Library database documentation

1) System Struct

There are 2 important classes managed, BOOK class and READER class (is indicate by READER CARD). BOOK Class includes the informations of books in library. Struct:

BOOK (Book ID, Name, Authors, Translators, Publisher, Year of publishing, Edition)

+Book ID (Int, Format: XXXYYYYY): a number what defines unique book. A book much have only 1 Book ID. XXX is 3 digits number that define the bookcase the book belongs to. YYYYY is the identify number of book.

+Name (String): Name of the book

+Authors ([String]): Authors of the book

+Translators ([String]): Translators of the book

+Publisher (String): Publisher of the book

+Year of publishing (Int): Year of publishing how the book

+Edition (Int): the edition of book

READER CARD (Card ID, Name, Address, Work, Department (or class), Day of creation)

+Card ID (Int, Format: XYYYY): a number that identifies the reader. X is 0 or 1 what defines if the reader is student or teacher. YYYY is the number that identifies the unique reader.

+Name (String): Name of reader

+Address (String): Address of reader

+Work (Teacher or student): What work does reader do?

+Department (or class) (String): The department in which the reader works (for teacher) or class (for student).

+Day of creation (dd/mm/yyyy): where the reader card is created?

2) Rule

+A reader can borrow at a time 2 books maximum.

+A book can be borrowed maximum 2 week.

+If the reader does not return the book before expired day, he/she must pay 1 amount of money, 0.3$/day after expired day.

+If the reader lets the book be broken or lost, he/she must pay money. The amount need to pay will be negotiated.

3) Popular request and statistic

A year:

+What book was borrowed the most in the year? How many times?

+What is the longest time of borrowing book? How long?

+What book was borrowed the least in the year? How many times?

+Who pays the most for the expired books? List for the black list => Limit her/him permission next year.

+What is the maximum number of a book borrowed at a time? Should we import more?

A month:

+How many books are still borrowed? A table of this books and these details.