|  |  |
| --- | --- |
|  | Software Development CA2 – Library Catalogue System |
|  |  |
|  | Michael O'Brien, Mariusz Ordon,  Software Development  12/1/23 |

# Aims and Description:

Design and implement a to a file-based data management system using Java.

# Starting Class List:

## Book:

Attributes:  
Title  
Author  
ISBN Int 13 digits  
Availability

Methods:  
Constructor  
toString()  
Display book details

## Audio Book:

Attributes:  
Title  
Author  
ISBN  
Availability

Methods:  
Constructor  
Gets and set methods  
toString()  
Display audio book details

## Thesus:

Attributes:  
Title  
Author  
Topic  
Abstract  
Date published  
Availability  
Status

Methods:  
Constructor  
Get and set methods  
toString()  
Display Thesus Details

## Dissertation:

Attributes:

Methods:

## CD:

Attributes:

Methods:

## DVD:

Attributes:

Methods:

## Author:

Attributes:

Methods:

## Library User:

Attributes:

Methods:

## Loan

Attributes:

Methods:

## Member Interface:

Methods:  
Search for a Book  
Search for an Audio Book  
Search for a Theses  
Search for a Dissertation  
Search for a CV  
Search for a DVD  
Search for an Author

## Librarian Interface:

Add new book  
Add new member

Decide between Stack, Queue or LinkedList.

Decide between classes, interfaces, data structures.

Decide what searching/sorting algorithm to use.

Compare between them.