**Library Management System**

A Library Management system is a tool used to manage items in a library. Broadly they should offer the following functionalities. [Source: <http://en.wikipedia.org/wiki/Integrated_library_system>]

1. Cataloging: A library can contain many different types of items ( Books, Videos, Audios, Games, Magazines etc.). There has to be a way to catalog the different item
2. Circulation: Tracking of items sent out
3. Acquisition: Ordering of new items, Archiving of old items
4. Tracking: Tracking of individual items
5. OPAC: Public interface for the users.
6. Cataloging:
   1. Search facility based on title, author, format, other custom properties (All)
   2. Items available in library v/s items checked out/reserved/damaged (Librarian)
   3. Generate id’s/tags for new items to be added to the library (Librarian)
7. Circulation:
   1. Check out of library item to members
   2. Returning of library items
   3. Reservation of library items
   4. Extending check out ( BR’s to be defined)
   5. Collecting fees/fines ( BR’s to be defined)
8. Acquisition:
   1. TBD
9. Tracking:
   1. TBD
10. OPAC:
    1. Search based on title, author, format, other custom properties (All)
    2. Checking items available in library
    3. Reserving items for check out
    4. Renew check out (BR’s to be defined)

Features to be added

1. DB:
   1. Populate mock data for all tables and check if additional tables are required
   2. Create table for holding user preferences
2. DAO:
   1. Add tests for accessing those tables
3. Business:
   1. Add tests for business functionality
   2. Add functionality to support advanced search (Type =| like “%BOOK%” AND Name =| like ”%Eff%ective”
   3. Add functionality to get details for all Item Instances to support search
   4. Add functionality to add Item
   5. Add functionality to add Member
   6. Add functionality to update Preferences
   7. Add functionality to collect fines
   8. Add functionality to view all transactions of a member
4. View:
   1. Create forms for the business functionalities introduced above

Old requiremenents ( to be incorporated into the main)

Library with Books and Videos.

Actor – Borrower, Librarian

BRs –

1) Add new libraryItemInstance or video to libraryManagementSystem

2) Archive libraryItemInstance or video from libraryManagementSystem (no more available for rent)

3) If I add another item with an existing ISBN number, I should add to copies available not a different item

4) Assign category /ratings to books/videos

5) Transfer books/videos from one category to another

6) More than 2 Items of similar type cannot be borrowed (Can’t have more than 2 books at same time)

1.)Items that is reserved to another user cannot be borrowed by a different user ( provided current date is < reservation date else allowed)

7) Transfer libraryItemInstance/video from an existing borrower to another without returning

8) Can’t borrow more than 1 video at a time

9) Person can reserve the item, if unavailable.

10) There should be reservation date also

11) Change rent for videos / books

12)