



# Heuristic Evaluation

Project 3 • Redesigning the National Library Board website/app

## Introduction

### Product and Goals

This report documents the heuristic evaluation of the National Library Board (NLB) mobile application, which is an app that allows users to access library services on-the-go.

The goal of this heuristic evaluation is to identify the usability problems from NLB mobile user interface design.

### Findings

A total of 27 evaluation issues were observed, with the most common usability issues encountered being from the search function.

## Overview of NLB mobile app

The NLB mobile app is available in both the Apple store and Google Playstore. The app has been available since 2017.

## Methodology

Nielsen's ten usability heuristics was used to evaluate the tasks. The tasks were performed by each team member and the usability issues and heuristic violations were recorded. The issues were then evaluated and given a severity rating.

Heuristics Evaluated:

- #1: Visibility of system status
- #2: Match between system and the real world
- #3: User control and freedom
- #4: Consistency and standards
- #5: Error prevention
- #6: Recognition rather than recall
- #7: Flexibility and efficiency of use
- #8: Aesthetic and minimalist design
- #9: Help users recognize, diagnose, and recover from errors
- #10: Help and documentation

[\(10 Heuristics for User Interface Design: Article by Jakob Nielsen\)](#)

Severity rating (0-4)

- 0 = I don't agree that this is a usability problem at all
- 1 = Cosmetic problem only: need not be fixed unless extra time is available on project
- 2 = Minor usability problem: fixing this should be given low priority
- 3 = Major usability problem: important to fix, so should be given high priority
- 4 = Usability catastrophe: imperative to fix this before product can be released

## Tasks Evaluated

The tasks were identified

1. Find and borrow an ebook
2. When at the library, use the mobile app to borrow the book you liked.
3. Find an event (Event name: A maneful of colours for SingaPaw)
4. Add preferred library through NLB mobile
5. Renew your book loan & extend the due date using the mobile app.

## Findings

No.	Section	Issue	Heuristics Violated	Severity rating
1	Search function	Unable to go back to search after ebook is borrowed. Click search to go back to search	#9	3
		Misleading "filter" function. No filter function for book search, only "Advanced Search"	#2, #5	3
		When searching for book titles, there is no predictive search function for wrong search	#5	3
		Audiobook search appeared in ebook search result.	#4	4
		No suggestion on what a user could search for	#10	1
		Under "Recent Searches", no image of the book cover shown, users are unable to remember what the book looks like.	#6	3
		Search is not available on the e-book screen	#7, #4	4
		Some books do not come up in the list when searched using author name whereas	#5	4

		they are come up when searched using book name		
2	Home Screen	Multiple icons of the same functions to borrow books (E.g. On header, icon to use camera to borrow books is beside the eCard for same function)	#8	3
3	Icon Design	Two similar user account icons at the main page, with different function	#8, #4	3
		Login icon confusing. Uses the "on-off" icon	#6	2
		The share icon design looks like upload	#2	1
		Filter icon is used for both filter for events and as advanced search when looking for books	#2, 4	3
4	Chat	No error prevention in the chatbot section, did not reply directly to the question.  No context on cancel button	#5, #9	3
5	Feedback	After the user issues a feedback, there is no obvious function to return where the user came from	#3	1
6	Books/e-book	When a user favorite a book, it goes to the bookmarks. (Mismatch of ideas)	#4,2,6	3
7	App	App crashes after a while	#1	4
8	Sort / Filter	Cannot sort the list as per a recommended read or popularity	#3	3
		Cannot sort / filter / search within ebook categories	#3	4
9	Login	When the user forgets password, the user is prompted to get identification details, when user forgets userid the user is prompted to change for a new password as well	#4,7	3

10	Preferred Library	Once user selects a preferred branch, the user have no way to see the events of other library	#3	3
		When a user selects a preferred library, they cannot unselect the select.	#7	3
11	Help section	No onboarding to guide users on the many features of the app	#10	1
		No info on how the points are added & used	#10	2
12	Banner, Whats happening and Events	<ul style="list-style-type: none"> <li>- Banner has mix of announcements, events and general announcements</li> <li>- What's happening has announcements</li> <li>- In website events navigation button is named "whats on"</li> </ul>	#4	3
13	Map colour pins	<ul style="list-style-type: none"> <li>- No legend for 3 different coloured pins on map</li> <li>- <b>Red:</b> not sure what this is but includes - National Library / Lee Kong Chian reference library and The LLibrary</li> <li>- <b>Orange:</b> Regional Library</li> <li>- <b>Blue:</b> Public Library</li> </ul>	#6	2