Activity Diagram for the library management system

Librarian	Library management system

Activity Diagram Key:
- ◉ End
- — Joining line
- ● Start
- ▢ Block

Start

Start the system

The librarian needs to input the library books datafile.

Check the file exists and can be opened

<< input incorrect, file doesn't exist or cannot be opened and read >>

<< Data file found and able to be read >>

Menu options presented to the librarian

See books borrowed by a member

Add a member

Return a book

Issue a book

Exit the system

Issue the book to the member

<< Member exists >>

Check the memberID exists

<< bookID exists >>

Check the bookID is in the system

<< bookID doesn't exist >>

<< MemberID doesn't exist >>

Is the book past ts due date?

<< Yes >>

Calculate late fees and show on the system

<< No >>

Book returned

Are the inputs valid?

<< Valid inputs >>

Member added, view their confirmed details on the screen

<< Invalid inputs >>

Show borrowed books by the member

System end

End