Usability report: calibre

Abstract

This document presents the findings of the UKKOSS13 student project team's usability evaluations on the open source calibre e-book library manager. Calibre was examined using both expert review methods and user tests, and the findings are combined in this document. Short descriptions of the methods used are also presented. Several problematic areas were identified in the evaluations, with varying degrees of severity. Based on the findings, the project team developed some improvement ideas for the problem areas and they are presented in this document.

Introduction

UKKOSS13 is a student project, a part of the larger UKKOSS project. The goal of the larger project is to examine ways of bringing usability work to open source software development, and research is done by evaluating the results of these student projects. The goals of the student projects are different; students pick an open source software project, get to know it, and decide how to best bring usability issues to the OSS community's attention. The open source software under research in this UKKOSS13 project is calibre, an e-book management software.

Methods

This report examines calibre from multiple viewpoints. The primary source of data is the usability tests conducted with volunteers, as this data presents actuality by showing issues the test users encountered. These findings are backed up with expert reviews by UKKOSS13 members.

The combined findings are grouped into 10 problem categories, which were first established in the heuristic evaluation.

Cognitive walkthrough

Cognitive walkthrough is an expert evaluation method, where an expert or team of experts forms their initial impressions on a UI or piece of software. These initial impressions are recorded, and used to identify likely problems other users may have. A cognitive walkthrough is traditionally done early in usability evaluation or during early development of software. The cognitive walkthrough is more free-form than the other evaluation methods and is in essence simply notes of the evaluator's first reactions to the evaluated UI or software.

In UKKOSS13, each project member conducted their own cognitive walkthrough which were then shared between the team, discussed and combined into one document. The findings were taken into account as the heuristic evaluation was conducted, and most of the key points found were also found to violate the heuristic set used.

Heuristic evaluation

Heuristic evaluation is an expert evaluation method for detecting usability problems in the design of the user interface of a software. Heuristic evaluation is done by analyzing the target software with a set of predetermined principles (henceforth referred to as heuristics), which can be considered as a list of characteristics that a 'usable' software product should fulfill. One of the most commonly used (and applied in practice) set of heuristics is Nielsen's 10 usability heuristics, and they are also used in this evaluation.

The heuristic evaluation was mainly done for the 1.2x version family of the software on the Microsoft Windows platform. A cursory check was performed on the OS X version of calibre as well.

Usability tests

Usability tests were performed in a dedicated usability lab in the University of Oulu. The test situations were recorded on video, along with recording the test PC's screen for the duration of the test. These two videos were then used to dissect each usability test and all of their actions and comments were annotated. Due to ethical reasons, these videos were only viewed by the student project team.

The users were also given a brief interview both before and after the tests. The purpose of the interviews was to assess their computer usage habits, and to get their overall impression of calibre and if they would be willing to use it in the future.

Users ranged from teenagers to 50+ years old. All test users possessed at least moderate computer skills. None of the users had used calibre before, but some had used other e-book managers (smartphone or tablet based, e-book retailer specific managers).

Usability tests were conducted on the 32-bit Windows version of calibre (version number 1.26) on a Windows 7 PC.

User interviews

Each test person was interviewed before and after the actual usability test took place. The purpose of the first interview was to survey the backgrounds of the test users; e.g. their age, education, experience with computers and ebooks. The post-test interview aimed to reveal any additional information the users might had not been able to communicate during the test. The results of the pre-test interview are collated into Appendix A.

The interviews that took place after the usability test (see Appendix B) were roughly based on a general structure of questions, but free-form discussion was allowed and encouraged. The translated transcriptions presented in Appendix B are somewhat edited in order to maintain readability.

The topics discussed in the post-test interview were as follows:

- What is your overall impression of the software?
- Was the User Interface clear / easy to understand?
- Did the software appear to be useful?
- Could you see yourself using calibre or some similar software in the future?

Test cases

Usability tests were done with the aid of 10 use case situations, which aimed to simulate standard usage of calibre. More in-depth tasks such as editing books or advanced book conversion settings were ignored, as these are not relevant to basic usability evaluation. Basic library maintenance tasks and the majority of the central features listed at the calibre web site were the emphasis.

1. Use case: Reading an e-book with calibre
   ● Launch calibre.
   ● Pick an ebook of your choice from the library.
   ● Open the e-book for reading.
   ● Close the window.

2. Use case: Adding an e-book to calibre library (from local storage)
   ● Select the file pg18857-images.epub ('A Journey to the Centre of the Earth) to be added to the library.
   ● Open the book you added for reading.

3. Use case: Downloading public domain e-books with calibre and editing metadata
   ● Load an e-book from the Internet using calibre.
   ● Select Archive.org, Open Books and Project Gutenberg as stores in the search window.
   ● Search 'The Letters of Wolfgang Amadeus Mozart' -book and add it to the calibre library.
   ● Update/ edit the book's metadata. Check that both the name of the book and the author are written correctly.
   ● Apply tags to the book (for example one pre-existing tag you can select from a dropdown menu, or a tag that you make up yourself).
   ● Download metadata for the book from the web and compare it to the data you added earlier yourself.

4. Use case: Editing metadata in bulk for several e-books at once
   ● Select all Jules Verne books from the library.
   ● Add a tag 'Classic' for all the selected books, and change the author's name into same form for all of them.

5. Use case: Searching, converting, exporting and removing e-books

- Search for the book 'Pride and Prejudice' using calibre library's search function.
- Convert the book into PDF-format.
- Save the above PDF-file to disk (i.e. export the book from calibre library).
- Remove the book from calibre library.

6. Use case: Managing an e-reader device with calibre
- Connect Kindle e-reader to calibre and wait for calibre to detect it.
- Copy the book 'The King in Yellow' to the e-reader.
- The book 'Alice's Adventures in Wonderland' is in calibre in several formats. Copy the book in AZW3 format to the e-reader.
- Move the book 'Adventures of Huckleberry Finn' to calibre library (first change the view from calibre library to the books in the e-reader).

7. Use case: Downloading the articles of today's Helsingin Sanomat in e-book format
- With calibre you can download news from several news sites as e-books. Open calibre's fetch news function.
- Fetch the articles of today's Helsingin Sanomat.

8. Use case: Adding an empty book from ISBN number
- The ISBN number of the book 'The Last of the Mohicans' is 1404315616.
- Add an empty e-book to calibre library using the above ISBN number.
- Download metadata for the book from the Internet.
- Check that the name of the book is correct in the downloaded metadata.
- With the help of this empty book you added you can buy the book; visit a linked online store (Amazon or Google books) to see that the book they offer is the correct one (but don't buy it! TOL doesn't have the money!).

9. Use case: Searching with the tag browser and managing Virtual Libraries
- Use the tag browser's sorting function to search for all Jules Verne's books.
- Create a virtual library for this author.
- Use the tag browser and search for the tag 'Science Fiction' within the virtual library you just created.
- Create a new virtual library for that tag and that author.
- Exit the virtual library.
- Remove all the created virtual libraries.

10. Use case: Managing libraries
- Create a new empty library (for example on the desktop, name it e.g. as 'New Library').
- Switch back to the original library ('Calibre Library').

Results

Problems are presented under ten problem categories, which were defined during the heuristic evaluation. Additional problems, which may not fit one of these categories, are presented separately. Possible improvement ideas are proposed for each problem area.

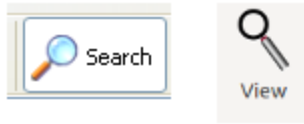| #	Problem	Severity rating	Heuristics
1	Inconsistent use of icons, ambiguous icons	2	#2: Match between system and the real world #4: Consistency and standards #6: Recognition rather than recall
2	Crowded user interface	4	#7: Flexibility and efficiency of use #8: Aesthetic and minimalist design
3	Difficulty of predicting the program behavior	2	#5: Error prevention
4	Some active windows prevent access to other open windows	3	#1: Visibility of system status #6: Recognition rather than recall
5	Activity indicators visible even when there are no active tasks	2	#1: Visibility of system status #9: Help users recognize, diagnose, and recover from errors
6	Inconsistent amount of information in tooltips and insufficient help	1	#10: Help and documentation
7	Job canceling process	3	#9: Help users recognize, diagnose, and recover from errors
8	Not following platform conventions	0	#4: Consistency and standards
9	Inconsistent terminology	2	#4: Consistency and standards
10	Error prevention and user mistake handling	2	#5: Error prevention #9: Help users recognize, diagnose, and recover from errors

Problems identified in the heuristic evaluation were assigned severity ratings in order to help allocate resources to those problems that most need it. The severity ratings can also be used to determine if additional usability efforts are required. The rating scale is based on Nielsen's severity ratings for usability problems. As the scale was primarily designed for evaluating commercial products before release, some changes were made to accommodate it to an open source development environment. The most severe rating, 'Usability catastrophe', which is used for frequent and pervasive issues that completely prevent users from using the program to its intended purpose, was dropped. The reason for this is that calibre could be considered to be mostly 'finished' and in a bugfix/maintenance phase after a number of public releases. 'Major

usability problem' is instead the highest rating, and a less severe rating, 'Moderate usability problem', was created.

Severity Rating:	Description:
0: Not a usability problem	Issue that might violate a usability heuristic, but is not a usability problem in the context it is encountered in.
1: Cosmetic problem	Issue that the user can easily overcome; or an extremely rare, non-critical issue. Doesn't need to be fixed unless there is extra time available.
2: Minor usability problem	Issue that presents some annoyance for the user, or a non-critical issue that occurs occasionally. Low priority for fixing.
3: Moderate usability problem	Issue that presents difficulty for the user, or one that occurs somewhat more frequently or persistently. Moderate priority for fixing.
4: Major usability problem	Issue that users may be unable to fix themselves and/or an issue that occurs frequently and persistently. High priority for fixing.

1: Inconsistent use of icons, ambiguous icons

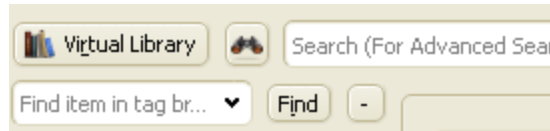| Problem:	Improvement idea:
Problem: The 'View' button's use was not apparent to some users. One test user, who had previously been mostly using localized versions of Windows, kept thinking the 'View' button was used for searching (the source of confusion being the magnifying glass icon; picture 1).	**Improvement idea:** Change the 'View' icon. An open book could work.
Problem: One icon can have different functionalities in calibre. For example the icon for saving news schedule options in the 'Fetch news' menu is the same as the 'Save to disk' icon in the main toolbar.	**Improvement idea:** Each icon should always relate to the same kind of functionality every time the icon is displayed. If a new functionality needs an icon, don't recycle the existing icons.
Problem: In some places the Close-button is plain text, and in other places there is also an x-sign next to the text.	**Improvement idea:** Make each instance of the close button consistent throughout calibre.
Problem: Using the minus sign to close a virtual library is not logical. Users had to hover the mouse over the button and read the tooltip.	**Improvement idea:** Replace the icon with something else, a red X or simply text 'close' or 'exit'. Alternatively, displaying virtual libraries as tabs by default will remove the need to have a close button altogether.

Picture 1: Same icon, different functionality: a common search button vs. calibre view button.

2: Crowded user interface

Problem	Improvement idea
Problem: One example of the crowdedness is the virtual library/tag browser/library search/saved searches area. It is very difficult to see which of the elements belong together.	**Improvement idea**: Different functionalities could be separated from each other for example by adding some empty space between them.
Problem: Many users mistook the tag browser search bar for the library search, attempting to look for the book's name inside the tag browser (obviously with no results). (Picture 2)	**Improvement idea:** The tag browser search and library search are too close to each other (in fact, the whole corner around the Virtual library button is very cluttered). Maybe moving the tag browser search down, just above to the 'Alter tag browser' button could help? Also, the text in the library search bar's Go!-button could be changed to Find or Search, because the users seemed to be drawn to use the tag browser search due to the Find-button there.
Problem: To the right of the search bar is an additional dropdown menu, where you can save searches. Next to that are two buttons with somewhat ambiguous icons. The button on the right has a small downward arrow like some of the icons on the main toolbar, but clicking the arrow doesn't function in the same way, instead you have to hold down the button. This isn't consistent with the rest of the program and could confuse users.	**Improvement idea:** The icons could be changed or rescaled to be at least somewhat legible.
Problem: Users had some trouble using the bulk edit window, as there is so much functionality in a small space. Users required a lot of time to find the relevant fields and in some cases, couldn't spot them at all.	**Improvement idea:** The bulk edit window is already divided into two tabs, Basic Metadata and Search and Replace. Maybe moving some of the more rarely-used options to an additional tab (Advanced Metadata?) might help?
Problem: Calibre's interface doesn't scale well. The interface elements remain the same size when reducing the window size. Some of the buttons are hidden under a dropdown menu which prevents seeing and using them. On non-HD displays (e.g. a small laptop with 1366x768 screen) the program must be run in fullscreen in order to see the whole GUI at once.	**Improvement idea:** Apart from rescaling graphical assets used in calibre and extensively changing UI scaling, this problem is very difficult and time consuming to fix.

Problem: The initial view on the convert books window will allow the user to change the input and output formats, as well as to customize basic metadata. For the most part, this is all that is needed for a conversion, but there are also multiple other pages full of advanced options, way more than the average user might need. These are really only needed in the case of conversion errors. Perhaps the most important elements in the window are the input/output menus, but they aren't highlighted in any way.	**Improvement ideas:** Change the layout of the window so that the essential functionality is emphasized. Advanced options shouldn't steal the focus at the first glance.
Problem: Using Virtual Libraries was difficult for most of the test users. Most of them had initial issues simply locating the Virtual Library button (picture 2), and some users first tried the Calibre Library button on the main toolbar. The location of the button does not seem to be intuitive.	**Improvement idea:** Move the virtual library button to another spot, perhaps right above the 'Alter tag browser' button?

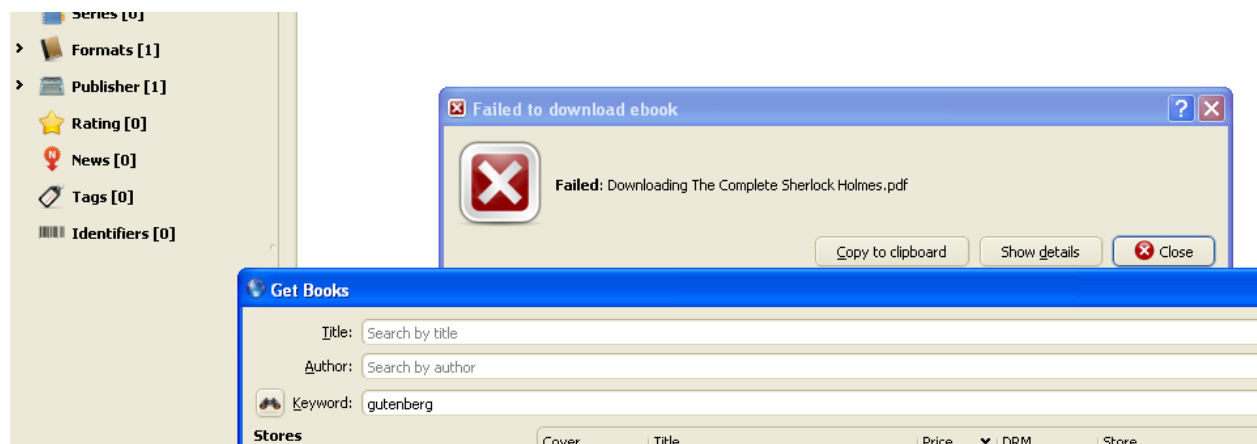*Picture 2: Which search bar to use? A crowded part of the UI.*

Problem: When an e-book is being converted, it is not very clear where the output file will be stored. The way this works in reality is that the new format will appear in the same library entry alongside the original format, but it might not be very obvious to a new user.	**Improvement idea:** Apart from adding a column for existing formats for a given book, it may be difficult to communicate this behaviour to a new user. Formats are listed on the book details, but test users did not generally notice it.
Problem: When editing a book's metadata, it is not always clear which buttons will save modifications (Next/previous buttons will save changes without prompting). This makes it easy to accidentally edit some data without ever noticing it.	**Improvement idea:** Prompt to save changes when clicking next/previous buttons.
Problem: The integrated search function in 'Get books' isn't very reliable, e.g. items found by the search might not correspond to the actual book inventories of the shops.	**Improvement idea:** Hard to fix, as much of this functionality is store-side and not something calibre developers can influence.
Problem: When downloading metadata in Edit metadata, the pop-up window's title reads "Downloading metadata…" even after the program has finished downloading it. Some users didn't know if the download process was finished or not.	**Improvement idea:** The 'Downloading metadata…' window title should be changed. The title doesn't change after the download finishes, falsely implying that the download is still ongoing.
Problem: Users were often confused whether or not the book transfer operation finished, when sending a book to the device from calibre's library. The operation is so fast that users didn't really notice the activity indicator spinning for a fraction of a second, and were left wondering if the task was completed or not. There is an additional column, 'On device', which will be marked with a green checkmark when the book is present on the connected device, but most users didn't notice this.	**Improvement idea:** Adding a book to the library from the device brings up a popup prompt with a progress bar of the operation. Including a similar prompt for the library-to-device operation as well would increase consistency and communicate directly to the user that the operation has started and when it has finished.
Problem: Send to device and send to main memory commands were a little unclear to some users, and they sometimes went looking elsewhere for the function to transfer the book.	**Improvement idea:** Maybe device-specific texts could change according to the attached device? For example 'Send to device' could be 'Send to Kindle', or 'Send to Kobo', etc.

Problem: When searching for news inside the 'Fetch news' -window there is no indicator for the search process. The program does not communicate that it is searching.	**Improvement idea:** The progress indicator on the lower right corner is moving but it is hard to notice. The arrow animation, that is used in some instances, could be used here also to notify the user of the download process.
Problem: The 'Get books' window doesn't have a visible option for downloading the book. Double-clicking on a search result will download it, and there is a 'Download' option on the right-click context menu, but some users expressed confusion that there was no immediately visible option for download. Also some users got confused with the green arrow symbol (picture 2), mistakenly thinking of it as a download button.	**Improvement idea:** A download button could be added to Get books -window to show users a clear, visible way to download a book. Also, replace the green downward pointing arrow with a symbol that doesn't resemble a button element.
Problem: Virtual libraries are created using the currently active search expression, so those users who chose to manually search for the instructed terms also erroneously included additional books from another author (the use case instructed users to search for and create a virtual library for all of the author Verne's books. An additional book contained the word Verne in its comments metadata). Using the tag browser appends a filter to the search expression, for example limiting author name searches to just the author metadata field.	**Improvement idea:** Creating a virtual library by selecting the books you want to include in a virtual library from the library, in addition to the current way by using the main search or tag browser, could be one new beneficial functionality to calibre. This would allow users to create, for example, to-read lists or other sets of books that don't necessarily share any common metadata. Right now, you'll have to apply a tag or some other common metadata entry to create a list like this, or manually type a search expression containing the titles of the books in parentheses separated by OR logical operators. Additionally, the right-click context menu inside the calibre library could feature an option for directly adding a book to an existing virtual library, allowing easy maintenance of virtual libraries. This could similarly be achieved with OR operators in the search expression, but as a downside the expressions would grow in length.
Problem: The name 'Virtual Library' is not very descriptive. Test users did not initially understand what it referred to. After creation of their first virtual library however, they generally seemed to understand the concept	**Improvement idea:** Alternate ideas for renaming virtual libraries could be bookshelves, sub libraries, etc. The word 'virtual' doesn't really have a connotation which would warrant its use to describe a subset of something.

and could finish the rest of the task without too much trouble.	
Problem: The virtual library button behaves differently when compared to other buttons. The other buttons have small downward pointing arrow that opens a menu, but the virtual library button does not have that. I would be more logical to the users if the use of these arrows was consistent.	**Improvement idea:** Add a small arrow to the virtual library button, signifying that it will open a menu.
Problem: Users had difficulty with switching out of and between virtual libraries.	**Improvement idea:** There already exists a functionality to display the main library and any created virtual libraries as tabs above the library view. This is a much more logical way of navigating within virtual libraries than through the virtual library button. This could be on by default.

4: Some active windows prevent access to other open windows
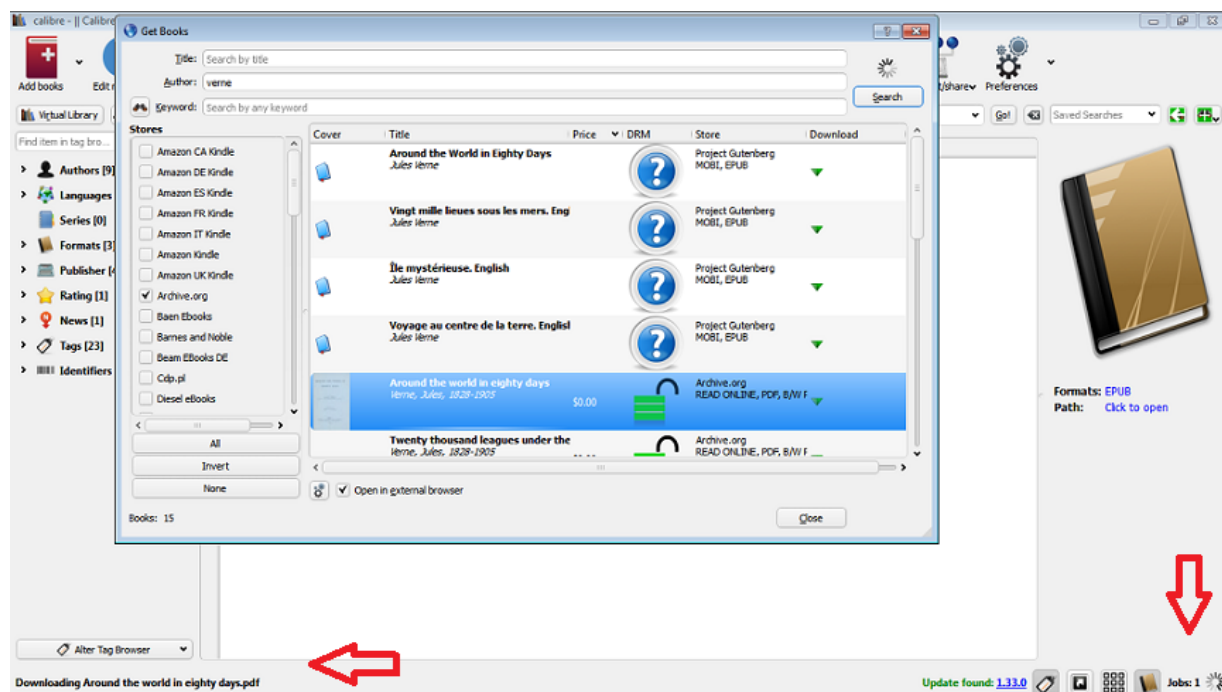
Problem: Some windows inside calibre prevent the user from using any other window in calibre (including the main view itself) (picture 3). These focus-stealing windows need to be closed before the user can access other functions. Focus-stealing windows also prevent the user from accessing the help functions on the main library view.	**Improvement idea:** All the windows should be available, regardless of other open windows, if there are no critical reasons for prohibiting access.

Picture 3: An error message beneath a focus-stealing window. 'Get books' has to be closed before the error message can be interacted with.

5: Activity indicators visible even when there are no active tasks
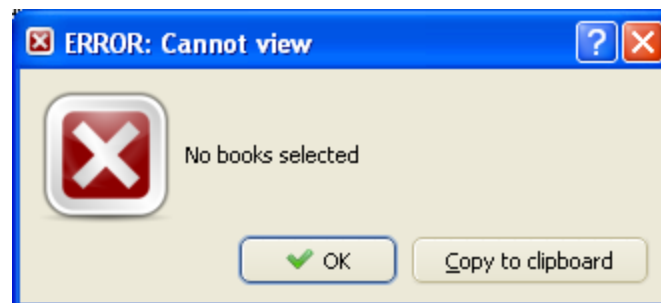
Problem: The activity indicator spins in the lower right corner of the main window while a task is active (picture 4), but users failed to notice it and so they didn't know whether the task was finished or not. This occurred when downloading books via Get books, and during book transfer to device.	**Improvement idea:** The book conversion process displays a brief arrow animation above the activity indicator, which most users noticed. Users then knew to look for the activity indicator on following tasks. The same arrow animation could be added to other tasks as well. To avoid irritation of more experienced users, the arrow animation could be displayed only a certain amount of times after initial calibre installation.
Problem: The activity indicator is visible even though there are no active tasks. The motionless indicator may be interpreted as calibre has stopped responding.	**Improvement idea:** The indicator could be for example invisible or greyed out when not active.

Picture 4: The small activity indicators are displayed at the background while the user is still focused on the pop-up window.

6: Inconsistent amount of information in tooltips and insufficient help

Problem: Some tooltips are just a few words (for example the tooltip for Remove books is simply "Delete books"), while others go into great detail. There are also buttons that would really need tooltips but have none.	**Improvement idea:** Tooltips should be a few sentences at most, while detailed information should instead be written in a separate help section. On the other hand, useless tooltips that just repeat what the icon or icon text itself say are basically useless. Buttons and icons with no textual explanation could benefit from tooltips, though.
Problem: There are some question mark -buttons that do not do anything in various spots in calibre (picture 5). For example if you do not have a book selected, and click 'View you get an error message where this problem occurs. These buttons are probably intended for helping (or have been meant to but they were not finished) but now they may be just misleading the users.	**Improvement idea:** The buttons should be either removed or finished.

Picture 5: The question mark button has no functionality.

7: Job canceling process

Problem: Processes like converting books or downloading news cannot be prevented or aborted from the initial menu. User has to go to the Jobs-menu to cancel the processes and it prevents users from quickly aborting the process which they didn't intend to start. The user is also required to close the open window to access the Jobs-menu and this slows the canceling process.	**Improvement idea:** Aborting an active task should be made possible from the initial menu.

8: Not following platform conventions

Problem: When creating new libraries the test users first tried to create a new library either in a non-empty folder or a non-existing folder, and received the corresponding error message.	**Improvement idea:** When a user types a non-existing folder name on the location field calibre could create that folder automatically instead of giving an error message.
Problem: Some users didn't use the folder selection dialog during the creation of a new library. They instead opted to create a folder manually outside of calibre, and then typed its location in the library creation window.	**Improvement idea:** The button for selecting the library folder location could have a larger or more clear icon, and a tooltip could be added to it as well.
Problem: When hovering over certain objects, the cursor changes to a hand cursor but its behavior remains the same as the original cursor. This happens for example when downloading books from the Get books menu. The user still needs to double click the book to start downloading it, even though the cursor has changed to hand cursor.	**Improvement idea:** The behaviour of the cursor should be changed to match the cursor's outlook or alternatively just use the arrow cursor.

9: Inconsistent terminology

Problem: Some users had trouble distinguishing between 'Add books' and 'Get books'.	**Improvement idea:** 'Get books' could be renamed to something more distinct from 'Add books'. 'Download books', for example, might work.
Problem: The terms 'e-book' and 'ebook' are both used in calibre. The term 'e-book' is used in the E-book Viewer, while the term 'ebook' can be found in some other instances (some help texts, e.g. in 'Edit book', and in the online help). Otherwise, calibre mostly uses the term 'book' (most of the main toolbar icons refer to just 'books').	**Improvement idea:** It makes sense to refer to the ebooks as just 'books' in most circumstances, but in some specialized situations it may be necessary to refer to them as ebooks or e-books. In these situations there should be a commonly shared spelling of the term.
Problem: On calibre's home page, calibre is always written with a lowercase c. In calibre itself however, it is sometimes written with a lowercase c and other times with a capital C.	**Improvement idea:** Unifying the naming conventions. The name of the software should be written correctly in it.
Problem: Capitalisation of icon texts is inconsistent. In some icon texts the first letter of each word is capitalised (e.g. 'Edit Book', 'Calibre Library'), while elsewhere only the first word is capitalised (e.g. 'Add books', 'Convert books') (Picture 5).	**Improvement idea:** Unifying the naming conventions.

Picture 5: Main toolbar icons. Note the capitalisation differences with 'Edit Book' and 'Calibre Library' and the rest of the icons. Also note the 'Donate' button, which doesn't have any text underneath it.

Problem: There are also some instances where the users can perform undesirable actions. The user is for example able to click the Remove books -button even if there are no books selected, and no error message appears.	**Improvement idea:** Performing undesirable actions can be prevented for example by disabling (e.g. graying) the options that are not applicable in a specific use situation, or by displaying an error message.
Another example is that if the user edits the metadata of a book and clicks Cancel, all the changes made will be lost.	Some kind of a confirmation for making sure whether the user wants or does not want to discard the changes would be good.
Also, when editing metadata, you can remove selected formats from a book and no confirmation message appears. Basically this makes it possible for the users to accidentally delete some book formats.	

References

Nielsen, J. (1995). 10 Usability Heuristics for User Interface Design. Retrieved 3.3.2014, from http://www.nngroup.com/articles/ten-usability-heuristics/

Nielsen, J. (1995). Severity Ratings for Usability Problems. Retrieved 3.3.2014, from http://www.nngroup.com/articles/how-to-rate-the-severity-of-usability-problems/

Appendix A: A summary table of the test users

	Test person 1	Test person 2	Test person 3	Test person 4	Test person 5
Age	60	26	15	23	56
Education	M. Sc. (Tech.)	Master of Arts (soon to graduate)	Junior high school	Bsc (4th year University student)	D. Sc. (Tech.)
Prior experience with ebooks	None		None	Has used iPad for reading ebooks / articles	Familiar with the concept. Has tested an ebook on an iPad and has examined a Kindle device
Has an ebook reader device?	No	Kindle Paperwhite	No	No dedicated device; has used a tablet for reading ebooks	No dedicated device; has tested ebooks with an iPad
Preferred way of reading: traditional / ebook?	N/A	Considers ebooks easier to read than traditional books	N/A	Hasn't decided yet but really enjoys reading on the iPad	Prefers traditional books; sometimes reads books in PDF format via PDF reader app
Experience with computers	Mostly work related. Has used computers since 1980s.	20+ years of hobbyist experience. Builds his own computers.	Hobbyist / gamer	Hobbyist; has used computers since childhood	30+ years: Programming, usual work related computing etc; Uses Macs at work (mostly for the quality display) and an iPad at home & on the move
Operating systems used	DOS / Windows 3.x / 9x / XP / 7	Windows (+ some Linux usage related to studies)	Windows	Windows, mobile OSs (iOS, Sailfish), OS X	OS X (preferred), Windows, Linux
Experience with ebook management software	None	None	None	Mendeley for article management; iBooks on the iPad	None (on desktops)
Familiarity with open source software	Has used Firefox and some other common applications but hasn't paid attention to the OSS aspect.	Has used some math related OSS software; Firefox etc. common software.	None	Familiar with OSS software and has used Linux from time to time.	A familiar concept; Was more involved with OSS in the early 1990s; uses some applications; hasn't used OSS tools for development in recent years
Knowledge of usability activities	Recognizes poor usability but hasn't any theoretical knowledge on the subject	No theoretical knowledge on the subject	None	A couple of University usability courses; tries to pay attention to usability in general	Familiar with Nielsen's golden rules and ISO standards regarding software development; recognizes the importance of usability in software development

Appendix B: User interview transcriptions

User 1

"When using this kind of new software for the first time, it felt quite confusing. When you had these instructions to follow, I think most of the tasks went at least OK. Some times you had to go back and forth. Using these tags is something I haven't used to. It was a new thing for me and you can't instantly figure out what the tags are and how to use them."

"The [user interface] was structurally divided OK, but there was a huge amount of different things. It took a while to spot the different functions. You couldn't instantly figure the UI out just by looking at it. At least the UI had the usual windowing principles; e.g. function buttons at the top, then it had the main view and different indicators and additional functions at the side."

"A lot of [UI elements] are displayed at the same time."

"The software seemed useful, if it provides an interface between the book and the libraries.. and you could download the books to the computer and from there send them to the reader device. When you purchase a new ebook, you have to download it and send it to the device. I would assume that the reader device can't hold all of your books at the same time.. I'm not sure though.."

"The ebook reader is a device you can carry with you. You wouldn't want to carry a laptop around all the time, so the reader device has its purpose.."

"I probably would [use calibre or some similiar software], yeah. Because it provides access to the different vendors as well, so it works as the… interface between the reader and the library. Like a [centralized management software], yes, why not."

After the interview the test person wanted to add that there were times when the program didn't give enough feedback to the user (referring to the activity indicator at the bottom right of the main window); it wasn't very obvious if the program had carried out some tasks or not.

User 2

"It was intuitive in the sense that, well, one of the macros I used, actually worked. The fact that you could use it with Kindle, was especially impressive. I think I could use it [the software] myself.

"The UI seemed clear… it had a bunch of stuff, though."

"My intuition worked. When I clicked with the right mouse button, certain things happened. I knew right away what the library and device icons were for. Add books icon was also obvious. You could tell half of the icons' functionality without reading the text."

"I have the new version of the Kindle device, which came out sometime in the last October. At the moment, when I'm using it… acquiring books for it, then I'll use the Amazon store. I'm not sure if they have this public domain stuff. I don't know if I could acquire them from the Amazon store. I have an impression of looking for some PD material from the store and not finding it. That's the reason I could use calibre."

User 3

"The program left an okay overall impression. The English langauge caused some troubles."

"The UI seemed clear and I suppose the program is useful."

User 4

"It seemed like... well, at least I could accomplish the tasks. On a few occasions, you had to think about how to do a task. The UI seemed clear... when you think about how much it had different kinds of functionality, so it that sense [the functionality] could be found logically under the menus."

"In some cases there were two ways to accomplish a task - so this added an another menu to deal with, but it didn't bother me."

"I haven't dealt with many books, as I've been reading mainly articles. But if you had a lots of those books and an E-Reader for them, [the software] could be useful."

I probably would [use the software] if I would acquire an e-reader device and had a magazine subscription. Unless the device itself had this management system. If you had to attach the device to the computer, then it sure would have [a management system]..

User 5

"You could probably do some work with the software, if you'd just learn it. As these tasks were written in Finnish and the UI was in English, there were some things I couldn't spot…"

"Yeah, [there was this conflict of languages], you couldn't be exactly sure. At one point I didn't know where to find a functionality -- whether it was at the large window at the background or at the pop up window."

"I would say the software was a typical "Windows-style mishmash" and could use Apple-ish clarity. The clarity found in Apple products was missing. When you were navigating you had to find [the correct function] by trial and error."

"So yeah, [it was a typical "geek software"], hehe. I think you could do everything you wanted if you'd take some time to learn the program. So yeah, you could do some work with the software. It was quite like these... well, it reminded me of these disc-burning applications, it was roughly as complicated/clunky to use."

"I would probably find out what Apple has to offer before even thinking about using this "Windows based application" for managing ebooks."