

A STUDY ON MANAGING KOHA OPEN SOURCE LIBRARY MANAGEMENT SYSTEM IN THE UNIVERSITY LIBRARY, CENTRAL UNIVERSITY OF KERALA

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ABSTRACT

This study examined the use of open source integrated library management system in Central University of Kerala Library with the aim of highlighting the capabilities and potentials of open source software (Koha) and its practical importance to academic libraries across the globe. Library automation benefits both the library staff and the users as it reduces the level of job stress on the staff and enhances remote and timely provision of up-to-date information to the users. It was found that many libraries in India and across the globe have turned more and more to free and open source software. The Libraries of Central University of Kerala is automated library with wi-fi network. Library collections are searchable through Web OPAC; searches can be made by author, title, subject, publisher, class number or by words in title and Boolean search.

The purpose of this paper is to present the objective of designing a bibliographic database for the University Library, CUK with which the automation of circulation routines is carried out. From this point of view it may be concluded that Koha is a useful package for the creation of a database and for information retrieval.

Keywords: Library automation, Open Source Software, Library and Central University of Kerala

1. INTRODUCTION

Today's world is the digital world. The changes are evident all over the world, and its effects being felt in every walk of life and in every field of knowledge. The field of Library and Information Science is also not an exception to this phenomenon. In developed countries computerization of libraries started in 1940's. The first use of computers in library and information centers in India was reported in 1965 at INSDOC, now known as national Institute of Science communication and Information Resources (NISICARE), New Delhi. INSDOC initially computerized the author and subject indexes of Indian Science Abstract and in 1967 brought out, Roster of Indian Scientific and Technical translators using computers. Later on several Indian Libraries particularly those attached to scientific and industrial research organizations used mainframe

computers of their parent bodies in 1970's. The 1980's witnessed a gradual increase in the use of computers in library operations. Library automation gathered momentum in 1990's.

Software plays an important role in the automation of library. Many types of software are available for use in libraries. Out of the available software, very few are updated and/upgraded regularly and has large user base. This software can be used in libraries to provide new value added services to the end users.

Koha is a full-featured open-source Integrated Library System, developed initially in New Zealand by Katipo Communications Ltd. Koha was first deployed in January 2000 for Horowhenua Library Trust, Koha is currently maintained by a team of software providers and library technology staff from around the globe.

1.2 Review of literature

The present study aims to implementation of automation library management system in the University Library, Central University of Kerala using koha open source software. The important studies conducted earlier in the related areas are reviewed

Vera, AkpokodjeNkiruka and EdoreAkpokodje Thomas (2015) conducted a study on evaluate the adoption of Koha integrated library system for library online registration at the University of Jos Nigeria. The study used a survey method and questionnaire for data collection. Online registration database gives access to easy and accessible information retrieval in an efficient and effective manner. The result shows that the use of Koha integrated library system will solve the problem of manual processing and untimely statistics generation.

Edem, Margaret B. (2016) conducted a study on adoption of software packages in University Libraries in Nigeria. This study used a survey design to investigate the adoption of software packages in NigerianUniversity libraries. Software Adoption Questionnaire is used this study. The findings of the study indicated the software packages adopted in Nigerian university libraries. The findings indicated that KOHA is the most widely adopted and the most widely used software package

2. UNIVERSITY LIBRARY, CENTRAL UNIVERSITY OF KERALA

The Central University of Kerala started functioning in March 2009 in Vidyanagar, Kasaragod and the library started to functioning in October 2009. Now the Central University of Kerala has 6 Schools with 21 Departments. The Libraries of Central University of Kerala is automated library with wi- fi network. Library collections are searchable through Web OPAC; searches can be made by author, title, subject, publisher, class number or by words in title and Boolean search.

The library is using Koha: integrated library system for automating its library resources and services. The library holds the details of more than 31000 books, 66 print journals and 8500 + online journals on UGC Infonet and serves to 803 PG students, 240 Research Scholars, 109 Teaching Faculty and 26 Non-Teaching Staff.

2.1 Objectives of the Study

1. To develop and updated database of books of the University Library, CUK.
2. To Implement automated system using Koha library integrated open source software more effectively
3. To carry out the issuing and returning functions of the circulation section more effectively

2.3 Methodology

The present study conducted on managing KOHA open source library management system in the University Library, Central University of Kerala. The study is based on the working experience in Koha. Various modules in Koha were discussed in this paper

2.4 Library Automation

Library automation refers to the use of computer to automate the typical procedures of libraries such as cataloguing and circulation. Automation is a process of using the machinery for easily working and saving the human power and time. The main purpose of library automation is to free the librarians and library staff and to allow them to contribute more meaningfully to spread of knowledge and Information. In the simple language "When we use machineries for collection, processing, storage and retrieval of information and do another works of library with the help of machineries that called library automation.

3. SOFTWARE

Software is a computer program for using computers and other such hardware to their optimum capabilities. A set of command is known as program, and a set of program is known as software. Computer software, or simply software, is that part of a computer system that consists of encoded information or computer instructions, in contrast to the physical hardware from which the system is built.

3.1 Library software

A library software system is the software used to catalogue, track circulation and inventory a library's assets. Library automation software covers two major areas, namely control and management of library resources, and access to documents and information. These two areas deal with library housekeeping systems and text retrieval systems respectively. In latest software packages there is a provision for both library housekeeping operations as well as public access for information retrieval. In addition, there are software packages for re-organizing and presenting information in desired format, producing publications, and help to control and manipulate statistical and financial data.

3.2. Open source software

Open source software refers to software that is developed, tested, or improved through public collaboration and distributed with the idea that must be shared with others, ensuring an open future collaboration. The collaborative experience of many developers, especially those in the academic environment, in developing various versions of the UNIX operating system, Richard Stallman's idea of Free Software Foundation, and the desire of users to freely choose among a number of products - all of these led to the Open Source movement and the approach to developing and distributing programs as open source software.

4.KOHA

Koha is a fully featured, scalable, library management system. It is the world's first free and opens source library system. Development is sponsored by libraries of varying types and sizes, volunteers, and support companies worldwide.

The Koha integrated library system includes catalogue, OPAC, Circulation, Member Management and acquisition packages. To install koha for use following configuration is required. It requires a Linux Server, Apache, MySQL, Perl, Root on the server a reasonable level of command with command line and database administration skill. Koha was created by Katipo Communications in 1999 by for the horowhenua trust in New Zealand, and the first installation went live in January 2000. From 2000, companies started providing commercial support for Koha, building to more than 20 today.

In 2001, Paul Poulain (of Marseille, France) began adding many new features to Koha, most significantly support for multiple languages. In 2010, Koha has been translated from its original English into French, Chinese, Arabic and several other languages. Support for the cataloguing and search standards MARC and Z39.50 was added in 2002 and later sponsored by the Athens County Public Libraries. In France Paul Poulain co-founded BibLibre in 2007. In 2005, an Ohio-based company, Metavore, Inc., trading as liblime, was established to support Koha and added many new features, including support for Zebra sponsored by the Crawford County Federated Library System. Zebra support increased the speed of searches as well as improving scalability to support tens of millions of bibliographic records. The latest stable release of Koha is 16.5.3. Koha is currently a very active project. The analysis of the size of the code base may be deceptive because Koha stores user interface translations alongside actual source code and ohloh cannot always distinguish them.

5. FEATURES

- Management Interfaces
- Circulation i.e. issues & returns of Library items
- Koha uses a full text indexing engine to allow for fast and powerful searching of all of your metadata
- A full acquisitions module complete with budgets, book funds, suppliers and exchange rates.
- Database of Library users
- E-mail Overdue Notifications
 - Management of serials i.e. subscription, renewals etc

- MARC21 and UNIMARC support
- MARC Import/Export
- Online Public Access Catalogue of the Library holdings
- Online Reservations & Renewals
- Barcode Printing: Koha can be used to print barcodes and spine labels
- Barcode scanning: Koha works in a web browser.
- Comprehensive advance search
- Multilingual Web OPAC
- Web-based OPAC
- Self Check: Koha can be used with any SIP2 compliant self check machines
- Various Web 2.0 facilities like tagging, comment, social sharing and RSS feed
- Z39.50 server compliant.

5.1 Modules Covered

- Online Public Access Catalogue,
- Acquisitions
- Cataloguing
- Circulations
- Serials
- Report
- Patrons
- Lists
- Course Reserves
- Authorities
- Tools

The University Library, Cental University of Kerala has developed the Design and Implementation of Koha software in the Library for the access of library materials.

6. KOHA LOGIN SCREEN

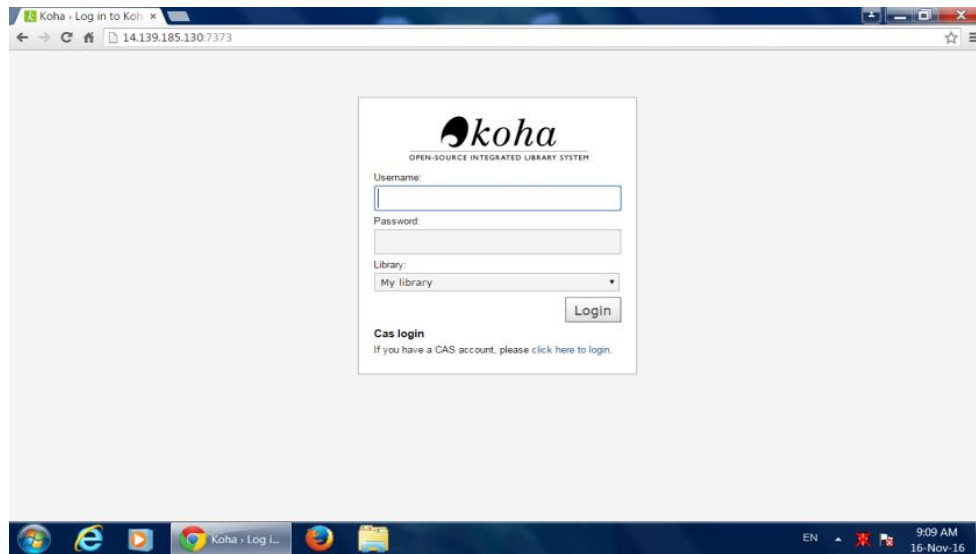


Fig. 1.koha Login screen

Once we have completed the login, it leads to the main page.

6.1 Home Page of Koha

The Home page of university library, CUK all sections are available in this front page such as Circulation, Patrons, Advanced Search, Lists, Course reserves, Cataloguing, Authorities, Serials, Acquisitions, Reports, Tools, Koha administration and about Koha.

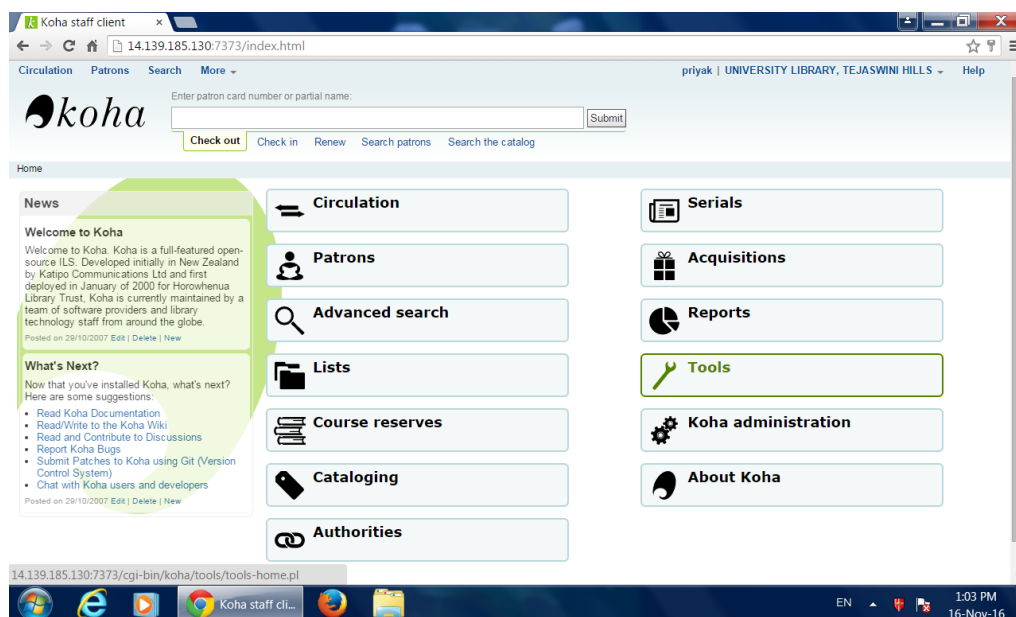


Fig.2. Home page of koha

6.2Administration

The Koha Administration page shows various system parameters. It allow us to define different parameters for the functioning of Koha library branches, item types, the categories of borrowers, the charges taken for the different types. A

system preference is the most important module of Koha. It deals with administration and maintenance part of Koha. Only Librarian, Administrator or person of similar designation can hold access right to this module.

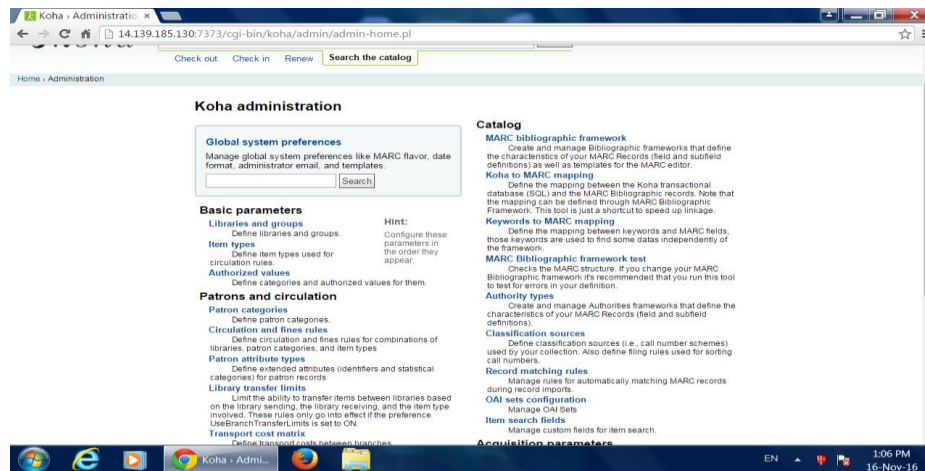


Fig. 3. Koha Administration module

The bibliography screen is enter the details of the book. To ease the data entry work one marc record is divided into 0 to 9. We can click on the respective number to fill into the specific marc tags. For example, 0 will contain tags like 010, 020, 043, etc. This also makes the work of maintaining MARC tags.

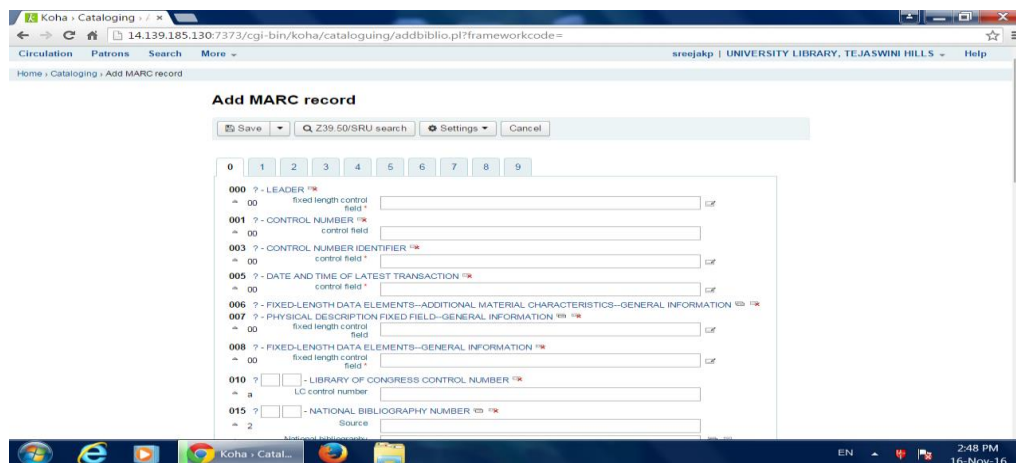


Fig. 4. Bibliographies information add module

6.3 Add New Patrons

When we click on the add patrons in the above search result, then the following form will appear which prompts us to fill in the member particular, the Koha system automatically allots one card number to the patrons. Once the details are filled in then it prompts us to confirm the record. This information is shown only when the user sees his/her membership information in the OPAC.

6.4 Borrower categories

It can be defined by clicking on the same link in the parameters window. It can be edited or deleted the details of a particular borrower type in the following window and we can even add new categories.

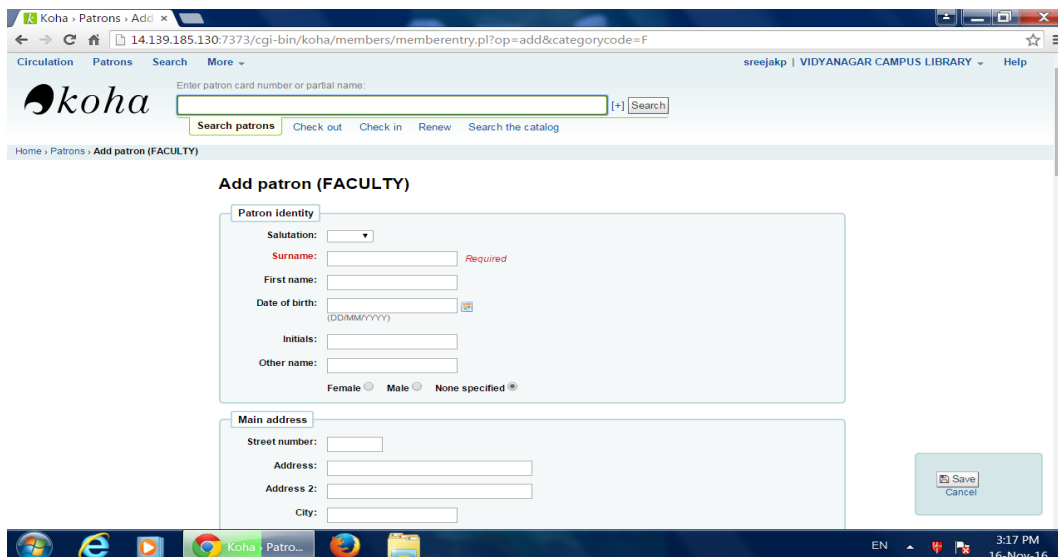


Fig. 5. Selected patron type add module

The second link on the main page allows us to search for an existing member. The Administrative information about the user can be seen by the librarian like the fine and charges attributed to a particular user, the items currently under issue. The window show in the below figure is a very useful feature of koha patrons administration module. It gives comprehensive and detailed information about the user.

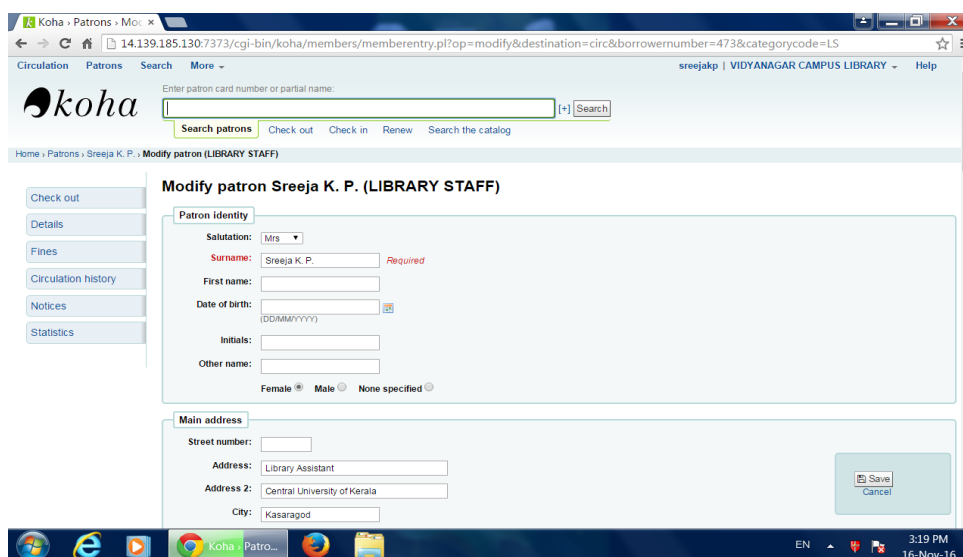


Fig.6.Modifyfrom the Patron module

6.5 Circulation Module

The process of circulation, we have to enter either the borrower card number or the partial last name of the borrower, as shown in the fig. 6. After entering the information, it shows the patron information with his/her category and one hyperlink is also available to look into more details of the patron, when issue any book, the barcode of the book should be entered and the date of issue needs to be selected.

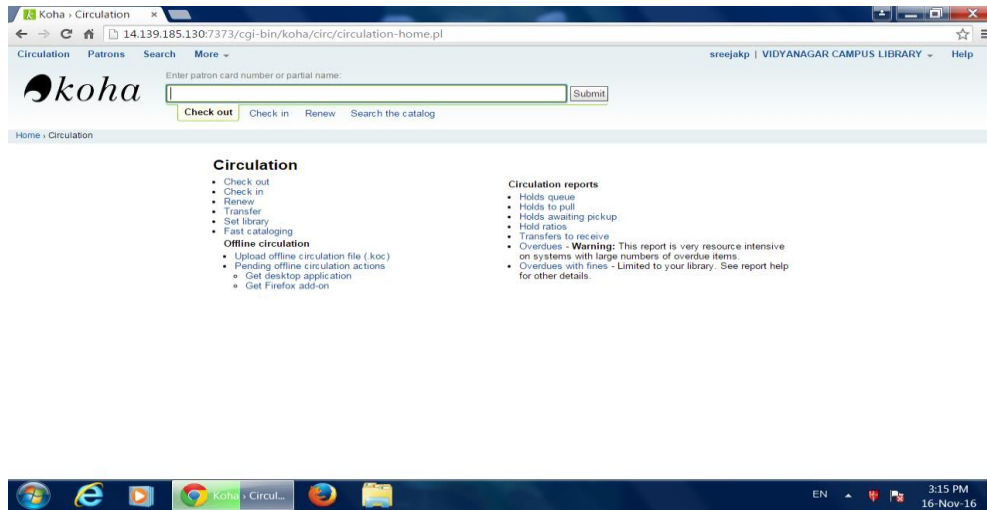


Fig. 7. Circulation module

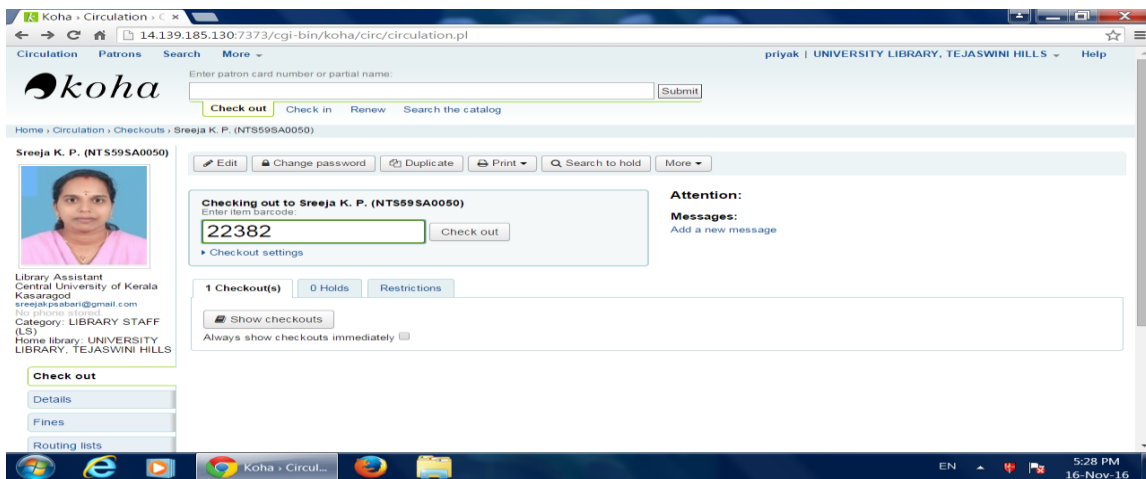


Fig. 8. Book Issue module

Enter the barcode book number (Acc. No.) full detail information (Check in item) the following window will be appeared.

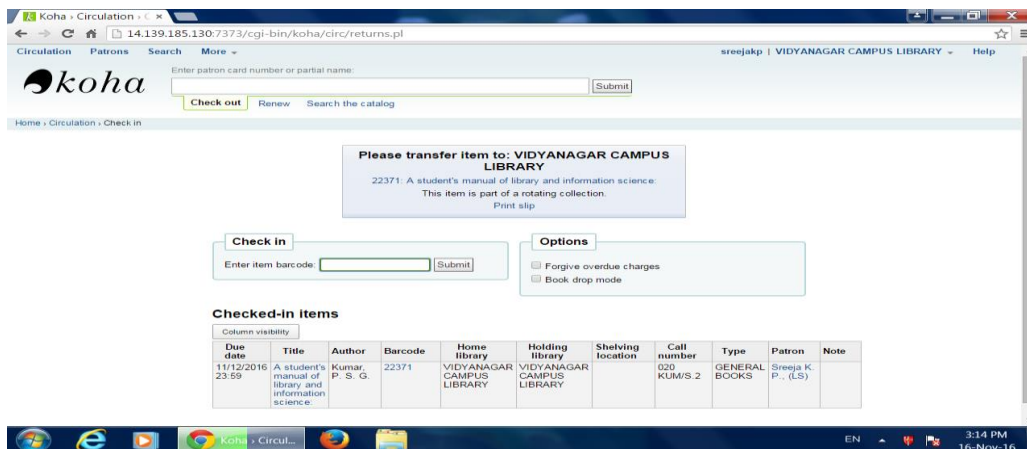


Fig.9. Book return (Check In) module

7. OPAC MODULES



Fig.10. OPAC enter title module

Figure 10 shows the details of advanced search. We can search by keywords, subject, title, author and even the barcode of the document.



Fig. 11: OPAC search result page

Figure 11 shows the OPAC particular title module. Here, we can access by title, author subject and copy available in which department also displayed.

7.1 KOHA Tools module

Koha tools mainly used for MARC records for Bibliography and patron information import and export, many functions such as label, patron card creator, uploading patron image, overdue notices so all functions available to the Koha tools modules.

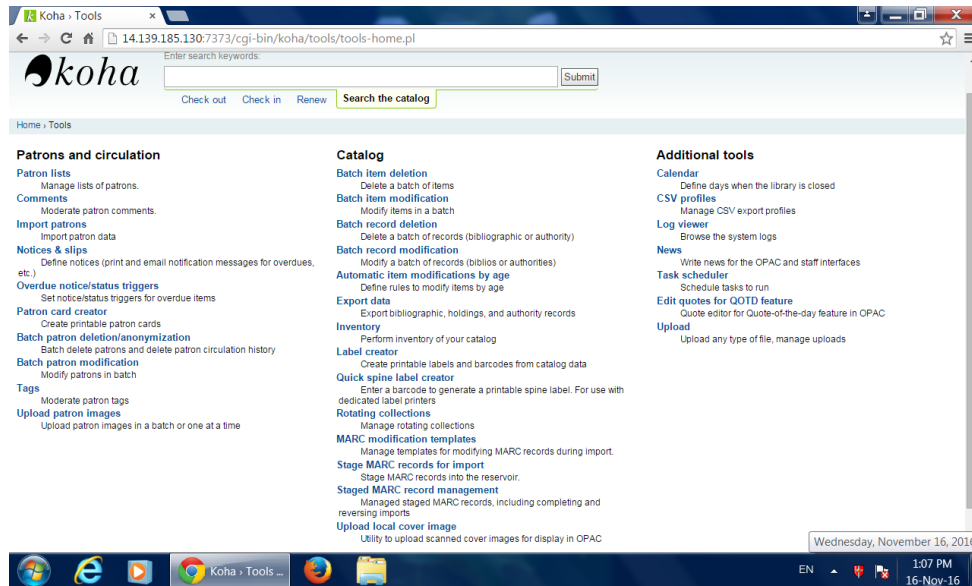


Fig. 12.KOHA tools module

8. Features of functional modules

Functional modules include feature of acquisition, Serial control and cataloguing features.

8.1 Acquisition features

Acquisition section is an important section in a library. The main modules in acquisition sections are Selection of item, duplicate checking, selection of vendor, ordering, general order request letter, receiving, fund control etc.

8.2 Cataloguing Features

It includes copy catalogue, call no., import and export data, union catalogue, cataloguing of different item, reports, import/export data, cataloguing of electronic document etc.

8.3 Features of serial control

Serial control features are fund control, ordering, receipting, claiming, binding, import/export etc. Managing serials is the most complicated job for a library. The module should be capable to keep tracks of serials in the library effectively and efficiently.

8.4 Circulation Features

Circulation section is an important section in a library. Library automation helps this section to speed up the library activity. Software should include all the circulation features. The main circulation feature for a better software are check out, Check in, renewal, reservation, use of barcode technology, patron and item information, fines, report generation etc.

8.5 Features of OPAC

The Library software should be able to accommodate all the Functions of OPAC like simple search, advanced search, user help, reservation through OPAC, library map etc.

9. Summary

The present study mainly focused on the usage and implementation of library software in University library, Central University of Kerala (CUK), Kasaragod. It may be concluded that Koha is a useful package for the creation of a database and for information retrieval. On the other hand the ever-rising needs and expectations of library professionals have given a through challenge automation software vendors. Approximately all ILS software offers the same module for all type of

libraries, ignoring the aspect of library collection, user and services, but open source ILS software comes with core functional modules, such as online catalogue, circulation, cataloguing with choice of limiting parameters format.

In this research work, an attempt has been made towards finding out ways and means for automating activities in the University Library, CUK. Koha open source software system has been used for the automation of day-to-day activities of the University Library; it revealed that Koha software is more suitable for the library automation. The open source model of ILS software like Koha can provide an attractive alternative for libraries, if only its ideals can be realized and things could change very quickly. To evaluate commercial and Koha open source ILS software for their own merits in features, proven reliability, support and vision.

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