LibraryBooks Version 2.0 – An Android App

Introduction

Scenario one. John is at University and has been given a reading list by each of his tutors. Rather then carry each of the lists around with him John spends a few minutes searching the University library using the LibraryBooks app for each of the books. Upon finding them he moves the entry to the specific book list he has created in the LibraryBooks app. Now when he goes to the University library he has all the details of his required reading at the touch of a button.

Scenario two. Carol enjoys reading crime novels and swaps good reads with friends. She is told of an exciting book that a friend has just read so she searches the local public library catalogue using the LibraryBooks app until she finds the required book. She then moves the entry to her "Fiction - Crime" list. Now the next time she goes to the local library the details of the books she would like to read are available at the touch of a button on her mobile.
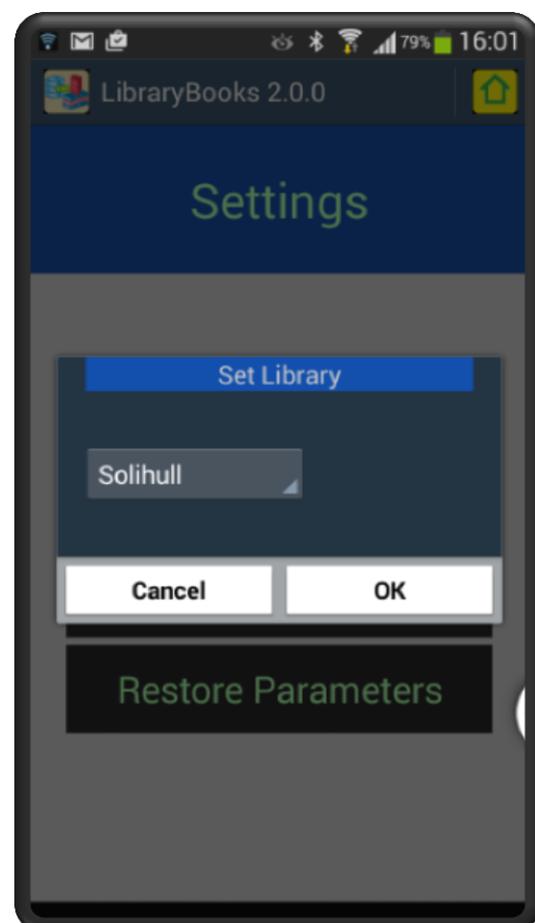
These are two of the scenarios that demonstrate how the app LibraryBooks can usefully help users.
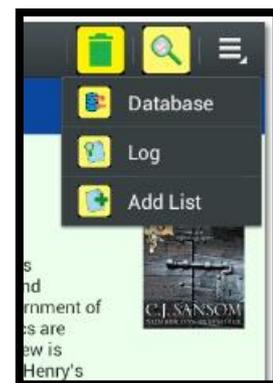
Setting Up LibraryBooks

The first task when you first run the app is to set the local library. This is done by entering the menu, pressing the database entry and then pressing the "Set Library" button. This will result in the dialogue box as shown on the right appearing. Press the pull down list and select the library you want to select.

Currently the app will only search on library catalogues that use Capita's Prism database system. Within the app the following local libraries are currently set up, these are :-

- Solihull
- Aberdeen
- Birmingham City University
- Bournemouth University
- Bournemouth
- Bradford
- Brighton University

- City of London
- Cornwall
- Coventry
- De Montfort University
- Derby University
- East Lothian
- Edinburgh
- Fife
- Gateshead
- Gloucestershire
- Highland
- Jersey
- Leeds
- Liverpool
- NCAD
- Northumbria University
- North Yorkshire
- Poole
- Portsmouth University
- Roehampton University
- University of Central Lancashire
- Wigan
- Winchester University
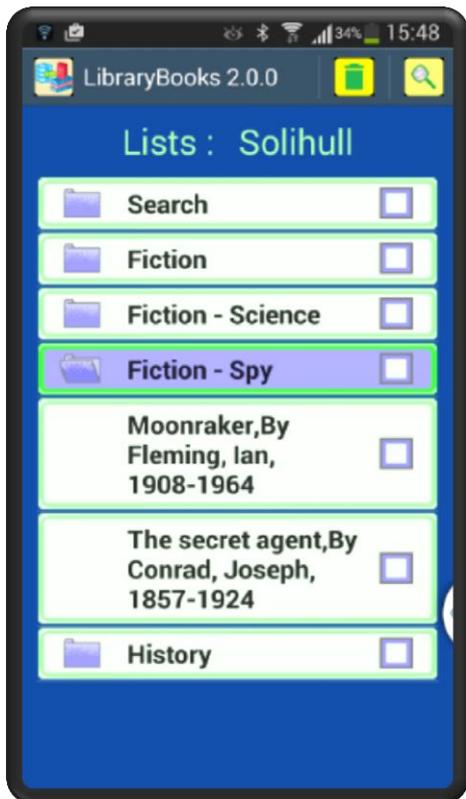- Wirral
- Worcestershire
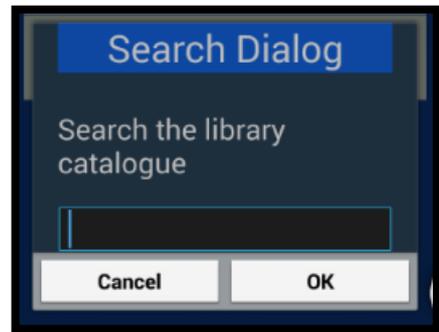

Overview – A Walk Through

To show how to use the LibraryBooks app lets go through an imaginary use of the app. You have just loaded the app. Now are running it. LibraryBooks is pre-loaded with a few lists and a few books. If you have loaded it on a mobile then the screen will display the lists and when you touch the Fiction list this will open displaying the title/author of two fiction books.

Now you want to enter a new list so you open the menu and press the "Add List" entry. A dialog will appear allowing you to enter the name of the new list. You enter "Fiction - Historical" and then pressing the OK button the new list will be displayed.

Now it might be the case that you do not need the "History" list. To remove it you click the check box on the same line as the list title and then press the "Drop" icon shown in the screen dump on the left. This will remove the list. If the list had entries under it then you would not be able to click the box. The box would be inactive. Also the Search list is a special list and cannot be dropped. It is not possible to tick the "Search" box. The "Search List is the list where the entries returned from searching the library catalogue will be stored. That covers the list information.
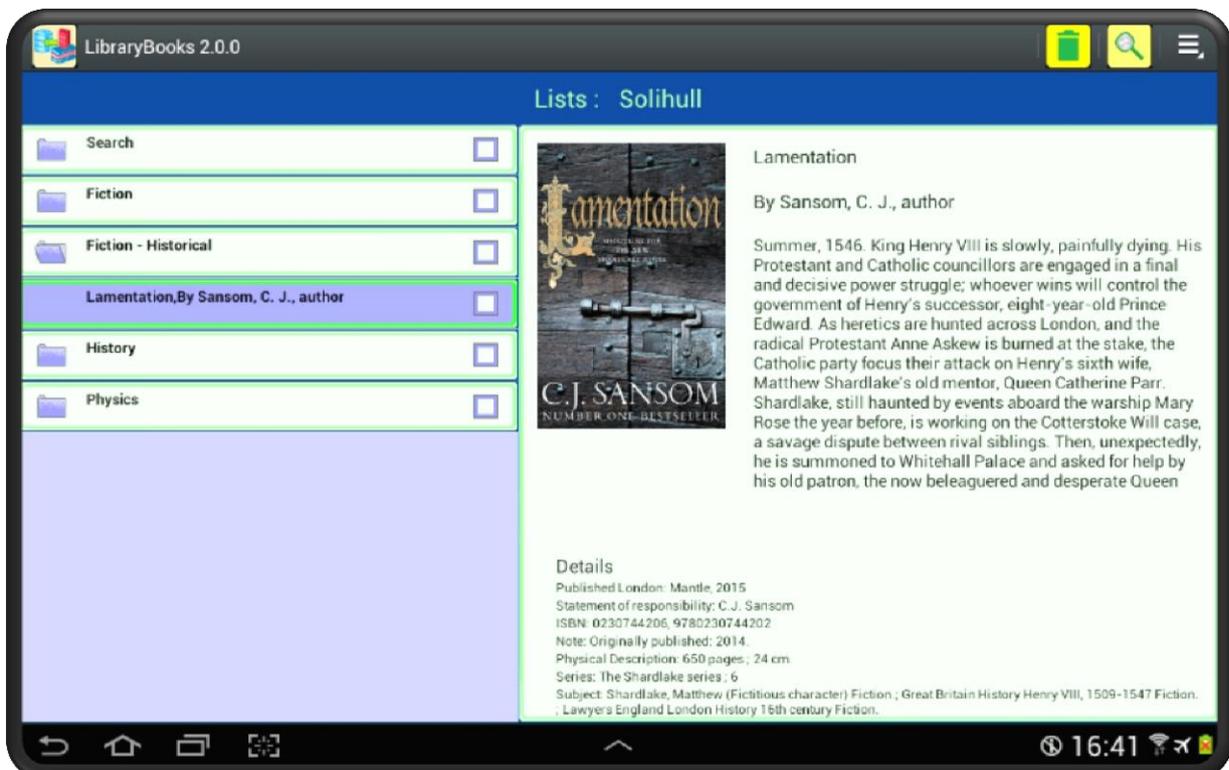
Going back to the new list you have created, "Fiction - Historical". You can now move the entry for "Goldfinger" that is under the "Fiction" list to the new list. Press your finger on the "Goldfinger" entry until a grey shadow box appears then move your finger till it is over the new list. The grey shadow box will move with your finger. Once it is over the new list you might notice that the new list characters change from black to dark blue. Then drop the entry into the new list by taking your finger off the screen. This should result in the entry moving to the new list.

The next function to try is to search the library catalogue. Pressing the "Search" icon at the top of the screen will result in the search dialog being displayed as shown above. Enter "Sansom C J" and press the ok button. The app will then search the library catalogue for "Sansom C J" and return the entries found in the "Search" list. You are then in the position to move the entries from the "Search" list to your own lists. For instance you could move the novel "Lamentation" to the "Fiction – Historical" list.

When the catalogue is searched again it will remove all entries still in the "Search" list and replace them with the entries for the new search.

Returning to the "Home" screen you will see all the search entries in the "Search" list. From there you can move any number of entries to your own lists thereby keeping the entries. Remember that all the entries remaining in the "Search" list will be removed when you carry out another search.

Returning to the "Home" screen you will see all the search entries in the "Search" list. From there you can move any number of entries to your own lists thereby keeping the entries. Remember that all the entries remaining in the "Search" list will be removed when you carry out another search.

To see the details of an entry touch the list entry. The details will then be displayed. On the tablet version the details will be displayed on the right hand side. On the smaller screen devices the details will be displayed on a new screen.

That covers the main functionality of the LibraryBook app.
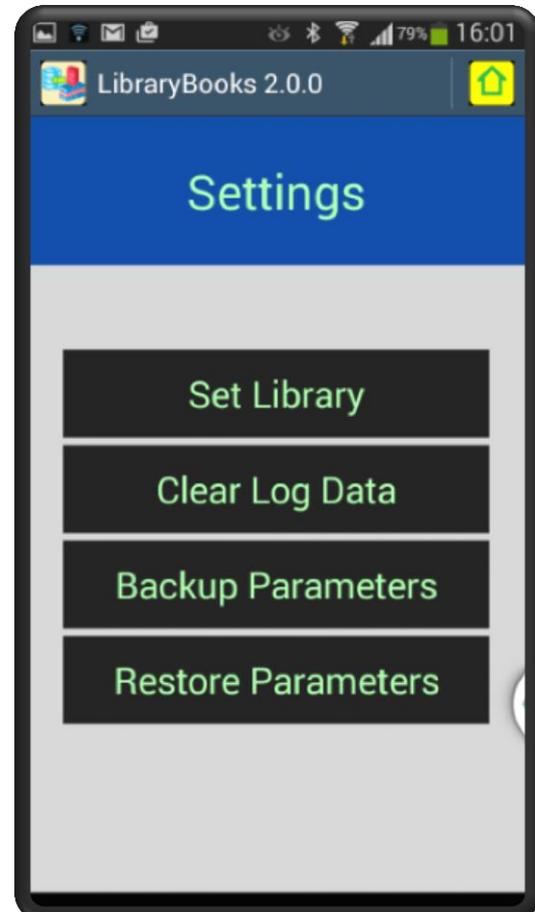
Settings and Log Screens

From any of the screens the user can access the "Settings" screen by displaying the menu and selecting the "Settings" option. The screen shown on the right will appear. The first option sets the library that the app will search. The default for this is "Solihull" so if your local library is not Solihull you will need to set the library. Only libraries that use Capita's Prism system can be accessed by the app, LibraryBooks.The second option removes all the existing log entries.The second option takes a backup of the parameter file. The output name of this flat file is defined by parameter id 5 and is stored in the directory defined by parameter 1.
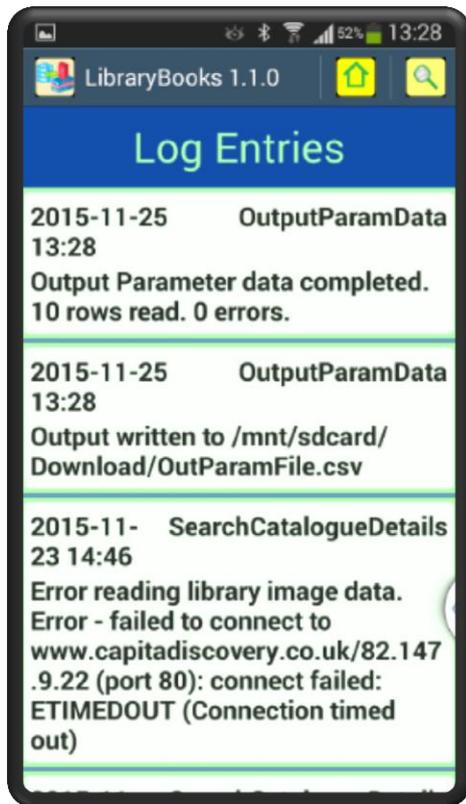
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The second option removes all the existing log entries.

The third option takes a backup of the parameter file. The output name of this flat file is defined by

parameter id 5 and is stored in the directory defined by parameter 1.

The fourth option replaces the existing parameters. It does not delete any existing parameters but overwrites any parameters it finds in the parameter backup file. If it only finds parameter id 1 in the parameter file it will overwrite the default directory with the new default directory. The format of the flat file it expects is the same as the format of the output backup parameter file. The flat file it looks for is defines by parameter 3 and the directory it looks in is defined by parameter 1.

Appendix A – Default Parameters

Id	Value	Description
1	"/mnt/sdcard/Download"	Input Output Directory.
3	"InpParamFile.csv"	Input Parameter File.
5	"OutParamFile.csv"	Output Parameter File
7	"Solihull"	Default Library
8	"http://www.capitadiscovery.co.uk/solihull/"	Default Search address
9	"|"	Separator

Appendix B – Input-Output File Structure

Backup Parameter File Input & Output Data	
Column	Description
1	Unique Identifier
2	Value
3	Description

Appendix C – Technical Information

LibraryBooks has been developed in Android Java and requires a minimum of Android api of 14. This is Android 4.0, Ice Cream Sandwich.

LibraryBooks holds its data in a Content Provider. There are public constants within the class BookContentProvider that give the URI's used. These are as follows:-

Parameter File Input & Output Data	
URI	URI Value
CONTENT_URI	"content://org.BlueshireServices.LibraryBooks.BookContentProvider/books"
IMAGE_CONTENT_URI	"content://org.BlueshireServices. LibraryBooks.BookContentProvider/bookImages"
GROUP_CONTENT_URI	"content://org.BlueshireServices. LibraryBooks.BookContentProvider/groups"
GROUPNAME_CONTENT_URI	"content://org.BlueshireServices. LibraryBooks.BookContentProvider/groupname"
MAXGROUP_CONTENT_URI	"content://org.BlueshireServices. LibraryBooks.BookContentProvider/maxgroup"
LOG_CONTENT_URI	"content://org.BlueshireServices. LibraryBooks.BookContentProvider/bookErrLog"
PARAM_CONTENT_URI	"content://org.BlueshireServices. LibraryBooks.BookContentProvider/bookParams"