

*finished on both platforms

SmartLib API

Functions

Get Libraries :

Returns all the activated libraries.

Currently there is a 2nd non valid library "TEPAK", for testing purposes.

MASTER_URL= "http://www.cs.ucy.ac.cy/projects/smartLib"

GET_LIBRARIES= "/MASTER/getLibraries.php"

URL: MASTER_URL + GET_LIBRARIES

Post Variables:

- **device:** "android" | "iOS"

Result:

JSON Array:

- **First Object:**
 - **result**
 - 1: Activated Libraries Returned
 - -11: Database Error
- **Other Objects**
 - All other objects must access ONLY if result==1 !
 - Variables for other objects
 - name
 - url
 - set this as **CUSTOM_LIB_URL**
 - email
 - town
 - country
 - telephone
 - telephone is not required, so may not be included

Login :

URL: CUSTOM_LIB_URL + "/authenticate.php"

Post Variables:

- **device:** "android" | "iOS"
- **username**
- **password**

eg execute login from iOS Device for user abc using GET method:

WebpageURL+ "/authenticate.php" + "?device=iOS&username=abc&password=123"

Result:

JSON Object:

- **result:**
 - 1: user credentials match (doesn't mean is logged in)
 - 0: login failed (wrong user and/or pass)
 - -11: database internal error
- **username**
- **name**
- **surname**
- **email**
- **telephone**
- **allowRequests**
 - **0:** ούτε ειδοποιήσεις εντός εφαρμογής, ούτε email
 - **1:** μόνο ειδοποιήσεις εντός εφαρμογής
 - **2:** μόνο ειδοποιήσεις μέσω email
 - **3:** και ειδοποιήσεις εντός εφαρμογής αλλά και email
- **level**
 - **2:** Μπορεί να κάνει κάποιον Level2(mod), ή να διαγράψει κάποιον χρήστη από την Βιβλιοθήκη
 - **1:** Μπορεί να εισάγει τις προσωπικές του Βιβλιοθήκες
 - **0:** Ο χρήστης δεν ενεργοποίησε ακόμη τον λογαριασμό του μέσω του email του.
 - **-1:** Ο χρήστης είναι επισκέπτης στο σύστημα.
 - *Μόνο σε >=1 ο χρήστης μπορεί να είναι logged in

Register:

URL: CUSTOM_LIB_URL+ "/SQLregister.php"

Post Variables:

- **device:** "android" | "iOS"
- **username**
- **password**
- **confPassword**
- **name**
- **surname**
- **email**
- **telephone**
- **appNotif**
- **emailNotif**

appNotif, and **emailNotif**, are checkboxes. Make the true value to "on", the false, is everything else!

Result:

JSON Object:

- **result:**
 - 1: user successfully enrolled to library
 - 0: user enrollment failed
- **message**
 - If result is 0, this message concatenates, all errors found.

Insert Book :

URL: CUSTOM_LIB_URL+ "/insertBookByISBN.php"

Post Variables:

- **device:** "android" | "iOS"
- **isbn**
 - of book
- **username**
 - user, owner of book

Result:

JSON Object:

- **result:**
 - 1: Book successfully inserted for user
 - 0: Book already existed for user
 - -2: Book ISBN didnt exist in Google Books API
 - -11: Database Internal error
 - -12: Weird Error: Didnt matched username with uniq ID. This must be programmers fault (wrong usage of PHP parameters)

State Of Book:

URL: CUSTOM_LIB_URL + "/stateOfBook.php"

Post Variables:

- **device:** "android" | "iOS"
- **isbn**
 - of book
- **username**
 - user, owner of book

Result:

JSON Object:

- **result:**
 - 1: Rented (user owns it)
 - 0: Book available for rent (user owns it)
 - -1: No rental (user owns it)
 - -2: Other - No Rental (user owns it)
 - -3: User doesnt own it
 - -11: Database Error
 - -12: Weird Error: programmers fault

Lent A Book:

Lents a book. Works only if book is in Available status(= 0)

URL: CUSTOM_LIB_URL + "/lentABook.php"

Post Variables:

- **device:** "android" | "iOS"
- **owner**
 - user will give his book
- **destination**
 - user will get the book
- **isbn**

Result:

JSON Object:

- **result:**
 - 1: Book Successfully lented
 - 0: User tries to lend himself
 - -1: destination username dont exists
 - -11: Database Error
 - -12: Weird Error: programmers fault
 - that means, book wasnt in state=0. (Status Of Book should be used before this Script) . Or parameters were wrong

Return A Book

Returns a book. Works only if book is in Rented status(= 1)

URL: CUSTOM_LIB_URL + "/ReturnABook.php"

Post Variables:

- **device:** "android" | "iOS"
- **owner**
 - will get his book back to its virtual library
- **isbn**

Result:

JSON Object:

- **result:**

- 1: Book Successfully returned
- -11: Database Error
- -12: Weird Error: programmers fault

Get User Books

Gets all books of a user

URL: CUSTOM_LIB_URL + "/getUserBooks.php"

Post Variables:

- **device:** "android" | "iOS"
- **username**

Result:

JSON Array:

- **First Object:**
 - **result**
 - 1: User Books have been returned
 - 0: User has no books Yet
 - -11: Database Error
 - -12: Weird Error: programmers fault
- **Other Objects**
 - All other objects must access ONLY if result==1 !
 - Variables for other objects
 - isbn
 - title
 - authors
 - publishedYear
 - pageCount
 - dateOfInsert
 - imgURL
 - lang
 - status
 - 1: rented
 - 0: available
 - -1: no rentals
 - -2: other - no rentals
 - For more info about variables check SmartLib Analysis doc 3.2 & 3.2

Change Status Of Book

Makes a book rentable / not rentable. Does NOT work if book is in Rented status (= 1)

URL: CUSTOM_LIB_URL + "/changeStatusOfBook.php"

Post Variables:

- **device:** "android" | "iOS"
- **isbn**
- **username**
- **newstatus**
 - **0: available**
 - **-1: no rentals**
 - **-2: other - not rentals**

Result:

JSON Object:

- **result:**
 - 1: Book Status Changed
 - -11: Database Error
 - -12: Weird Error: programmers fault

Delete A Book

Deletes a book. Does NOT work if book is in Rented status (= 1)

URL: CUSTOM_LIB_URL + "/deleteABook.php"

Post Variables:

- **device:** "android" | "iOS"
- **isbn**
- **username**

Result:

JSON Object:

- **result:**
 - 1: Book Successfully Deleted
 - -11: Database Error

- -12: Weird Error: programmers fault

Mobile Search :

URL: CUSTOM_LIB_URL + "/search.php"

Post Variables:

- **device:** "android" | "iOS"
- **username**
- **column**
 - not required
 - can be **only:** "authors", "isbn", "title"
- **keyword**

Returns:

JSON Array:

- **First Object:**
 - **result**
 - 1: Books found
 - 0: No results found
 - -11: Database Error
 - -12: Weird Error: programmers fault
 - **booksNum**
 - number of results found
- **Other Objects**
 - All other objects must access ONLY if result==1 !
 - Variables for other objects
 - username
 - owner of book
 - status
 - status for the owner
 - 1: rented
 - 0: available
 - -1: no rentals
 - -2: other - no rentals
 - isbn
 - title
 - authors
 - publishedYear

- pageCount
- dateOfInsert
- imgURL
- lang

eg: Search for: iphone:

Results:

Book: "iPhone OS Development: Your Visual Blueprint for Developing Apps for Apple's"

This results will come 3 times, with 3 owners and their status:

dzeina : 0(Available)

canast : 0 (Available)

ctsout : 1 (Rented)

When you get the result, you can show it 3 times, or modify staff in your code, to show only one.

Request A Book

Requests a book from a book Owner

URL: CUSTOM_LIB_URL + "requestABook.php"

Post Variables:

- **device:** "android" | "iOS"
- **owner**
 - user will receive this request
- **username**
 - user who makes the request
- **isbn**

Result:

JSON Object:

- **result:**
 - 1: User username, Successfully Requested Book from user Owner
 - 0: User dont accept requests (should be checked before)
 - -1: user already requested this book before
 - -11: Database Error
 - -12: Weird Error: programmers fault
 - that means, .. something!

Incoming Requests

All requests for books, from other users

Εσείς εκάμετε πχ request για ένα βιβλίο που το έχω εγώ!

URL: CUSTOM_LIB_URL + "incomingRequests.php"

Post Variables:

- **device:** "android" | "iOS"
- **username**

Returns:

JSON Array:

- **First Object:**
 - **result**
 - 1: Requests found
 - 0: No requests for user found
 - -11: Database Error
 - -12: Weird Error: programmers fault
 - **booksNum**
 - number for book for incoming requests
- **Other Objects**
 - username
 - user who made this request
 - isbn
 - title
 - authors
 - date
 - imgURL
 - acknowledge
 - answer for request
 - 1: positive (you can have the book)
 - 0: negative
 - -1: didnt answered yet

Outgoing Requests

All requests for books, from other users

Εγώ έκαμα request ένα βιβλίο που το έχετε πχ εσείς.

URL: CUSTOM_LIB_URL + "outgoingRequests.php"

Post Variables:

- **device:** "android" | "iOS"
- **username**

Returns:

JSON Array:

- **First Object:**
 - **result**
 - 1: Requests found
 - 0: No requests for user found
 - -11: Database Error
 - -12: Weird Error: programmers fault
 - **booksNum**
 - number for book outgoing requests
- **Other Objects**
 - username
 - user who made this request
 - isbn
 - title
 - authors
 - date
 - imgURL
 - acknowledge
 - answer for request
 - 1: positive (you can have the book)
 - 0: negative
 - -1: didnt answered yet

Books i Give :

All books user gave(lented) to other users

URL: CUSTOM_LIB_URL + "borrowBooks_iGave.php"

Post Variables:

- **device:** "android" | "iOS"
- **username**

Returns:

JSON Array:

- **First Object:**
 - **result**
 - 1: Requests found

- 0: No requests for user found
 - -11: Database Error
 - -12: Weird Error: programmers fault
- **booksNum**
 - number for book requests
- **Other Objects**
 - username
 - user who made this request
 - isbn
 - title
 - authors
 - date
 - imgURL

Books i Took :

All books user took(borrowed)from other users

URL: CUSTOM_LIB_URL + “borrowBooks_iTook.php”

Post Variables:

- **device:** “android” | “iOS”
- **username**

Returns:

JSON Array:

- **First Object:**
 - **result**
 - 1: Requests found
 - 0: No requests for user found
 - -11: Database Error
 - -12: Weird Error: programmers fault
 - **booksNum**
 - number for book requests
- **Other Objects**
 - username
 - user who made this request
 - isbn
 - title
 - authors
 - date
 - imgURL

Reply to Request

User who owns the book answers 1 | 0 to user requested

Previous acknowledgement for book must be -1 (Not answered). Otherwise it wont work(user cant change reply)

URL: CUSTOM_LIB_URL + "replyToBookRequest.php"

Post Variables:

- **device:** "android" | "iOS"
- **owner**
- **destination**
- **isbn**
- **answer**
 - "0" or "1"

Returns:

JSON Object:

- **result**
 - 1: Successfully replied
 - -11: Database Error
 - -12: Weird Error: programmers fault

Delete a Request

Works only from user who requested side, and deletes only negative answered request or not answered yet request.

URL: CUSTOM_LIB_URL + "deleteABook.php"

- **device:** "android" | "iOS"
- **owner**
- **username**
 - user who did the request, and it dint answered yet, or was answer was negative,

and now wants to delete it

- **isbn**

Returns:

JSON Object:

- **result**
 - 1: Successfully deleted
 - -11: Database Error
 - -12: Weird Error: programmers fault

Popular Books

URL: CUSTOM_LIB_URL + "/popularBooks.php"

Post Variables:

- **device:** "android" | "iOS"
- **username**

Returns:

JSON Array:

- **First Object:**
 - **result**
 - 1: Books found
 - 0: No popular books found
 - -11: Database Error
 - -12: Weird Error: programmers fault
 - **booksNum**
 - number of results found
- **Other Objects**
 - All other objects must access ONLY if result==1 !
 - Variables for other objects
 - username
 - owner of book
 - status
 - status for the owner
 - 1: rented
 - 0: available
 - -1: no rentals
 - -2: other - no rentals
 - isbn
 - title
 - authors
 - publishedYear

- pageCount
- dateOfInsert
- imgURL
- lang

Mail sent

Mail function depends whether Mail Server exists.

URL: CUSTOM_LIB_URL + "/sendMessage.php"

Post Variables:

- **device:** "android" | "iOS"
- **username**
- **destination**
 - username of dest. user
- **message**

Returns:

JSON Object:

- **result**
 - 1: mail send
 - 0: user dont accept mail messages
 - -1: Mail Server Error