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Koha LMS (Library Management System) Managing in the Tagore Library of Chitkara University, Himachal Pradesh: A Study

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ABSTRACT

This study aimed to demonstrate the potential and capabilities of LMS software (Koha) and its practical significance for academic libraries worldwide by examining its implementation in the Tagore Library of Chitkara University Himachal Pradesh using an open-source system. The library's automation lowers staff's employment stress levels and improves prompt and distant delivery of current information to users, which benefits both patrons. It was discovered that an increasing number of libraries in India and other countries have shifted to using free and open-source software. Chitkara University Himachal Pradesh's libraries are automated and equipped with a wireless network. Web OPAC (www.opac.chitkarauniversity.edu.in) allows users to search library collections by author, title, subject, publisher, class number, words in the title, and Boolean search operators. This study aims to outline the goal of creating a bibliographic database that will be used to automate circulation procedures at Tagore Library Chitkara University Himachal Pradesh. From this vantage point, Koha can be considered a helpful database construction and information retrieval program.

KEYWORDS: KOHA Managing, Library automation, Open Source Software**.**

1. INTRODUCTION

The world we live in today is digital. Globally, there is no denying the developments, which are having an impact on all spheres of society and knowledge. This phenomenon also applies to the field of library and information science. The 1940s saw the beginning of library computerization in developed nations. The National Institute of Science Communication and Policy Research (NIScPR), located in New Delhi, formerly known as INSDOC, published a paper in 1965 detailing the initial usage of computers in libraries and information centers in India. The Indian Science Abstract's author and subject indexes were first computerized by INSDOC, which also published a computerized roster of Indian scientific and technical translators in 1967. Later, in 1970, several Indian libraries, especially those affiliated with industrial and scientific research institutions began using the mainframe computers of their parent companies. There was a steady rise in the use of computers in library operations starting in 1980. In

1990, library automation began to gain traction. Software is crucial to the automation of libraries. Libraries offer a wide variety of software for use. Few readily available programs have a significant user base and are updated or modified frequently. Libraries can utilize this software to provide their patrons with new value-added services. "Koha is an open-source integrated library system with extensive features that was first created in New Zealand by Katipo Communications Ltd. Initially implemented for Horowhenua Library Trust in January 2000, Koha is presently managed by a global team of software vendors and library technology personnel.

1.2 LITERATURE REVIEW

The present study aims to implement of automation library management system in the University Library, Tagore Library of Chitkara University using Koha open source software since 2008.

Haji et al. (2021) Defined software plays a vital role in maximizing the utilization of hardware, and Library Management Software (LMS) has become indispensable for delivering excellent customer service, efficient stock management, and effective service management in libraries. This recognition is built upon the accumulated wisdom and the expertise of library professionals throughout history

Minkova(2018) Define that Open-source software refers to computer software that is accompanied by its source code, made available under a license that grants users the freedom to examine, alter, and distribute the software without restrictions. Typically, open-source software is developed in a collaborative and transparent manner, engaging a wide community of contributors.

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

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

Rahman (2014) Defined an all-in-one library management system (ILMS) is typically anticipated to encompass a comprehensive range of library operations, including procurement, cataloging, lending, administration, periodicals management, online public access catalog (OPAC), interlibrary loan (ILL), and generation of statistical reports. Moreover, it should offer seamless access to specific sub-modules within these primary functional areas.

Randhawa (2013) Described Evergreen is a library management software that provides assistance for user/patron administration, automated email notifications for overdue or 20 pre-due items, generation of statistical reports, web browser-based remote access, and support for the session initiation protocol (SIP).

Pruett and Choi (2013) As referenced by Pruett, Integrated Library Systems (ILS) encompass both software applications and hardware components that efficiently manage, monitor, and provide convenient access to various informational resources within a library

Singh and Sanaman (2012) Reported that Koha made its initial online debut in 2000, paving the way for numerous other open-source software (OSS) initiatives in the field of library and information science. Notable examples such as Greenstone, DSpace, and VuFind has garnered widespread adoption worldwide, benefiting from continuous enhancements driven by collaborative insights and shared knowledge

Omeluzor, et al (2012) Opined that "integrated library management software is designed to enhance all library routine activities as expected by the library users". A good and reliable ILS enhances management, control and easy access to information resources that are physical in a library and outside, for example, books, CD ROM, e-journals, e-books, e-databases, and repositories, among others. It also helps to reduce time wastage in the delivery of services to the library users.

Alam and Islam (2011) Examined reports indicate that the state of digitization and automated library systems in Bangladesh is currently at a nascent stage, with limited progress observed. Nonetheless, a handful of initiatives have been observed in recent times, initiated by various institutions.

Muller (2011) Stated that "integrated library systems (ILS) are multifunction, adaptable software applications that allow libraries to manage, catalog and circulate their materials to patrons". In choosing ILS software, libraries must base their decision not only on the performance and efficiency of the system, but also on its fundamental flexibility to readily adapt to future demands and needs of their patrons.

Warr and Hangsing (2009) Found out that Greenstone emerged as the sole software package that consistently met the majority of criteria across multiple categories, earning top marks in five out of twelve areas. These five aspects, including reporting and querying, user interface, automated tools, adherence to standards, and support and maintenance, received full scores. Greenstone prioritizes delivering robust functionality to end-users.

2. TAGORE LIBRARY, CHITKARA UNIVERSITY HIMACHAL PRADESH

The Chitkara University Himachal Pradesh started functioning in August 2008 and the Tagore Library started to function in September 2008. The Libraries of Chitkara University is an automated library with a wi-fi network. Library collections are searchable through Web OPAC (opac.chitkarauniversity.edu.in) searches can be made by the author, title, subject, publisher, class number or by words in the title and Boolean search. The library is using Koha: integrated library system for automating its library resources and services. Tagore Library is well equipped with modern facilities and resources (print and electronic) in the form of CDROM, DVD-ROM, online databases, video cassettes, patents, standards, thesis, reports, e-books, e-journals, etc. The Digital Library section of the Tagore Library has developed an institutional digital repository using world-renowned software DSpace, which preserves the institute's intellectual output for posterity. Dedicated staff assists students in navigating the library collections and finding information on specific topics. Library spaces inspire students to conduct research and collaboration. The interdisciplinary environment of the library transforms students into lifelong learners. The Tagore Library strongly believes in Academic integrity. Besides more than 45000 books and 52 subscriptions to periodicals, the

library also houses 2,86,920 e-journals and 69,73,579 e-books. The library has central air conditioning, and Wi-Fi, and can seat 400 people. The library subscribed to several databases, including IEEE, Knowledge-Hub (K-Hub), EBSCO, Bentham Science, Lexicomp ex-Pharma Series and DELNET. The library holds the details of more than 45000 books.

2.1 THE STUDY'S OBJECTIVES

1. To develop and update the Koha database of books in the University Library.
2. To implement an 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.

2.2 TECHNIQUES

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

2.3 LIBRARY AUTOMATION

The term "library automation" describes the use of computers to automate common library operations like circulation and cataloging. Using machinery to make tasks easier and save time and human energy is known as automation. The primary goal of library automation is to free up librarians and staff members so they may more effectively contribute to the dissemination of knowledge and information. To put it plainly, "Library automation refers to the use of machinery for information gathering, processing, storing, and retrieval as well as other library tasks."

3. SOFTWARE

Software is a computer program designed to maximize the use of computers and related gear. Software is a collection of programs, and programs themselves are referred to as sets of commands. As opposed to the physical hardware that a computer system is constructed from, computer software, or simply software, is the portion of a computer system that is composed of encoded data or computer instructions.

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 the 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 helping to control and manipulate statistical and financial data.

3.2. OPEN SOURCE SOFTWARE

Software that is created, tested, or enhanced through public collaboration is referred to as open-source software. It is released with the understanding that it must be shared with others to ensure open cooperation in the future. The Open Source movement and the methodology for creating and disseminating software as open source was influenced by several factors, including the cooperative experience of numerous developers, particularly those in the academic setting, in creating different versions of the UNIX operating system, Richard Stallman's concept of the Free Software Foundation, and users' desire to freely select from a variety of products.

4. KOHA

A feature-rich, scalable library management system is called Koha. It is the first open-source, free library system in history. Libraries of all shapes and sizes, volunteers, and support organizations across the globe fund development. The OPAC, circulation, member management, catalogue, and acquisition programs are all part of the Koha integrated library system. The settings listed below are necessary to install Koha for use. A Linux server, Apache, MySQL, Perl, Root on the server, and a passable command line and database administration expertise are required. For the Horowhenua Trust in New Zealand, Katipo Communications developed Koha in 1999. The first installation was operational in January 2000. Businesses began offering Koha commercial support in 2000. The most notable addition to Koha's features since its inception in 2001 was the multilingual support, which was made possible by Paul Poulain of Marseille, France. The original English version of Koha was translated into French, Chinese, Arabic, and a few other languages in 2010. In 2002, support for MARC and Z39.50 cataloging and search standards was added, and later on, the Athens County Public Libraries supported this support. Paul Poulain co-founded BibLibre in France in 2007. Metavore, Inc., an Ohio-based business that operates under the trade name liblime, was founded in 2005 to support Koha and provide several new features, such as support for Zebra, which is funded by the Crawford County Federated Library System. Zebra provides improved scalability to accommodate tens of millions of bibliographic records while also speeding up searches. Koha's most recent stable release is 23.11. At the moment, Koha is a highly busy project. Because Koha saves user interface translations alongside actual source code and Ohloh can't always tell them apart, the examination of the code base size could be misleading.

4.1. 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
- 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
- Koha In Out Management System
- 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.

4.2 MODULES ADDRESSED

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

4.2.1 KOHA LOGIN PAGE SCREEN

Figure 4.2.1. Koha login page screen

The main page is reached after completing the login process.

4.2.2 KOHA'S HOME PAGE

All of the library's sections, including those on circulation, patrons, advanced search, lists, course reservations, cataloguing, authorities, serials, acquisitions, reports, tools, Koha administration, and about Koha, are accessible from the Tagore Library's home page.

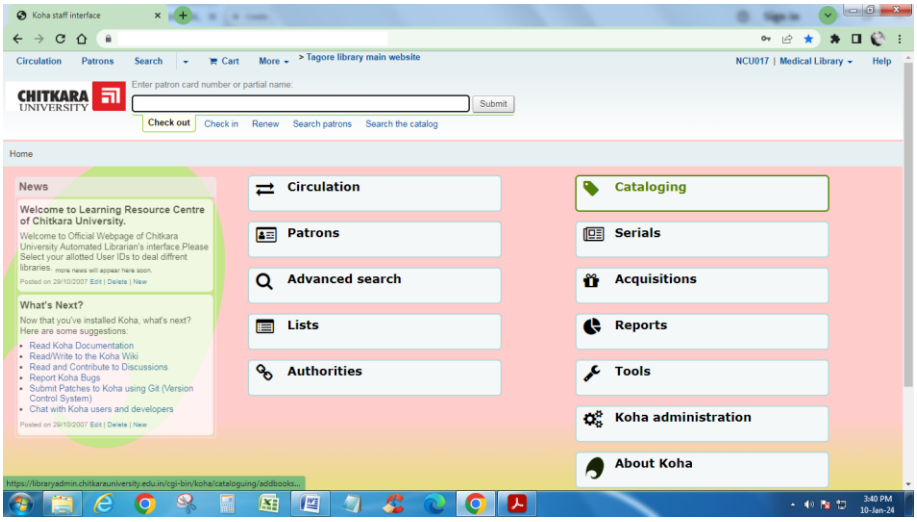


Figure 4.2.2. Home page of koha

4.2.3 ADMINISTRATION

A page called Koha Administration displays several system parameters. It enables us to specify several parameters for the operation of the Koha library branches, including item types, borrower classifications, and fees for various sorts. In Koha, a system preference is the most crucial module. It addresses Koha's maintenance and administrative aspects.

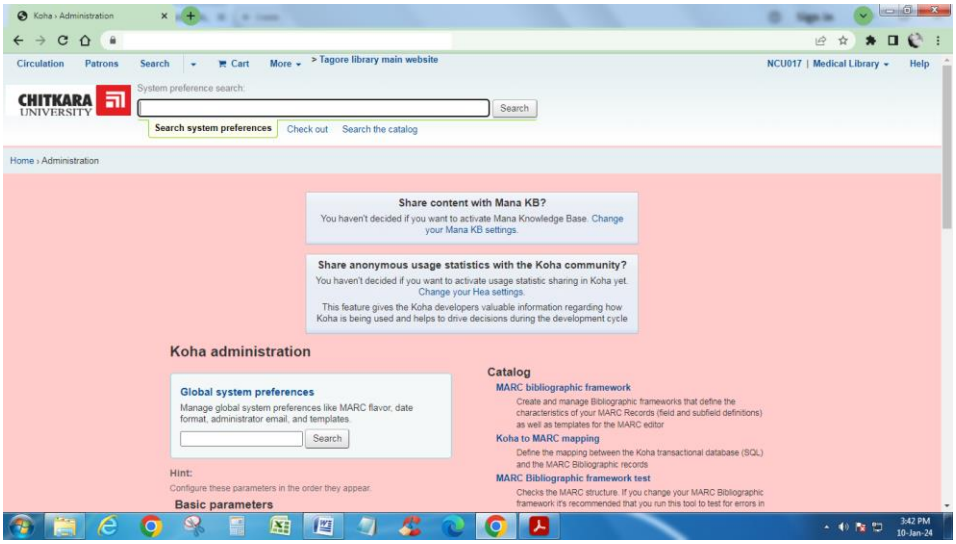


Figure 4.2 3. Koha administration module

The book's details are entered into the bibliography screen. A single marc record is separated from 0 to 9 to make data entering easier. To complete the corresponding number in the particular marc tags, we can click on it. 0 will, for instance, include tags like 010, 020, 043, and so forth. Additionally, this makes the task of keeping MARC tags easier.

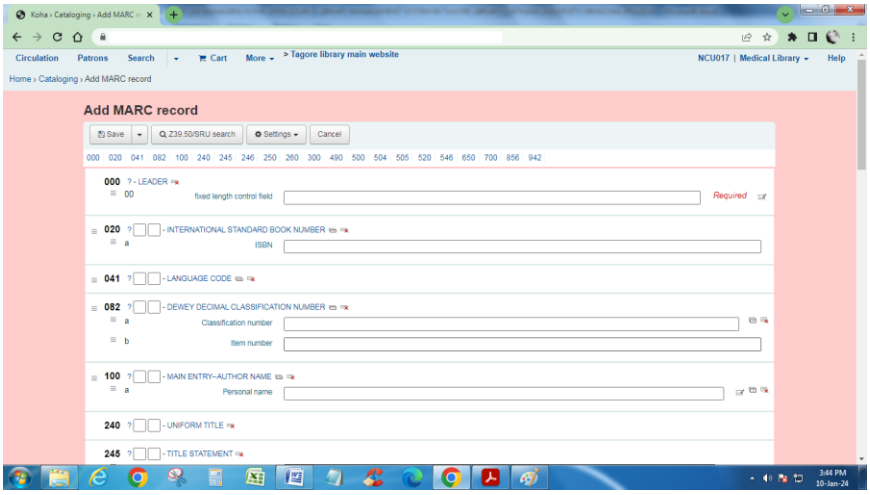


Figure 4.2.4 Bibliographies information add module

4.2 .4 ADD NEW PATRONS

The Koha system automatically assigns each patron a card number when we click on the "add patrons" link in the search result above. The form that follows asks us to fill in the member's details. It asks us to confirm the record when the details are entered. Only when the user views their membership details in the OPAC is this information displayed.

4.2.5 BORROWER CATEGORIES

In the parameters window, click the same link to define it. In the ensuing window, we can add additional categories and change or remove the information pertaining to a specific borrower type.

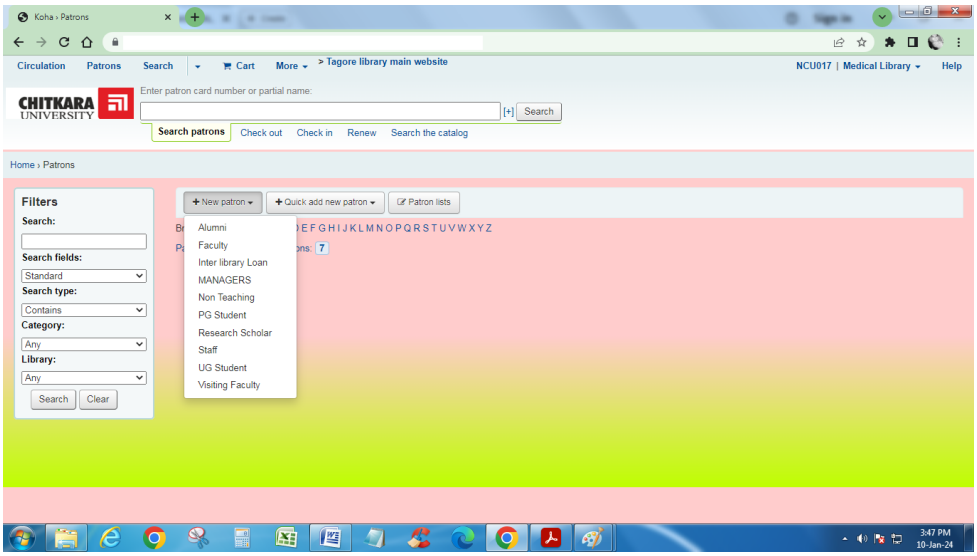
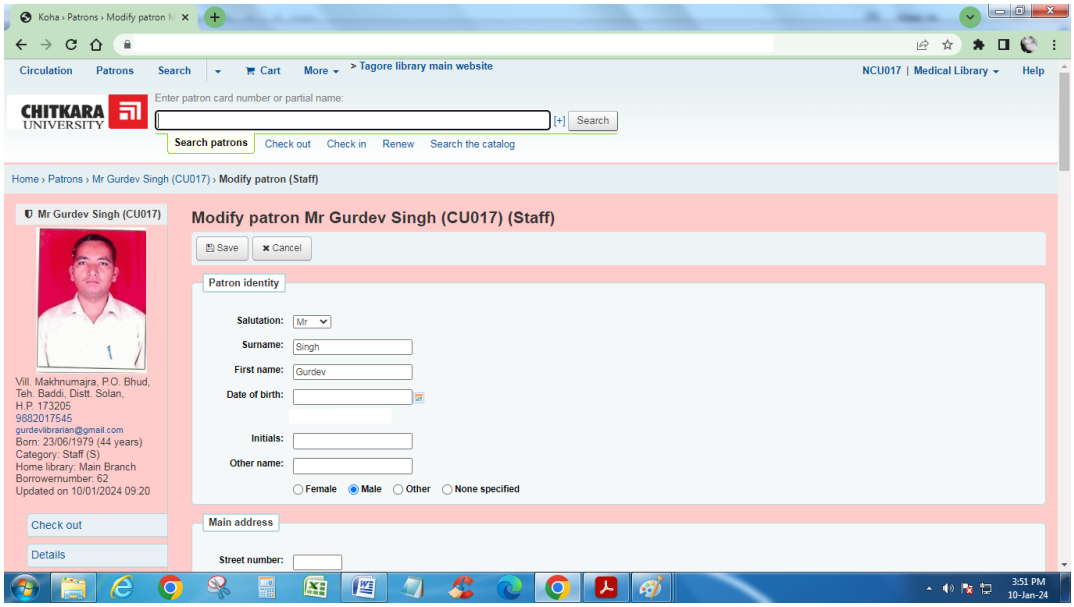


Figure 4.2 5. Selected patron type add module

We can look for an existing member by clicking the second link on the home page. The librarian can view the administrative data about the user, including the fines and costs associated with a specific user and the items that are presently being borrowed. One of the most helpful features of the Koha Patrons Administration Module is the window depicted in the figure below. It provides thorough and specific user information.



Modify from the Patron module

4.2.6 CIRCULATION MODULE

In order to initiate the circulation process, we must input the borrower's partial last name or borrower card number, as illustrated in Figure 6. Once the information is provided, the patron's information is displayed along with their category. A hyperlink allows you to view further facts about the patron. When issuing a book, you must enter the book's barcode and choose the issue date.

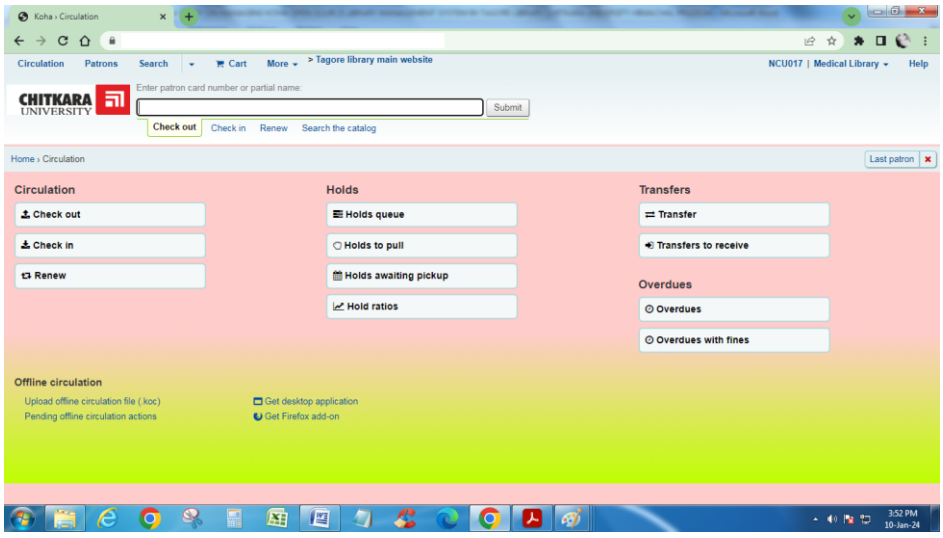


Figure 4.2 6. Circulation module

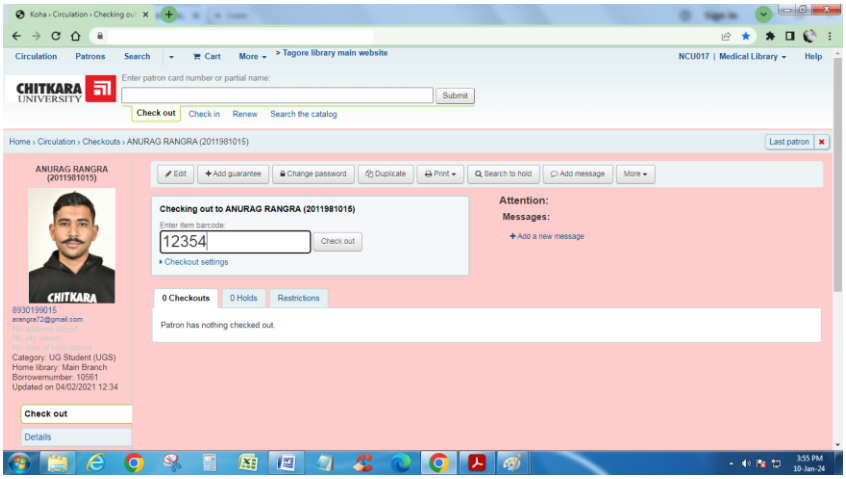


Figure 4.2 7. Book issue module

A window requesting complete detail information (Check- in item) and the barcode number (Accession Number) will appear.

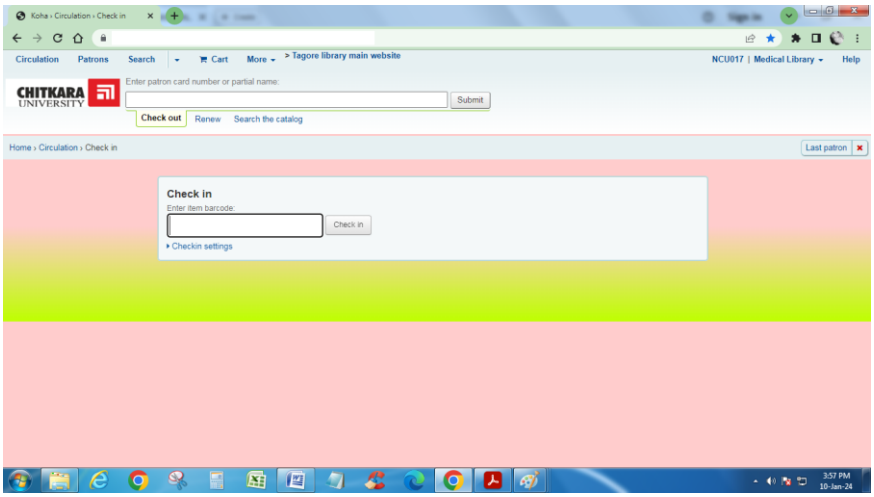


Figure 4.2 8. Book return (Check-in) module

7. OPAC MODULES

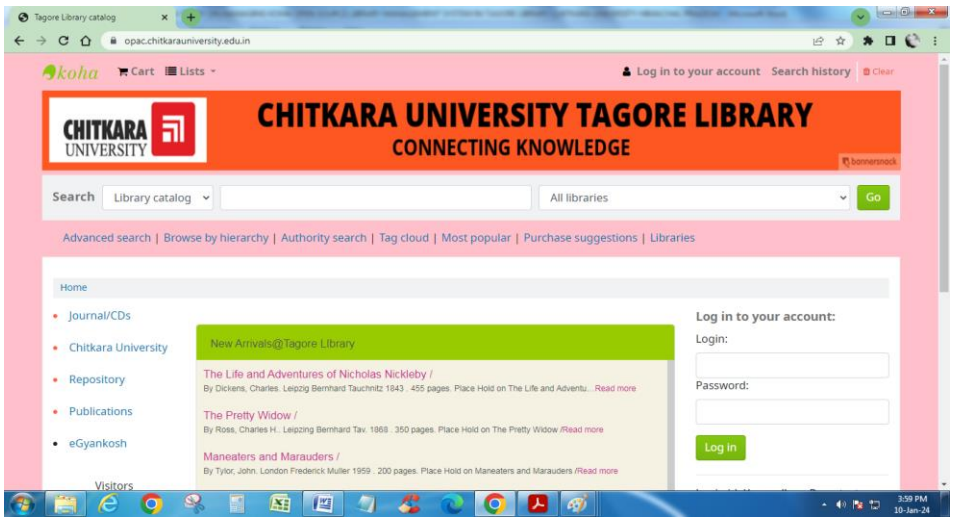


Figure 4.2.9 OPAC enter title module

The advanced search information is displayed in Figure 10. Keywords, subjects, titles, authors, and even the document's barcode can all be used in a search.

Figure 4.2.10 : OPAC search result page

The OPAC special title module is displayed in Figure 11. Here, we have access to copies that are available in each department as well as by title, author, and subject.

7.1 KOHA TOOLS MODULE

Koha tools are primarily used for the import and export of patron information and MARC data for bibliographies. They also offer a host of other services, including label creation, creating patron cards, uploading images of patrons, and sending overdue reminders.

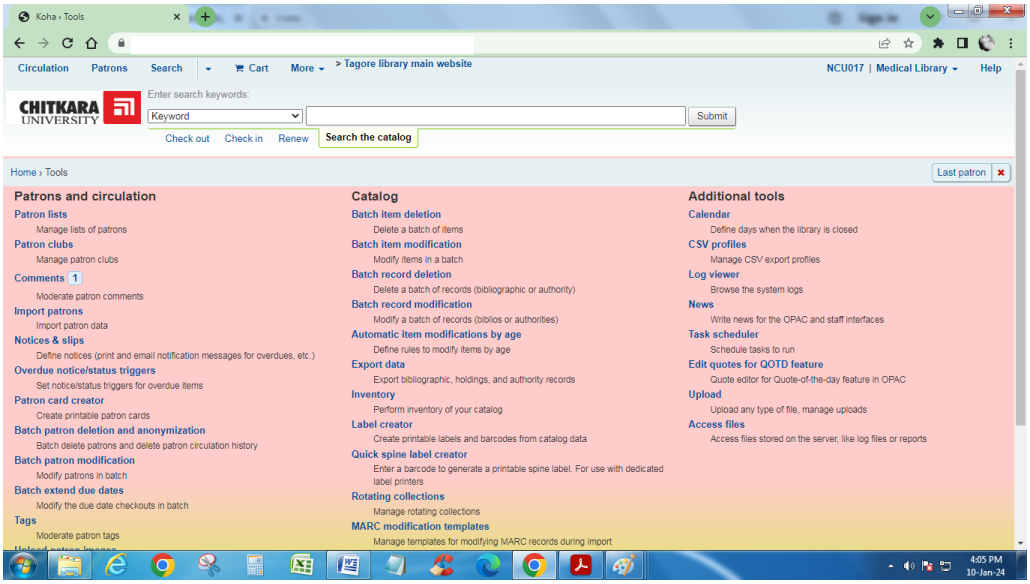


Figure 4.2.11 Koha tools module

8. FUNCTIONAL MODULE CHARACTERISTICS

Features related to acquisition, serial control, and cataloging are examples of functional modules.

8.1 FEATURES OF ACQUISITION

A library's acquisition part is a crucial section. Selection of items, duplication checking, vendor selection, ordering, general order request letter, receiving, fund control, etc. are the primary modules in the acquisition sections.

8.2 FEATURES OF CATALOGING

It contains cataloguing of various items, reports, import/export data, call number, union catalogue, cataloguing of electronic documents, and copy catalogues, among other things.

8.3 FEATURES OF SERIAL CONTROL

Features of serial control include import/export, fund control, ordering, receipting, claiming, and binding. In a library, managing serials is the most difficult task. Effective and efficient tracking of serials in the library should be possible with this module.

8.4 FEATURES OF CIRCULATION

A library's circulation area is a crucial area. This section's library activity is accelerated by library automation. All of the circulatory features ought to be included in software. Better software should primarily include the following features: check-in and check-out, renewal, reservations, barcode technology, patron and item information, fines, report production, etc.

8.5 FEATURES OF OPAC

All of OPAC's features, including basic and sophisticated search, user assistance, reservations made through OPAC, library maps, and more, ought to be supported by the library software.

SUMMARY

The use and application of library software in Chitkara University's Tagore Library was the primary subject of the current study. We may conclude that Koha is helpful software for building databases and retrieving information. On the other side, providers of automation software are facing challenges due to the constantly evolving demands and expectations of library professionals. Open-source ILS software includes core functional modules like online catalog, circulation, and cataloguing with a choice of limiting parameters format. Nearly all ILS software offers the same module for all types of libraries, ignoring the aspect of library collection, user, and services. An attempt has been made to identify strategies and tactics for automating tasks in the Tagore Library through this research project. The University Library's daily operations have been automated using the Koha open source software system, which has shown that Koha software is better suited for library automation. If only its objectives could be realized, the open-source ILS software architecture, exemplified by Koha, may offer libraries an appealing substitute. However, things could change very quickly. To assess Koha open source and commercial software according to its own merits, taking into account features, track record of dependability, support, and vision.

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