Integration of PDF Flip Book Reader in Koha OPAC for Easy Access and Dissemination of Fulltext Library Resources among the Users

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Abstract

Book is an important and inevitable document for any library. Without book library cannot exist in the society. Library is a collection of resources of different types of documents like books, films, maps, periodicals, newspapers, e-books, audio books, databases, manuscripts and other resources. Actually these are the bibliographic information in integrated library management and retrieval system. Flip PDF book reader is the interesting tool to read book in matured level environment. This paper has only selected the Flip PDF book reader for the users. Apart from it has also selected one popular open source library management software such as Koha. The main objective of this paper is to integrate the flip pdf book reader with Koha OPAC for the better management and retrieval of full text resources among the users. It is possible to read the pdf file as manual text documents and also execute the page from first to next page and vice-versa. Obviously this is the new concept in library management system for the users and most of the users have been benefitted by using this system.

Keywords: E-Book reader, OPAC, Koha, PDF Flip Book Reader, and Fulltext Resources

Introduction

In recent decade Internet has played a major role in knowledge society. Due to the advent of Internet it is too easy to create various open access documents like books, journals, etc. In the open access arena e books have played a major role but e book reader has not much gained popularity like e books. There are several reasons behind them. Some of them are psychological and social problems. Reader is reluctant to read books online due to lack of multi facility of printed books. There are various e book readers available in the world. Among them kindle, kindle touch, kindle paper white, kindle voyage, kindle oasis are noteworthy. All the e book readers are more or less same in position so users cannot sit comfortably to browse books. In other e-book readers it is not easy to browse e-books like a printed

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Objective

The main objective of this paper is to integrate the flip pdf book reader with Koha OPAC for the better management and retrieval of full text resources among the users and create the digital environment to read the e book manually.

Review of related literature

Seet and Goh in their paper showed the affordance and acceptance of e reader device and sorted out five major affordances--mobility affordance, support affordance,connectivity affordance, immediacy affordance, and collaborative affordance, which were found to be effective in learning the matter. It is a matter of great surprise that all afordances have a greeat impact on learning system except sustainability affordance (Seet and Goh, 2011). In another study Park,Sung and Cho observed the influences of acceptance of e book devices depends on the reading experiences of users. I this respect they made a survey of 219 participants and showed usefulness and text satisfaction were the major determinants to choose the e book reader (Park,Sung and Cho, 2013). Schomisch,Zens and Mayr worked on use , usability ,and acceptance of e book reader and focused on experiences on a group of social science students. They proved that e book reader does not much advance as e publication advances accordingly (Schomisch,Zens and Mayr, 2012). Richardson Jr and Mahmood both studied on satisfaction of users and usability of top five e book readers and found Kindle is the most effective and and suitable e book reader as per their study on 181 respondents who are graduate in Information Studies (Richardson Jr and Mahmood, 2011). Mr. Mandal in his research paper discussed an integratyed library system for future and also enumerated various softwares, standards and services. He presented a comparative studybetween nvarious softwares and standards (Mandal, 2016). In 2017, Chakrabarti & Mandal examined the articles published in SRELS journal from 2011 to 2015 from the perspectives of readability of those published articles and showed the article is not so easy to understand and one is required 13 to 14 year completed eduucation to understand the content of articles (Chakrabarti & Mandal, 2017). In another paper Dr. Mandal showed how to design and devlop an integrated information and retrieval management system for college libraries and how successfully it works (Mandal, 2017a). In a paper Mr. Mandal elaborately designed an ISO framework for any college libraries for easy access for the users and showed how does the framework oprate library automation effectively(Mandal, 2017b).

E-Book Reader Tool

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present time, different ebook reader is available, these ebook reader helps a reader to customize the ebook reader according to his or her requirement, like, change in colour, font and size etc., which helps in hassel free reading. Some of the popular ebook reader is Kindle, Freda, Calibre, Sumatra PDF, Icecream ebook reader etc and these ebook reader is compatible with different ebook formats, for instance, EPUB, MOBI, PDF, FB2 etc. and almost all these ebook reader have the features of cross platform that means it can run on different operating systems,like, Windows, Linux, Mac etc. Hence these ebook reader can be easily operable by a normal user as well as an expert (http://www.techradar.com/news/the-best-free-ebook-reader-for-windows). History of the ebook reader is also very much old, in a 1930 manifesto, written by Bob Brown, titled 'The Readies', in this writing the equivalent idea of e-reader was mentioned by him (https://en.wikipedia.org/wiki/E-reader). It can be stated that, after the inception of ebook reader, a reader can easily access the ebook at anytime and any place. The important e-book pdf reader is stated as follows :

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Methodology

The aforementioned e-book reader tool is available in Web environment and this tool has been selected for this paper as the matured level popular open source e-book tool i.e. pdf flip book reader. All the tasks have been performed in Ubuntu Operating System and local web server (/var/www/smbook). The link of any full text pdf file can be copied in Koha MARC tag 856 $u and finally the results will be displayed in Koha OPAC, showed in Figure-2.

Fulltext Resource Access Interface in Koha OPAC

Information retrieval and dissemination of information is one of the essential tasks of Koha OPAC. It can be classified in three ways like OPAC, Web-OPAC, and Integrated Access. Bibliographic information consists of different fields and sub-fields for the better management of full text resources and it is possible by using the MARC 21 tag 856 $u in Koha data entry framework. The Figure – 1

represents the fulltext resource access interface for the users and it can be accessed in two ways viz. reading the document as book reader and downloading the pdf file from the Koha OPAC. It is possible to share the resources among the users in different ways in cloud computing environment. This interface is very attractive to the users and library professionals for the better management and accesses the fulltext pdf resources. It is a part of information mashup because here users can easily read and access their relevant resources for study and research purpose. Users are very much benefitted by using this OPAC as follows:

(i) Users can easily access fulltext resources of the library.

(ii) It is possible to download and distribute the resources among the users.

(iii) Users can read the pdf document manually.

(iv) Community communication and interaction is possible by using this.

(v) It displays the full bibliographic information of fulltext resources.

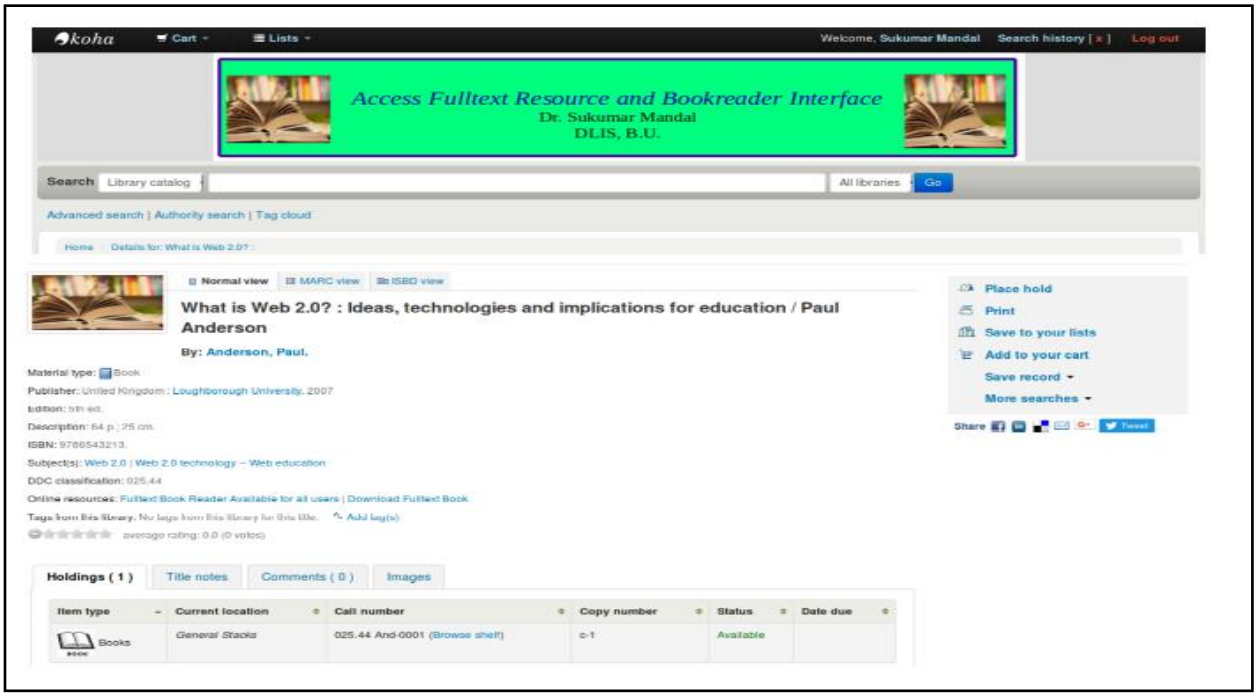

Figure – 1: Fulltext Resource Access Interface in Koha OPAC

Flip PDF Book Reader Display

This is one of the important tools in integrated library management and retrieval system. Flip pdf book reader can be displayed just clicking on the full text access field in Koha OPAC and finally the Flip Book reader (Figure – 2) will appear. Generally it is known that the search is not possible in PDF file but this paper has successfully proved to search any keyword available in contents will easily appear the left panel of book reader and will also display the page number associated with keywords. This is the new innovative interface to all the users as well as advanced level users for reading manually for

text book by using the machine. The whole tasks have been performed on Ubuntu operating system and using the open source library management software Koha. The essential advantages of this system are stated as follows:

(i) To read and scroll the mouse to insert the book page.

(ii) To display the previous and next page in a particular text book.

(iii) Keyword search is possible from the search box.

(iv) To display the appropriate page number against in one keyword.

(v) To increase and decrease the font of PDF file.

(vi) To search the content wise those terms are available in full text document.

(vii) It fully supports the multilingual for each of the community.

(viii) Users can search and read the full text resources in a twinkle of an eye.

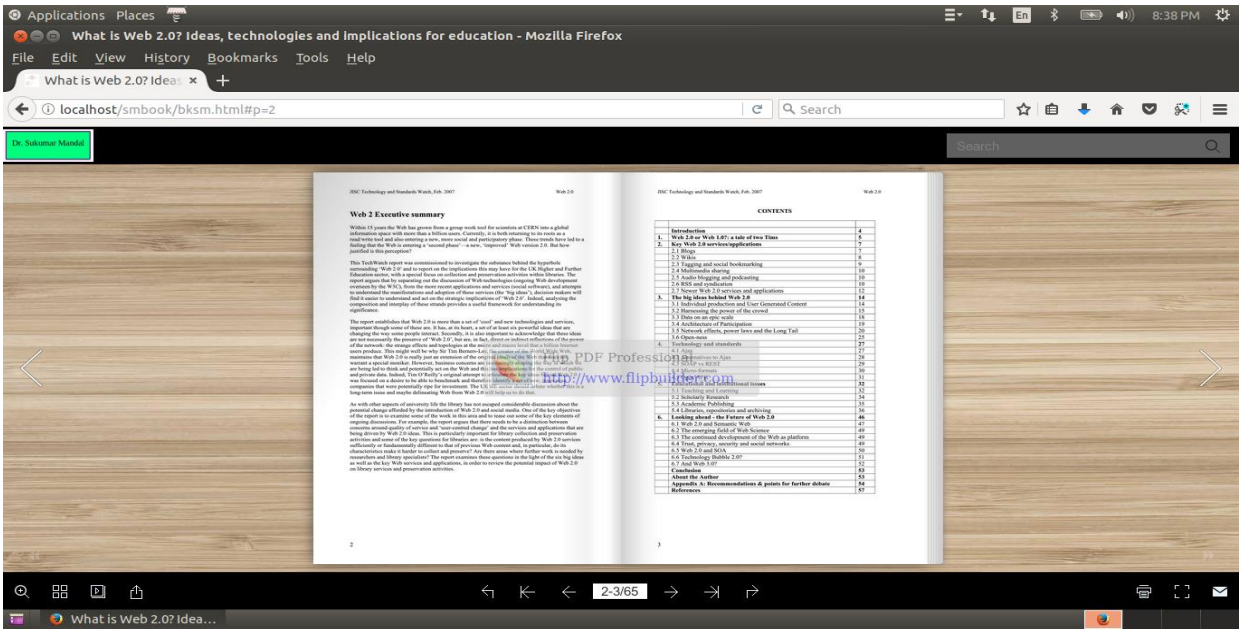

Figure – 2: Flip PDF Book Reader Interface in Koha OPAC

Conclusion

Digital library is a collection of digital objects. Increasing the reading habits is one of the major tasks in digital library environment. Most of the users of different libraries are interested to flip pdf book reader because it is same as manual reading. This paper has successfully integrated the above stated book reader in Koha OPAC interfaces. Users have seen the two link in full bibliographic description such as online reading and downloading the full text resource. Large number of users have been benefitted by using this techniques. However, the Koha MARC tag 856 $u and pdf flip book reader have successfully read the library resources instead of manual reading. So this can save the time of the reader and this interface is very attractive for the users. It is possible to search the page number and keyword which

users want from resources available in the databases. Proper management of library resources play a vital role in integrated library management and retrieval system. Users can easily access this pdf book reader by using different devices such as mobile, computer both laptop and personal computer, and also support both the operating system like Windows and Ubuntu. Any library and institutions have been benefitted by using this integrated framework both the library automation and digital library environment.

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