations:
 1. show the price of a given book title (there may be several),
 2. show all books published in a given Year of Publication,
 3. show the K most recent books in a given Scientific Area,
 4. show all books of a given Author (first and second),
 5. show the information about a given book title (there may be several),
 6. show the K most recent books,
 7. show all books in a given Scientific Area,
 8. show the K most recent books of a given author (first and second),
 9. show all books of a given author and in a given Scientific Area,
 10. show all books in a given Language.
- Implementation:
 - Use the C language and the **simple linked lists** for manipulate the data about the books.
 - Use some of the algorithms that have been studied in class.
 - You can also use algorithms that have not been studied in class.
- Write a short report.
- Deadline: April, 30