

# LAB 211 Assignment

Type:  
Code:  
LOC:  
Slot(s):

Long Assignment  
J1.L.P0009  
200  
N/A

## Title

HKT Book Store Management upgrade

## Background

You were asked to build a book management application for the HKT store. The program must have the basic functions of adding, deleting and editing book information. The book.dat file is used to store information of all books in the store. The author.dat file has stored author information including authorID and name. The relational model is shown as follows: one book can be written by only 1 author, one author can write many books.

**Upgrade version.2, support more functions: delete author, search by author name, real-time update processing.**

## Program Specifications

Build a management program. With the following basic functions

1. Build your data structure
2. Show the book list
3. Add new book
4. Update book
5. Delete book
6. Search book
  - 6.1 Search by book name
  - 6.2 Search by author name**
7. Store data to file
8. **Delete author**
9. **Real time update processing**

Others- Quit

Each menu choice should invoke an appropriate function to perform the selected menu item. Your program must display the menu after each task and wait for the user to select another option until the user chooses to quit the program. Each book has the properties such that ISBN, title, price and authorID. Each author has the following information: authorID, name. **The lecturer provides an author.dat file that contains information about 10 authors.**

## Features:

***This system contains the following functions:***

Display a menu and ask users to select an option.

### ▪ **Function 5: Search book**

Create a submenu that allows the user to select way to search: search by author name or by book name.

#### – **F.5.2: Search by author name– 75LOC**

- o User input author name want to search.
- o The system will search in the store, and return all book that has author name is the search string.

- Show result list: all information of book.
- **Function 6: Delete Author- 75LOC**
  - User can delete the author of book.
  - Before the delete system must show confirm message.
  - In the case, in the store that does not contain any book of this author then remove this author in author.dat file. On the contrary, the program displays the message "This author has a book in the store, you cannot delete this author".
  - Show the result of the delete: success or fail.
  - After delete, the program returns to the main screen
- **Function 8: Real-time update processing- 50LOC**
  - Modify the above functions so that when each function is completed, the system must immediately update to the database.
- The above specifications are only basic information; you must perform a requirements analysis step and build the application according to real requirements.
- The lecturer will explain the requirement only once on the first slot of the assignment.