

Duration : 85 minutes

Develop Library management OOP application with following components and requirements

1. Create MVC console application in NetBean:

- a. Define class Book with following attributes and methods: **(2 marks)**
 - + BookID, Book Title, Author, Year published
 - + Constructors, get/set(), toString()
 - + implement method for Comparable
- b. Define class Library with following attributes and methods: **(5 marks)**
 - + List of Book
 - + Read text file to load data for Library – lib.txt is provided (1 mark)
 - + Search book by different criteria (1 mark)
 - + Print any List of Book (1 mark)
 - + Add new Book from console (1 mark)
- c. Develop Library Management class for application **(4 marks)**
 - + Application menu for application include: Display all books, Book Search, Add new Book (1 mark)
 - Hint: An abstract Menu class is provided for use in the application. Override method execute()
 - + Method for searching book with searching menu (2 marks)

2. Technical requirements:

- + Create package **model** for Book and Library class.
- + Create package **view** for Menu and LibraryManagement class.
- + Checking error for input data.
- + User interface as sample images below

Library Management

1.List all books

2.Search book

3.Add new Book

4.Exit

Enter selection..

When choose search book:

Book Searching

-
- 1.Find by BookID
- 2.Find by Title
- 3.Find by Author
- 4.Find by Year of publishing
-

Enter selection..3

Enter Author :Cays

List of Books

Book{B0001 - Java Programming - Cays Horstman - 2020}
Book{B0003 - NodeJS for Beginner - Cays Horstman - 2019}

Total : 2 books.

**Notice: Student must strictly follow all requirements as describe above for marking,
Any modification the requirement detail is not allowed and will get no mark!**